

# Bio Terror Bible

## EXPOSING THE COMING BIO-TERROR PANDEMIC

**BIOTERRORBIBLE.COM:** Ever since the election of Barack Obama in 2008, the American government has been gearing up for a staged bio-terror attack and subsequent pandemic that will likely kill millions of people and destroy the once great United States of America forever. Researched and written by the author of [The Nuclear Bible](#), the new and shocking [Bio-Terror Bible](#) forecasts a government sponsored bio-terror attack and global pandemic prior to the doomsday date of December 21, 2012. The Bio-Terror Bible is substantiated by over 1,000 data points which indicate that bio-terror is blinking red on every level.

**"The Department of Homeland Security may be dangerous to your health." ~U.S. Strategy For Bioterrorism Emergency Medical Preparedness And Response, [Army War College](#)**

Aside from having the means, the motive and the opportunity to conduct a major bio-terror attack, the government is the only entity with the resources to organize, plan, drill and execute a major bio-terror false-flag operation. A major terror operation would cost millions if not hundreds of millions of dollars, all of which would be needed in order to blackmail scientists, steal or develop the virus or agent, weaponize it, deliver it, and execute the operation without getting arrested or properly investigated. The sheer logistics, security, communication and cover-up needed before and after the bio-terror attack is so daunting, there is only one suspect (government) even capable of carrying it out.

### Bio-Terror Drills

Since the election of Barack Obama in 2008, there has been over [175 bio-terror drills in America](#) which have conditioned first responders, law enforcement and military for an upcoming bio-terror attack and subsequent pandemic. The fact that these bio-terror drills exist in mass confirms that bio-terror attack is in the cards and may be played in a last ditch effort to regain political, economic and military control of society. Although there are numerous biological and chemical agents, roughly 90% of the bio-terror drills conducted were for response to an anthrax or smallpox attack.

### Bio-Terror Plots & Patsies

Since the election of Barack Obama in 2008, there has also been over [50 bio-terror plots](#) that have allegedly been subverted. In most cases, individuals were been arrested for biological or chemical related crimes that never came to fruition. Despite the ever growing number of high-profile bio-terror plots and patsies, the [historical record](#) indicates that 99% of all bio-terror plots, attacks, "tests", "accidents" and drills are conducted by the government who has the means, the motive and the opportunity for a bio-terror attack.

### Bio-Terror Scares & Hoaxes

Since the election of Barack Obama in 2008, there has also been over [50 bio-terror scares in America](#). A bio-terror scare is essentially a live bio-terror event except that the public and most of the authorities are unaware that there is no real bio-terror danger. Generally, once the incident is over, the news is broken that there was no real threat. Bio-terror "scares" enable authorities to gauge real time reactions to bio-terror and allow for better understanding of how the public, law enforcement and first responders will react in a real bio-terror emergency.

### Identified Biological Outbreaks

Biological [outbreaks worldwide have skyrocketed](#) since 2011 with roughly [50 outbreaks in 2012 alone](#). While some of the documented reports may have been legitimate biological outbreaks, most if not all appear to be generated man-made outbreaks with the overall goal of convincing America and the world that it is on the precipice of a major pandemic.

## Mystery Biological Outbreaks

Since the election of Barack Obama in 2008, there have been at least [19 "mystery disease" outbreaks](#) in the world. While some of the mystery diseases may have been legitimate outbreaks, most if not all of them appear to be generated man-made outbreaks with the overall goal of convincing American and the world that it is on the precipice of a major pandemic.

## Bio-Terror Scapegoats

In the aftermath of man-made bio-terror generated pandemic, the government and media will be feeding the public any number of different [scapegoats](#) in a desperate attempt to shift the blame and responsibility for the deadly pandemic onto anybody or anything but themselves. Various scapegoats have been developed over the last 20 years via the government, scientific community, mainstream media, education system, medical establishment and international politics specifically for the aftermath of a global bio-terror generated pandemic.

Bio-terror scapegoats include the continent of [Africa](#), [agriculture \(food and animals\)](#), [airports and air travel](#), [Al Qaeda](#), [bio safety labs](#), the notion that [bio-terrorism is easy](#), [bio-hackers](#), the [black market](#), [bugs and insects](#), [censorship or lack thereof](#), [domestic terrorists](#), transmission of disease from [exotic animals \(zoonosis\)](#), [government ineptitude](#) and stupidity, [mail-order DNA](#), the country of [Mexico](#), [missile shield failure](#), diseased [monkeys](#), and genetic [mutation](#).

## Biological Lab Accidents

Totally inexcusable and unlikely lab "[accidents](#)" have been occurring recently at [BSL Labs \(biosafety level labs\)](#) within the United States and around the world. It appears that a majority of these "accidents" were done on purpose with the overall goal of convincing the medical community and the public that a lab "accident" could in fact lead to a global pandemic. Should a bio-terror pandemic arise, it is possible that a lab "accident" may serve as the [scapegoat](#) and source of the deadly pathogen.

## The Bio-Terror Psyop

In December of 2011, a global bio-terror [psyop](#) (psychological operation), hoax, or false-flag was executed when it was revealed that a mutated airborne form of the H5N1 strain of avian influenza was created by a Dutch team of scientists led by Ron Fouchier, of Rotterdam's Erasmus Medical Centre. This major discovery was fabricated in a calculated attempt by the modern medical establishment to deceive the world into believing that humanity is on the precipice of a genetically mutated pandemic. After the story made international headlines and a [60 day moratorium on flu research was called](#), the claim of the new deadly [air-borne pathogens was all but debunked](#) by medical researchers in Wisconsin.

## Real Causes of Bio-Terror

If and when a full-scale bio-terror attack occurs, the live pathogens or agents responsible for the pandemic will likely be dispersed via [chemtrails](#) by government [airplanes or drones](#), by the [U.S. Postal Service](#) via [Tide detergent samples](#), by the government and medical establishment via [tainted vaccines](#), or by clinics via the portable petri dish commonly known as a [Trojan condom](#). Although the aforementioned causes are all a possibility, it is most likely that [tainted vaccines](#) will be the root cause of millions of deaths.

## Bio-Terror Propaganda

The overall goal of bio-terror propaganda is to convince America and the world that it is on the precipice of a bio-terror induced pandemic. [Bio-terror propaganda is currently at an all-time high](#) and confirms that an upcoming bio-terror attack is in the cards and may be played in a last ditch effort to regain political, economic and military control of society. Propaganda also has little regard for the [actual reality of biological related sciences](#) and is mostly fictitious in nature.

## Potential Bio-Terror Dates

Due to the relatively slow moving nature of a biological disease, it is impossible to know the exact date at which a natural occurring outbreak will occur. However, since the outbreak will be man-made, the 1,000 data points of evidence documented in [The Bio-Terror Bible](#) suggest that the pandemic will start prior to the doomsday of December 21, 2012. The dates of [May 20-21, 2012](#) (NATO Summit in Chicago) and [July 27-August 12, 2012](#) (Summer Olympics in London) appear to be the dates at which it is most likely that a man-made bio-terror attack will transpire. Other potential dates include the

[Republican National Convention](#) in Tampa, Florida on [August 27, 2012](#), the [Democratic National Convention](#) in Charlotte, North Carolina on [September 6, 2012](#), the 11<sup>th</sup> anniversary of the 9/11 attacks on [September 11, 2012](#), and [April 19, 2013](#), the second most infamous terror date in American history.

### Potential Bio-Terror Locations

Although a bio-terror attack and subsequent pandemic could theoretically occur in any city, region or country, there are two specific locations which have drawn red flags due to their recent bio-terror related incidents and the global events that will occur there in 2012, namely [Chicago, Illinois](#) (NATO Summit) and [London, England](#) (Summer Olympics). Other potential bio-terror locations include [Atlanta](#), Georgia, [Boston](#), Massachusetts, [Cruise Ships](#) worldwide, [Disney parks California and Florida](#), [India](#), Pacific [Islands](#), [Mall of America](#) in Minnesota, the subway in [New York City](#) and the airport in [San Francisco](#).

### Potential Bio-Terror Events

The [NATO Summit in Chicago on May 20-21, 2012](#) and the Summer [Olympics in London on July 27-August 12, 2012](#) appear to be the chosen locations for a made for television bio-terror attack that will likely start a global pandemic that will cull millions. Other potential bio-terror events include the [Occupy Wall St. Protests](#), the [2013 NCAA Final Four](#) in Atlanta, Georgia, the [2014 Commonwealth Games](#) in Glasgow, Poland, and the [2014 World Cup](#) in Brazil.

### Chicago & Bio-Terror

The city of Chicago has a rich history of [bio-terror related incidents](#) and [bio-terror drills](#), and was recently depicted in the bio-terror propaganda film entitled [Contagion](#) as the first American city hit with a global pandemic that kills millions. Riots, evacuations, martial law and mass arrests are planned for the [Chicago NATO summit](#) in which a provocateur could attack U.S. President Barack Obama or attack the [Occupy Wall St.](#) crowd with a bio-terror device.

The Windy City of Chicago is one of [21 cities NOT at risk for elimination](#) from the Cities Readiness Initiative, meaning that Chicago is "ready" for bio-terrorism. Chicago was also home to the [2006 Sears Tower Terror Plot](#) as well as the [2010 Chicago Bomb Plot](#), and may serve as the prime location for a made for television bio-terror attack that Chicago [Mayor Rahm Emanuel](#) will likely oversee and execute. Chicago recently opened a new [Advanced Bio-Terror Response Center](#) and as of April 26, 2012, the state of [Illinois has its first H1N1 outbreak](#).

### Bio-Terror War Games

To date, there have been 5 published [bio-terror war-games](#) which shed light on the possible future bio-terror attack scenarios. Based on these elaborate governmental war-games, it can only be concluded that a bio-terror attack is the end game for America.

### Doctor's Play (1999)

The war-game entitled [Doctors Play](#) involved bio-terrorists contaminating an auditorium with silent, odorless smallpox just before a political rally in Baltimore, Maryland. Coincidentally, the [2012 RNC is in Tampa Florida](#) on August 27, 2012, and the [2012 DNC is in Charlotte, North Carolina](#) on September 6, 2012. Both southern locations are potential targets as the events will be broadcast nationally and internationally.

### Dark Winter (2001)

The bio-terror war game [Dark Winter](#) played out the scenario of a terrorist biological attack on the American homeland. During the thirteen days of the war-game, smallpox spread to 25 states and 15 other countries. As the bio-terror drama played out, martial law is called, forced vaccinations are in play, civil violence erupts, the U.S. economy begins to crumble, and all travel is banned.

### Airplane Anthrax Attack (2001)

A war-game involving an [airplane anthrax attack](#) involved bio-terrorists using a small private airplane to release 440 pounds of military-grade powdered anthrax over downtown Denver, Colorado. Within 24 hours of the attack, the anthrax spores blew 126 miles eastward and exposed more than 812,000 people to the deadly agent. According to the war-game, between 447,000 and 591,000 of the victims die from anthrax related complications.

### **Marina Anthrax Attack (2003)**

A war-game involving an [anthrax attack at a marina](#) in Berkley, California left 9,000 people dead in the wake of the attack. For three critical days, doctors and epidemiologists puzzled over the apparent flu outbreak around the marina, but with the first diagnosis of anthrax the government turned local schools into mass hospitals whereby they vaccinated “every human they saw” with the anti-anthrax vaccine containing the deadly toxin Cipro.

### **Atlantic Storm (2005)**

[Atlantic Storm](#) was the latest bio-terror war-game involving players from many nations pretending to handle reports of smallpox cases in Germany, the Netherlands, Sweden, and Turkey. During this real-time war-game, countries cede authority to the U.N and WHO as the international community comes together in the name of fighting bio-terrorism and the global pandemic.

### **Potential Biological Wars**

Despite the fact that the United States and its European Union allies have been researching, planning, war-gaming and drilling for a major bio-terror attack and the subsequent pandemic, the nations of [Egypt](#), [Iran](#), [Iraq](#), [Libya](#), [North Korea](#) and [Syria](#) have been quietly set up over the last decade as potential bio-terror scapegoats. Based on the evidence available, it appears that the U.S., [Israel](#) and [South Korea](#) will be play the future victims in major false-flag bio-terror attacks that will eventually morph in a full-blown biological wars.

### **Bio-Terror & Biological Weapons**

There are currently a number of different biological weapons that have been developed for use against the civilian population, the [most deadly of which is the vaccine](#). Unbeknown to most, the U.S. has invented a [bio-terror grenade](#) which is an easy and undetectable way to unleash a pandemic with little or no accountability. In the mass confusion of a riot or political demonstration, a government terrorist could easily roll or throw a bio-terror grenade into an unsuspecting crowd and start a chain reaction of infection which could ultimately affect the entire world. The blame for the ensuing pandemic would then be placed on the political demonstrators rather than the nation state capable of developing and using modern bio-terror weapons and techniques. Other biological weapons developed by the West include [genetically engineered bio-weapons](#), [herbicidal bio-weapons](#), [homosexual bio-weapons](#), [non-lethal bio-weapons](#), [offensive bio-weapons](#), [race specific bio-weapons](#) and the new [Spanish Flu 2.0](#).

### **Biological Weapons Treaties**

Although the first world has formally agreed to ban the use of offensive biological weapons, the state of Israel is the only modern nation that has not signed the 1972 [Biological Weapons Convention](#), the refusal to engage in offensive biological warfare, stockpiling, and use of biological weapons. Israel is also the only modern nation that has signed but not ratified the 1993 [Chemical Weapons Convention](#), refusal to produce, stockpile and use chemical weapons. Should a biological terror attack hit America or any other nation, the illegal state of Israel and its dual passport wielding citizens will be prime suspects.

### **Dead Microbiologists**

Since May 19th, 1994, [more than 100 scientists](#) in the field of bio-terror, biology, genetics and medicine have been systematically targeted and killed. Most of these scientists died horrible deaths resulting from car crashes, plane crashes, murder, suicides and poison. In almost every single case, the perpetrators of these crimes were never apprehended, let alone tried or convicted for the crimes that they committed. The only plausible explanation for the deaths of so many medical professionals in the field of microbiology is that these particular individuals had intimate knowledge of various biological pathogens or other medical knowledge that posed a direct threat to those who are planning the global pandemic. Unfortunately, the war on microbiologists is a global phenomenon that continues until this day.

### **Biological Weapons Research: Secrecy & Ethical Violations**

Secrecy and ethical violations in respect to bio-terror research are numerous and quite shocking. Repeated warnings, citations and fines are all but ignored by governments and corporations rendering the climate surrounding offensive bio-weapons research programs as highly dangerous and volatile. To date, the United States is by far the most egregious offender and will likely be scapegoated in the aftermath of the pandemic by the infamous [Sunshine Project](#).



### **The Sunshine Project**

The [Sunshine Project](#) was a foundation funded program that existed in Europe and the United States from 2000 until 2008. While its purpose was never clearly defined, it acted as a source of information in respect to the highly illegal and highly unethical scientific practices occurring in the field of microbiology, specifically in bio-terror and bio-weapons research. The Sunshine Project will likely be trotted out in the world media post pandemic to shine light on (demonize and blame) the United States for ultimately allowing an environment of unregulated bio-related research to flourish.

### **The Bio-Terror Monkeys**

In the aftermath of man-made bio-terror generated pandemic, the government and media may attempt to scapegoat monkeys just as they did in the 1994 New York Times bestseller book entitled [The Hot Zone](#) and the 1995 blockbuster movie entitled [Outbreak](#). Since 9/11, there have been unprecedented reports of monkey [attacks](#), monkey [escapes](#), monkey [thefts](#) and monkey [smuggling](#) which suggests that the monkey scapegoat option is being primed for prime-time. Should monkeys be scapegoated, the [continent of Africa](#) will likely be scapegoated as the original location of the monkey(s), the disease, or both.

### **Bio-Terror Conferences**

Bio-terror and pandemic related conferences have occurred on a regular basis since 9/11, but have started occurring on a monthly basis since March of 2011. In 2012 alone there have already been 8 announced bio-terror summits and conferences. Coincidentally, the [WHO Summit will start on May 22, 2012](#), the day after the [NATO Summit in Chicago](#).

### **Bio-Terror Whitepapers**

Hundreds of whitepapers have been published by think-tanks, universities, NGO's and various governmental agencies that state that bio-terror and its subsequent pandemic is not a matter of if but when. The simple fact that these whitepapers exist in mass confirms that a bio-terror pandemic is the establishment plan for the stated goal of population reduction. As the [Army War College whitepaper](#) entitled "U.S. Strategy For Bioterrorism Emergency Medical Preparedness And Response" openly states, "The Department of Homeland Security may be dangerous to your health."

### **Bio-Terror Legislation**

In the wake of the 9/11 terror attacks, the U.S. government more than any other nation has been systematically preparing its population for an upcoming bio-terror related pandemic. A blatantly hypocritical philosophy has been employed whereby [bio-terror legislation](#) is passed in mass, yet many of the ethical and moral restrictions on biological research, vaccine trials and regulations have all but disappeared.

### **The Vaccines**

There are currently a number of different biological weapons that have been developed for use against the civilian population, the [most deadly of which is the vaccine](#). A wealth of recent medical research indicates that [vaccines are no longer safe](#) and may cause serious neurological problems, seizures, autism and even death. A recent push by the medical and government establishment in America to [make vaccines mandatory](#) may go into effect during a pandemic in which [martial military law](#) will be called and personal freedoms like the right to refuse a vaccine will be denied. In a major bio-terror related pandemic, it will likely be the tainted vaccines which are ultimately responsible for killing millions of people worldwide.

### **Bio-Terror Contracts**

Bio-terror related [contracts](#) between the U.S. government and private bio-tech companies indicate that anthrax and smallpox vaccines are indeed the main focus and the #1 priority. By outsourcing the smallpox and anthrax vaccines, the U.S. government gains well needed plausible deniability in order to avoid wrongful death lawsuits in the aftermath of a pandemic. Privately made vaccines handed out by the government will most likely be the root cause of deaths for millions of people worldwide

### **Bio-Terror Related Technology**

In 2011, a Facebook application was developed in a lab at Israel's Tel Aviv University which simulates the spread of a virus allegedly to indicate how infections spread among populations. The Facebook application is called [PiggyDemic, and it allows users to "infect" their friends](#) with a simulated virus or become infected themselves. Aside from this blatantly racist and disturbing application, a [pandemic](#)

[blog](#), multiple [bio-terror sniffing phone](#) applications and a bio-terror [first responder iPhone application](#) have all recently been invented. All that is now missing from the technological pandemic equation is the made for TV bio-terror attack.

### **Bio-Safety Labs (BSL)**

BSL Labs or [biosafety level labs](#) have been built all over the United States and around the world. For strategic purposes, a majority of these BSL labs have been purposely placed in large population centers. Regardless of their rating (1-4), BSL labs are a major health risk to the general public simply based on the fact that they house deadly pathogens and suspicious [“accidents”](#) tend to occur at these facilities on a regular basis. Should a bio-terror pandemic arise, it is highly likely that BSL labs will serve as the original source of the deadly pathogen.

### **Rogue Microbiologists**

In the aftermath of the 9/11 terror attacks, [4 rogue government microbiologists](#) have been investigated or convicted for illegal bio-terror related activities. Although on the surface it appears that these scientists acted alone, the truth is likely a different story as three out of the four rogue scientists are out free to strike again. Aside from having the means, the motive and the opportunity to conduct a major bio-terror attack, the government through its university system has an unlimited supply of willing, able and blackmailable scientists to choose from. In each case, the scientists in question acted in a blatantly illegal and unethical way, yet the U.S. and Canadian governments failed to convict any of these men for attempted bio-terrorism. Therefore, the only logical conclusion is these men were indeed acting on behalf of their government when they committed their bio-crimes.

### **History of Pandemics**

Based on both the ancient and recent [history of worldwide pandemics](#), there will likely be a deadly man-made bio-terror generated pandemic prior to the doomsday of December 21, 2012. Although North America and Europe have been relatively pandemic free over the last 100 years, the world has suffered unmercifully while hundreds of millions have been culled by disease in the second and third worlds. Unregulated human “testing” with “experimental” vaccines has been carried out by various governmental and non-governmental medical organizations in which the vaccines are routinely blamed by the natives as the root cause of disease outbreaks. Until unethical and illegal human medical testing is banned, the world will undoubtedly suffer one pandemic after another.

### **Government Biological Attacks & Tests**

The historical record of [government sponsored bio-terror](#) is littered with unprovoked attacks on unsuspecting soldiers and citizens alike. The fact that state sponsored bio-terror tests/attacks exist in mass confirms not only that government is indeed a serial bio-terrorist killer that will undoubtedly strike again in the very near future. In order to organize, plan, drill and execute a major bio-terror false-flag operation, millions if not hundreds of millions of dollars are needed in order to blackmail scientists, steal or develop the virus or agent, weaponize it, deliver it, and execute the operation without getting arrested or properly investigated. The sheer logistics, security, communication and cover-up needed before and after the bio-terror attack is so daunting, there is only one suspect (government) even capable of carrying it out.

Government attacks and tests to date include [World War II \(1939-1945\)](#), [Guatemala \(1946-1948\)](#), [San Francisco \(1949\)](#), [Project Naomi \(1949-1969\)](#), [the Korean War \(1952\)](#), [Operation Cauldron \(1952\)](#), [Project 112 \(1962-1971\)](#), [Project SHAD \(1962-1971\)](#), [Operation Ranch Hand \(1962-1971\)](#), [Hawaii \(1967\)](#), [the Vietnam War \(1970\)](#), [the Russia Anthrax Leak \(1979\)](#), [China \(1980's\)](#) the [Bhopal Gas Attack \(1984\)](#), [the Gulf War \(1990-1991\)](#), [Israel \(1998\)](#), [the 9/11 Anthrax Attacks \(2001\)](#), [Columbia \(2000-Unknown\)](#), [the England Foot & Mouth Attacks \(2007\)](#), [San Francisco \(2008\)](#) , and [Pakistan \(2011\)](#).

### **Aftermath of Bio-Terror**

In the aftermath of a bio-terror attack and subsequent pandemic, there will be mass confusion, fear, and hysteria. In this chaotic environment, there will be political and governmental agencies and institutions that will attempt to take advantage of the situation. Based on the [whitepapers](#) written in respect to bio-terrorism, the [U.S. government will declare martial law](#) after a bio-terror generated pandemic is confirmed. When this occurs, radio host [Alex Jones will attempt to incite violence](#) by calling for violence against the U.S. military and police forces. Once Jones' listeners take up arms against the U.S. government, [Operation ENDGAME will go into effect](#). In the few weeks after martial

law is instituted, the actions of Americans will forever dictate the future of the United States of America.

In the wake of a bio-terror attack, America can expect an [Alex Jones deception](#), a very slow [bio-terror clean-up](#), a failed [bio-terror hospital response](#), the drama of [bio-terror identification](#), disputes over [bio-terror jurisdiction](#), the activation of the [bio-terror response networks](#), the unveiling of [FEMA concentration camps](#), the use of [human cattle cars](#), the implementation of [martial law](#), the use of [mass coffins](#), the [mass exodus and repatriation](#) of all foreigners in America, potential [nuclear retaliation](#) against the "bio-terrorists", the execution of [Operation ENDGAME](#), the [quarantine](#) of the sick and dying, and mass [vaccine distribution](#) by the U.S. government.

### **The True Reality of Bio-Terror & Pandemics**

The [true reality](#) of bio-terror is almost 100% opposite of what the public has been led to believe. According to top scientists, the use of bio-weapons for mass terror is too hard to make, too hard to use, and way too undependable. Weaponizing an agent for mass distribution is extremely difficult and even if it is done professionally there is still no guarantee that it will work. Steve Emmett, an expert on nerve agents at Oxford University stated that, "It's easy to play up the risks and encourage panic," but "In fact the risks of mass poisoning [from any chemical agent] are very low". Emmett went on to state that smallpox can be passed on from person to person only by close physical contact, not simply by being in the same room as someone who is infected. "Regardless of what people say, [bio-terror] is very difficult to do, to inflict mass casualties with chemical or biological weapons," said Jonathan Tucker, an authority on unconventional arms with California's Monterey Institute of International Studies. Despite the non-stop government propaganda, the threat of bio-terrorism is very low and almost impossible.

### **Bio-Terror Videos**

The [video library of The Bio-Terror Bible](#) houses 14 videos that deal specifically with topics of bio-terror and pandemics. Shocking videos of bio-terror war-games, bio-terror drills, bio-terror conferences, bio-terror propaganda, medical martial law and dire warnings of doom gives the viewer an inside look into the upcoming bio-terror generated pandemic.

### **Bio-Terror Movies**

[Since 1957](#), there have been [19 mainstream movies and documentaries](#) dealing specifically with bio-terror and pandemics. Although these films have been sporadic over the last 55 years, they have intensified over the last 10 and appear to be peaking in 2012 or 2013.

**Bio-Terror Movies:** 1. [The Seventh Seal \(1957\)](#) 2. [The Last Man On Earth \(1964\)](#) 3. [The Andromeda Strain \(1971\)](#) 4. [The Omega Man \(1971\)](#) 5. [Outbreak \(1995\)](#) 6. [12 Monkeys \(1995\)](#) 7. [The Horseman On The Roof \(1995\)](#) 8. [The Patriot \(1998\)](#) 9. [Smallpox: Silent Weapon \(2002\)](#) 10. [28 Days Later \(2002\)](#) 11. [End Day \(2005\)](#) 12. [Right At Your Door \(2006\)](#) 13. [28 Weeks Later \(2007\)](#) 14. [I Am Legend \(2007\)](#) 15. [Doomsday \(2008\)](#) 16. [After Armageddon \(2010\)](#) 17. [Contagion \(2011\)](#) 18. [The Stand \(2013\)](#) 19. [World War Z \(2013\)](#)

### **Bio-Terror Books**

[Since 1939](#), there have been [21 books](#), both fiction and non-fiction, dealing with the topics of bio-terror and pandemics. Although these books have been sporadic over the last 50 years, they have intensified over the last 15.

**Bio-Terror Books:** 1. [Pale Horse, Pale Rider \(1939\)](#) 2. [Earth Abides \(1949\)](#) 3. [I Am Legend \(1954\)](#) 4. [The Andromeda Strain \(1969\)](#) 5. [The Last Canadian \(1974\)](#) 6. [The Stand \(1978\)](#) 7. [The Hot Zone \(1994\)](#) 8. [Emergence \(1998\)](#) 9. [Living Terrors \(2000\)](#) 10. [The Biology Of Doom \(2000\)](#) 11. [The Demon In The Freezer \(2002\)](#) 12. [When Every Moment Counts \(2003\)](#) 13. [Bioterror: Manufacturing Wars The American Way \(2003\)](#) 14. [Twilight Series \(2005\)](#) 15. [The Last Town On Earth \(2006\)](#) 16. [World War Z \(2006\)](#) 17. [Bioviolence \(2007\)](#) 18. [Company Of Liars \(2008\)](#) 19. [Bioterror In The 21st Century \(2009\)](#) 20. [Two Journeys \(2009\)](#) 21. [Bio-Shield \(2011\)](#)

### **Bio-Terror Board Games**

There have been [3 board games](#) which have been released in respect to bio-terrorism and pandemics. Eerily, the [Illuminati card game predicted the 9/11 attacks](#) (Pentagon & Twin Towers), the Fukushima nuclear disaster and the Gulf Oil Spill. Only time will tell if Illuminati's Epidemic and Population Reduction cards (see photo) will also transpire in reality.

**Bio-Terror Games:** 1. [Illuminati \(1995\)](#) 2. [Pandemic \(2008\)](#) 3. [Pandemic: On The Brink \(2009\)](#)

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## EXPOSING THE COMING BIO-TERROR PANDEMIC

**BIOTERRORBIBLE.COM:** In the aftermath of a bio-terror attack and subsequent pandemic, there are many things that could potentially happen. One of those things is that radio host Alex Jones will attempt to incite violence by calling for violence against the U.S. military and police forces in the aftermath of a bio-terror attack.

**Title:** 10 Reasons Why Alex Jones Should Be Tried For Treason

**Date:** February 19, 2012

**Source:** [Truther News](#)

**The goal of Alex Jones and his Zionist handlers is to get America to destroy herself. This is done the same way that Russia was destroyed under Stalin; dividing and then collapsing society upon itself by baiting Americans into a violent revolution against their own police and military.**

Alex Jones is the founder of [Infowars.com](#) and [PrisonPlanet.com](#), and the self-proclaimed grand-daddy of the 9/11 Truth movement. He has made and produced countless documentaries, the most famous of which are [Terrorstorm](#), [End Game](#), [The Obama Deception](#) and [Fall of the Republic](#). While many people have enjoyed listening to his radio show, patriotic Americans are now starting to question his true motives.

Currently, [The Alex Jones Show](#) boasts a radio audience of over 3 million gun-owning Americans. In effect, Alex Jones is the unofficial Commander and Chief of the largest militia the world has ever seen. With this unprecedented concentration of power into the hands of one man, it is imperative that people take a second look at Jones, his true motives, and what it means for the future of America.

**After all, can America really afford a betrayal by Alex Jones?**

While Jones can be thanked for waking Americans up to the evils of government, the fear is that Jones may be part of a greater Zionist plot to destroy America from within. While it may be hard to do, it is the patriotic duty of every American to defend the Constitution of the United States against all enemies, foreign and domestic, including Alex Jones.

### 1. STRATFOR Intelligence Operative

On February 12, 2012, [news broke](#) that Alex Jones was likely an intelligence tool of [STRATFOR](#), a Zionist intelligence agency located in Austin, Texas. On [February 15, 2012](#), just 3 days after the original [article](#) was published, Jones abruptly [canceled](#) his nationwide speaking tour which he had been [promoting since February 2, 2012](#).

Jones stated that his sudden change in plans was due to the fact that "the collapse is so imminent". Obviously, Jones has been made as a traitorous spy and is running scared. Revelation of Jones' ties to Israeli intelligence should come as no surprise since Jones has not and will not reveal [the true Zionist control of America](#).

As evidenced in further detail below, Jones has repeatedly made predictions that ultimately come true, especially in regards to terror events executed by the Israeli Mossad. The connection between Jones and Zionist [STRATFOR](#) is particularly damning considering [STRATFOR](#) openly admits to being an intelligence gathering center.



Therefore, it stands to reason that Alex Jones & Co. have been gathering intelligence, data and information on patriotic Americans since their inception in 1996, coincidentally the exact same year that [STRATFOR](#) was founded. The widespread fear that Jones' true mission is to identify and neutralize political information, activists and movements in America has now come to fruition.

**Alex Jones is just like an insecticide - 98% of it's a harmless gas, but it's the 2% percent left that will kill you. What that means is that Jones will make total sense for a while, but when it counts, he will betray the American people.**

## 2. Operation End Game

Alex Jones' film [End Game](#) (2007) appears to be the cover for [Operation Endgame](#), a "2003-2012 plan under implementation by the [Office of Detention and Removal Operations](#) of the [U.S. Department of Homeland Security Bureau of Immigration and Customs Enforcement](#) to detain and deport all removable aliens and "suspected terrorists" currently living in the United States by 2012".

The term "suspected terrorists" essentially refers to anybody listening to Jones' radio program, yet Jones conveniently failed to mention [Operation Endgame](#) in his 2 hour film about the extermination of humanity. Jones leaving out [Operation Endgame](#) is like making a movie about the Titanic, but forgetting to include the iceberg that allegedly sunk her. The blatant [PSYOP](#) by Jones & Co. was obviously done in a premeditated attempt to disguise the real [Operation Endgame](#) from truth seeking Americans.

[Operation Endgame](#) is the end game plan for America, its Constitution, its Bill of Rights, and could ultimately lead to the arrest, incarceration and slaughter of millions of Americans at [FEMA concentration camps](#) nationwide. Although Hollywood movies were made around the same time with roughly the same name, (e.g., [End Game](#) in 2006, [End Game](#) in 2009 and [Operation Endgame](#) in 2010), the film [End Game](#) appears to have been tailor made by Jones and [STRATFOR](#) to keep the operation secret from Americans. To date, their plan has worked.

## 3. The Stochastic Terrorist

Aside from calling for a violent revolution, but not in those words, Alex Jones is without a doubt the greatest stochastic terrorist alive today. [Stochastic terrorism](#) is the use of mass communication (e.g. radio, television, movies, videos and the internet) to stir up random lone wolves to carry out violent acts of terrorism that are statistically predictable but individually unpredictable (see below). Examples of Jones' stochastic terrorism are all over the internet, but a small sample was taken from his radio broadcast of [February 10, 2012](#), whereby Jones states "We are at the crossroads!", "Time to get aggressive", "It is on!", and "There is no choice, you gotta fight them!".

While Jones is indeed correct about many topics such as [9/11 Truth](#), the rising police state, [eugenics](#), vaccines, fluoride, aspartame, etc., Jones' handlers understand that the daily exaggeration of news and events will statistically cause a certain amount of individuals to psychologically snap, with a certain percentage of them resorting to acts of terrorism. These acts of terror are then used to demonize Americans and further legitimize the passing of draconian legislation which ultimately degrades the American way of life.

## 4. The Y2K Beta Test

During the [Y2K scare of 2000](#), Alex Jones attempted to whip the American people into a frenzied hysteria and subsequent panic after he [repeatedly lied on the air](#) and stated that Russia was planning a preemptive nuclear strike upon the United States (see below). What Jones was engaged in was likely part of a Zionist beta-test to see how the American public would react to a [War of the Worlds](#) type of doomsday scenario. The fear is that Jones will repeat his Y2K behavior in the aftermath of a terror attack and bait his gun owning audience into a full-blown attack on police and military based on fraudulent information.

Excerpt of the [Alex Jones Show on December 31, 1999](#) (Y2K):

### **Nuclear Missiles Deployed**

Alex Jones: "...Oh, this is extremely serious...two weeks ago [Topol-M](#), 6,200 mile super-range multiple warhead newest design U.S. cloned technology missiles were deployed across Russia. They are mobile. These are first strike type systems. They are also designed to survive several strikes from America or any other nation...They are deploying these and Yeltsin openly has been threatening us weekly to nuke us. I mean, it's just getting insane. And absolutely, this looks like just one more ratchet on the takeover of America. And yes, they have an extreme strongman in, a KGB leader, running Russia right now. They have deployed their missiles against us and their submarines and have already delivered fully functional missile cruisers to China..."

### **First Strike**

Alex Jones: "...Yes, he took the codes off and he took away our first strike capability. By first strike, that means that if missiles are in the air, let's say 4,000 of them, Russia's got a lot more than that, 4,000 missiles coming in, subs launching, suitcases going off, we have to wait until we absorb the first strike that will mean virtual inhalation to our military..."

### **KGB Chief Putin**

Alex Jones: "...All I know is this, Boris Yeltsin, at 4 o'clock in the morning, as the Russian time zone in its eastern area near Japan was entering into Y2K, he resigned and now Vladimir Putin, known as Vladimir the Ruthless by the Russian people is now taken the reins of power and he is a former KGB Chief...This is just unbelievable..."

### **Nuclear Rumors**

Caller: "One other thing, I heard Bill Greg say this morning that Russia said if their power goes out that they're gonna blame us and they're gonna set off their nuclear warheads."

Alex Jones: "Well, I didn't hear that but I would be interested to have any details. Do you have the details of what Colonel Greg said?"

Caller: No, that's all I heard him say was that they said if they had a power blackout they'd blame it on us.

### **The Nuclear Threat**

Alex Jones: "I know they're threatening to nuke us every single week...I've read the Associated Press, Reuters, Interfax News Agency, London Times articles here...I mean, I've read Yeltsin and Jiang Zemin's quotes, the dictator of China, and they're saying we'll nuke you. I mean, they spell it out...We will hit you with nuclear weapons. We reserve the right to hit you. Three weeks ago their head of their missile forces said we reserve the right to nuke you first..."

### **Stand Up America**

Alex Jones: "...Americans standing up as Russia threatens to attack us with nuclear weapons, as nuclear power plants, at least one are being shut down, as the military runs around with the police and the FBI saying terrorism is imminent, and some would characterize us as dangerous because we report the facts. Absolutely out of control. Just maintain your readiness, be calm, defend your family, defend your country..."

### **Cold War Radar System Activated**

Alex Jones: "...They have activated a powerful Cold War radar system in the North Pole region...Military traffic is everywhere right now ladies and gentlemen, scrambled...We got super power radar systems, nuclear systems up...Perhaps our military is refuse...It was Clinton that shut down that Cold War radar system. It's now back up from people that actually worked in there. We have it confirmed from the sound and where its coming from, from experts...This is absolutely out of control..."

Jones' Y2K actions were traitorous at best and an obvious and calculated attempt to deceive the American public into believing that nuclear war with Russia was imminent. Had Americans actually listened to Jones on December 31, 1999, riots would have ensued, thousands of Americans would have died, and martial law would have been instituted across America. As of 2012, Jones' radio audience is far larger, far younger, and far more trigger happy than they were in 1999.

Lastly, one cannot say "Fire!" in a theater, yet Jones was allowed to openly try and bait the American public into a mass panic with no accountability whatsoever. If Jones was not part of the intelligence establishment, he would be rung up on charges, tried in a court of law, and likely convicted for conspiracy to commit terrorism. The late William "Bill" Cooper repeatedly [exposed](#) Jones' dangerous Y2K behavior on his radio show and was subsequently gunned down on November 5, 2001.

## **5. Assassination of William "Bill" Cooper**

After the [premeditated](#) and traitorous actions of Alex Jones on December 31, 1999 (Y2K), Bill [Cooper took Jones to task](#) on his radio show and warned that Alex Jones was not a real patriot and that his behavior was dangerous to America. On the day of 9/11, Cooper repeated his warnings regarding Jones and stated that [Alex Jones is a disinformation agent](#) sent to provoke violence in the midst of a national tragedy.

On November 5, 2001, less than 2 months after 9/11, Bill Cooper was assassinated outside of his home in Eagar, Arizona. Despite Cooper's death, Alex Jones continues to [demonize](#) and [libel](#) Cooper every chance he gets. Cooper, while not perfect, was a true American hero and the antithesis of Jones.

Cooper taught his listeners how to decipher news from propaganda, fact from fiction, and essentially how to think for themselves. While no evidence has surfaced linking Jones to the murder of Cooper, it is highly likely that Cooper was liquidated in order to silence his critique of Jones and to eliminate him as Jones' only real competition.

## **6. Alex Jones goes COINTELPRO at the Austin Gun Rally**

[COINTELPRO](#) is a series of covert, and often illegal, projects conducted by the United States Federal Bureau of Investigation (FBI) and other agencies aimed at surveilling, infiltrating, discrediting, and disrupting domestic political organizations. The following actions by Alex Jones on January 25, 2010, CAN ONLY be construed as the work of an intelligence operative out to subvert genuine grassroots political movements:

A protest regarding the closure of the Texas Gun Show in Austin, Texas, [turned ugly](#) when liberty activists on the steps of the Austin Police Department headquarters were [verbally attacked by Alex Jones](#). Although Jones was formally invited to speak at the protest, he declined, but showed up anyway to bullhorn, disrupt and drown out the event's scheduled speakers.

In the [video](#) chronicling the takeover of the protest by Jones, an off-camera and unnamed activist asked why Jones didn't work with the event's organizers, to which Jones replied, "Well, I'm sorry; I brought 80% of the people here." Catherine Bleish, Executive Director of the Liberty Restoration Project confronted Jones by stating that, "Many people worked really hard on this event," to which Jones replied again, "You don't know what you're doing." Jones then stated that "You've got a hard-on for me" and "I'll be here in 20 years."

The next day, Jones went on the air and blatantly lied about the events of the day by stating: "The whole time I was there I had like [COINTELPRO](#) poking me and getting in my face, and I'm sure some of them were because later I found out about a meeting afterwards with some people we know are connected to some operations about how they want to get me and go after me, it's a whole another subject, but it borders on illegal but uh, luckily we had people on the inside that found out about that and called me about it"

Jones' accusations that [COINTELPRO](#) was attacking him was a calculated attempt to shift blame away from himself onto others and to deceive his radio audience as to what really happened. If there was any doubt that Alex Jones is the [COINTELPRO](#) agent provocateur he speaks of, the [video of the Austin gun protest](#) is the smoking gun.

**On January 25, 2010, Texas and America realized that:**

- A) Jones cannot be trusted,
- B) Jones has ulterior motives, and
- C) Jones is purposely working against, not for American patriots.

## **7. The Terror Predictions**

Alex Jones appears to be fed just enough Israeli intelligence via [STRATFOR](#) to make bold terror predictions a few months, weeks, or days prior a terror event transpiring in reality. In [all documented cases](#), Jones never cares to substantiate his predictions with hard evidence as to why he is making a given prediction, only stating that he "knows how the government thinks" and that "after analyzing the enemy profile" he is able to ascertain that certain events will happen.

As Alex Jones' terror predictions continue to come true, Jones looks more and more prophetic which ultimately gains him more credibility with his audience. The fabricated likeness of Jones as a geopolitical mastermind will then be used to provoke violence in the midst of a national tragedy, all based on fraudulent information. In essence, Jones has been built up by the Zionist establishment to prematurely ejaculate the 2nd American Revolution.

## **9/11 Terror Attacks**

Both [STRATFOR](#) and Alex Jones made terror predictions in regards to 9/11 about what was going to happen and who would be allegedly responsible. According [Wikipedia](#), [STRATFOR](#) has a connection to the 9/11 Terror Attacks: "At the time of the September 11, 2001 attacks, [STRATFOR](#) made its "breaking news" paragraphs, as well as some notable analyses predicting likely actions to be taken by al-Qaeda and the Bush administration, available freely to the public."

On July 25, 2001, Alex Jones [famously stated](#) the following on his radio program: "We know the government is planning terrorism. We know Oklahoma City and World Trade Center was terrorism. The point is: If any terrorism comes it's from this government. And if there was an outside threat like bin Laden, who was a known CIA asset in the 80's, running the Mujahedeen War, whose family builds all the military bases over in Saudi Arabia right now, whose sits on the board of Iranian satellite, he is the boogeyman they need in this Orwellian phony system."

Just 48 days later on September 11, 2001, the Israeli Mossad hijacked 4 planes, crashing 2 of them into the World Trade Center. As predicted by Jones, the blame was then placed onto Osama bin Laden by the Zionist media. Clearly, there is some sort of an intelligence connection at play between Jones and Israel. [STRATFOR](#), a Zionist intelligence operation, obviously knew of the impending [9/11 attacks which were carried out by the Israeli Mossad](#). Post 9/11, Jones has made sure that Americans believe "9/11 an Inside Job", thus putting the blame squarely on the American government and its people rather than the Israeli Mossad where it belongs.

## **Norway Terror Attacks**

On July 21, 2011, Alex Jones [famously stated](#) the following on his radio program: "They are now shifting to a new phase...Now the next phase they have already been beta-testing behind closed doors with the police and military...Now they are moving it to White Al Qaeda."

The next day, July 22, 2011, [Anders Behring Breivik](#), a white terrorist, allegedly bombed a government building and attacked a youth camp killing 77 and injuring 151, all while dressed in a police uniform. Coincidentally, the youth camp that was attacked just happened to have major [pro-Palestine rally](#) (anti-Israeli genocide) the previous day.

The Norway terror attacks also occurred on the same date as the [King David Hotel Bombing](#) of 1946, which was admittedly executed by Zionist terrorists, including the 6<sup>th</sup> Prime Minister of

Israel, [Menachem Begin](#). Since the Norway terror attacks were perpetrated by the Israeli Mossad, it stands to reason that Jones was given insider information that something regarding terrorism and the new White Al Qaeda was about to transpire.

### **The Future Assassination of Obama**

Aside from a 2011 report that [Alex Jones is actually working for the Obama](#) administration, [Alex Jones is one of 10 or so “celebrities”](#) that have openly predicted the future assassination of U.S. President Barack Obama. In a video uploaded on February 15, 2010, [Jones emphatically states that he is “100%” sure an Obama assassination is going to happen.](#)

There are many reasons to believe that an Obama assassination by the Israeli Mossad is going to happen, but interestingly this evidence is never mentioned by Jones. [Truther.org's](#) sister website entitled [ObamaCSI.com](#) has fully exposed the future assassination of Obama by the Israeli Mossad and detailed how Alex Jones will attempt to provoke and race bait in the aftermath of an Obama assassination. Should even a small percent of Jones' audience act on his hate speech, a full-scale [race war](#) may ensue.

### **Upcoming Bio-Terror Attack**

As of 2012, Alex Jones is now claiming that [a major bio-terror attack is imminent](#). As with the 9/11, the Norway terror attacks and the future assassination of Obama, Jones is again making a [baseless terror prediction](#) without substantiating it with hard evidence. How Jones, a college dropout, is able to routinely predict geopolitical events without EVER providing a shred of evidence for his claims is a mystery at this point unless he is part of the [STRATFOR](#) intelligence network.

The bio-terror prediction is likely being made based on intelligence coming from [STRATFOR](#) and the Israeli Mossad. After all, Israel is the only modern nation that has NOT signed the 1972 [Biological Weapons Convention](#) (refusal to engage in offensive biological warfare, stockpiling, and use of biological weapons) and therefore it stands to reason that should a bio-terror attack take place, it will be executed by the Israeli Mossad.

### **8. Denial of Zionism**

The main job of Alex Jones is to convince people that Zionists do not own and operate the United States of America. That is why Jones has his audience chasing illusionary ghosts such as the New World Order, Illuminati, Skull & Bones, Elites, Luciferians, Eugenicists, Satanists, Bilderbergers, the Royal Family, the Council on Foreign Relations, the Rockefeller Family, the Rothschild Family, the Club of Rome, the World Bank, the United Nations, the Globalists, the Banksters, The FED, The Trilateral Commission, and even the Bohemian Grovers!

Which one is it Alex?

Zionists are the only group Jones conveniently does not speak out. Despite Alex Jones stating that he defends the 1st Amendment and the right to Free Speech, everybody who has tried to call into Infowars to warn the audience about Zionism is immediately cut off and dropped.

When one researches the true power structure of America, undoubtedly they will find Zionists in every meaningful position. Despite all the evidence available, Jones has not and will not reveal [the true Zionist control of America](#). Aside being married to an Israeli, [Jones' repeated denials and lies in regards to Zionism](#) clearly indicating that he is nothing more than a Zionist tool.

### **9. The Millionaire Truther**

The Alex Jones/Infowars money sucking machine has continually bilked and drained money from its listeners and fans with repeated [“Money Bombs”](#), which are no different than what the infamous [Jim and Tammy Fay Baker](#) did to their audience. The numerous Money Bombs were allegedly conducted to raise capital for Jones' 3rd studio in as many years, but as of [February 17, 2012](#), Alex Jones is now speaking about building a 4th studio!



Even if the money is partially being used for a 3rd or 4th studio, the Money Bombs are an obvious personal money grab. One look at Jones' website and it's clear that Jones cares more about selling products than he does about speaking the Truth.

After all, should Jones betray his audience, he must get all the money he can before he twists the knife in the back of America. Based on his monopoly of truth related merchandise and repeated Money Bombs, Alex Jones is probably worth at least \$50 million. Despite his grandiose success, whether legitimate or not, he is continually asking for donations despite not producing a new film in almost 4 years.

A great example of how Alex Jones continues to defraud his audience is detailed in a [video](#) entitled, "Alex Jones' Potassium Iodide scam Exposed!". As documented, Jones takes full advantage of the [Fukushima nuclear disaster](#) in Japan by lying about the scarcity of [potassium iodide](#) in America in order to charge people exorbitant prices. Aside from jacking up the price, Jones went into daily diatribes in a calculated attempt to literally scare his audience into purchasing the potassium iodide from the Infowars store.

Enough said...Watch the [video](#).

### **10. The Super Bowl XLV Nuclear Terror Plot**

On February 1, 2011, [Julian Assange](#) of [Wikileaks](#) revealed to the world via leaked classified diplomatic documents that [Al-Qaida was on the brink of using a nuclear bomb](#) and that the West was on the verge of a "[Nuclear 9/11](#)". What the [diplomatic documents](#) failed to mention was actual target, date and location of the upcoming nuclear terror attack.

Published 4 days prior on January 28, 2011, [The Nuclear Bible](#), specifically named [Super Bowl XLV](#) on February 6, 2011, in [Dallas, Texas](#), as the target, date and location of the impending nuclear terror attack. As detailed in [The Nuclear Bible](#), Alex Jones' traitorous behavior previously exhibited on Y2K was to be repeated that Sunday night when a thermonuclear weapon was to be detonated in Dallas, Texas. After all, that's why Alex Jones began broadcasting on Sundays starting in 2008, so he would be live on the air when shit hit the fan!

### **Oiling His Guns**

Exactly six months prior to Super Bowl XLV, Alex Jones stated on his radio program that he was "oiling his guns" in an obvious statement to his listeners that he was getting ready for a violent revolution of some sort. Based on Jones' inflammatory rhetoric in the months counting down to the Super Bowl, Jones was psychologically prepping his audience for the scheduled nuclear terror attack.

### **Beta-Testing the Infowars Audience**

Shortly after the comment by Alex Jones that he was "oiling his guns", Jones began the disturbing trend of beta-testing his Infowars radio listeners. On almost a daily basis, Jones began to instruct his listeners to Google specific terms so that Jones and his handlers could see via Google Trends how many of his listeners were heeded his commands. Other forms of Beta Testing included the Obama poster campaign, whereby Jones ordered his listeners to print and hang millions of Obama Joker posters.

While these orders may seem innocent on the surface, it is clear that Jones & Co. were calculating how many listeners routinely obeyed his commands in order to gain a statistical understanding of Jones' commanding effect on his audience. There is no doubt that many of Alex Jones' listeners see him as an authority figure on truth, news, terror and the U.S. Constitution. Members of Jones' audience who has previously heeded Jones' commands would then be more likely to also heed Jones' commands to commit violence and terrorism, similarly to the [Stanford Prison Experiment](#).

Immediately after the February 6, 2011 Super Bowl, the beta-testing curiously stopped.

## **Pakistan**

Pakistan, the Super Bowl nuclear terror scapegoat, has been set-up over the last 25 years as the [greatest purveyor of terror](#) and [nuclear proliferation](#) in recorded history. In the aftermath of the first nuclear attack upon America, Jones was set to blame the U.S. government for the attack just as he has done so many times before.

If gun owning Americans would have obeyed Jones' subsequent orders to attack police, military and government installations across America, they would have been crucified in the court of public opinion when Pakistan was ultimately fingered in the attack. After the Jones led revolution, Jones would have vanished, millions of patriotic Americans would have been rounded up and disappeared, and Pakistan would have been targeted with nuclear weapons.

## **Super Bowl Aftermath**

After the Super Bowl XLV nuclear terror plot was exposed in early February of 2011, [Jones was a blubbing mess on the radio](#) and could barely contain his apparent anger and disbelief that he and the nuclear terror plan had been exposed. Since then, Jones has refused to speak about [The Nuclear Bible](#), and has instructed his minions such as Mark Dice and We are Change censor, block, and ridicule [The Nuclear Bible](#) and [Truther.org](#). This failed Super Bowl nuclear terror plot is potentially the biggest news story in American history and has the power to bring down the Obama administration, the U.S. Federal government, and the Zionist establishment, but no one will touch it

## **Conclusion**

While Jones professes to be a loving Christian who cares about humanity, nothing is further from the truth. Aside from smoking, drinking, cursing, lying, using illegal drugs and constantly degrading fellow truthers, Alex Jones is a closet race baiter and blatant fear monger.

Jones, the alleged man of truth, breeds continual fear into his audience which inevitably causes them to be kept in a perpetual state of fight or flight. Instead of imparting wisdom on how to make America and the world a better place, Jones preaches a steady diet of negativity which ultimately never raises the consciousness of his listeners.

In a nutshell, Alex Jones is a divider rather than uniter.

Exposing Alex Jones, [STRATFOR](#), and their partners in crime is the first step towards getting a real and independent investigation into 9/11 and saving America from its rapid free-fall. [America and Alex Jones are run by Zionists](#), not a New World Order. The sooner Americans figure this out, the better ([Truther News, 2012](#)).

# Bio Terror Bible

## EXPOSING THE COMING BIO-TERROR PANDEMIC

**BIOTERRORBIBLE.COM:** In the aftermath of a bio-terror attack and subsequent pandemic, there will be mass hysteria around the clean-up of the attack, especially if it's an Anthrax attack. There is no doubt that the clean-up process will be milked for political gain and may take months of even years to complete.

**Title:** U.S. Not Ready For Clean Up Effort After A Bioterror Attack

**Date:** April 10, 2010

**Source:** [Homeland Security News Wire](#)

**Abstract:** The small 2001 anthrax attack in the United States cost hundreds of millions of dollars in decontamination costs, and some of the facilities attacked could not be reopened for more than two years; a large-scale biological release in an American city, though, could potentially result in hundreds of thousands of illnesses and deaths and could cost trillions of dollars to clean up.

Following the 2001 anthrax attacks, the government and private sector undertook the task of cleaning up anthrax-contaminated facilities — a job that had never before been attempted on that scale. Decontaminating congressional office buildings, postal facilities, and media buildings cost hundreds of millions of dollars, and some of the facilities could not be reopened for more than two years.

Nine years later, what progress has been made in policy and practice that would make decontamination easier in the event of another attack? A recent assessment, sponsored by the [Commission on the Prevention of Weapons of Mass Destruction Proliferation and Terrorism](#) and appearing in the journal *Biosecurity and Bioterrorism*, [found](#) that the process of environmental decontamination would still be very difficult and costly and that the lines of responsibility at the federal level are still unclear.

The 2001 anthrax attack is considered to be a small attack, because relatively few facilities were involved and anthrax contamination was limited to indoor environments. A large-scale biological release, though, could potentially result in hundreds of thousands of illnesses and deaths and could cost trillions of dollars to clean up. An attack on a U.S. city could contaminate both indoor and outdoor areas, including buildings, street, parks, and vehicles.

Researchers from the [Center for Biosecurity](#) of the University of Pittsburgh Medical Center looked at current decontamination policy and technical practices at the federal level to determine what gaps exist that might hamper response to a future large-scale attack with a biological agent. The government agencies with primary responsibility for decontamination are the Environmental Protection Agency (EPA), the Department of Homeland Security (DHS), and the Department of Defense (DoD). Federal roles and responsibilities for decontamination research and response are not clearly spelled out, overlap, and are often underfunded..

The article also describes some of the technical and scientific issues that remain unresolved: After an anthrax release, what is the risk of secondary aerosolization? What is the federal standard for decontamination — or, how clean is clean? How clean is safe?

The authors note that there are too few personnel trained in decontamination among all of the agencies and including private contractors. In the event of an attack, private building owners and government agencies would likely be calling on the same limited pool of experts and contractors to help with remediation.

**Among the recommendations the authors propose:**

1. DHS should clarify federal roles and responsibilities
2. Congress should increase funding for decontamination research
3. In addition to research, additional investment in personnel is needed ([Homeland Security News Wire, 2010](#)).

# Bio Terror Bible

## EXPOSING THE COMING BIO-TERROR PANDEMIC

**BIOTERRORBIBLE.COM:** In the aftermath of a bio-terror attack and subsequent pandemic, a great many people will die as a result of the actions and inactions of hospitals throughout America. Based on recent [bio-terror drills](#), hospitals will likely open temporary clinics whereby people will be vaccinated in mass. Whether or not the vaccines kill or save the patient is yet to be determined.

**Title:** Some Hospitals To Rebuff Victims Of Bioterrorism

**Date:** April 16, 2003

**Source:** [UCLA](#)

**Abstract:** St. Vincent's Hospital, a 758-bed acute-care facility in Manhattan, recently held a drill to prepare for a nuclear, biological or chemical terrorist attack. The first step: Lock down the hospital so that no new patients could come in.

"If we can't protect the people who are here, we can't do our job," says Richard Westfal, assistant director of emergency medicine at St. Vincent's.

Doctors in the nation's emergency rooms have long sought to treat everyone. But as U.S. hospitals confront the possibility of terrorism -- especially acts resulting in victims who might contaminate others or spread infectious diseases -- a few health-care providers envision a significant, and highly controversial, change in mission.

In the case of an attack with nerve gas such as sarin or a radioactive "dirty bomb," Dr. Westfal says, St. Vincent's wouldn't admit patients until its staff was fully outfitted in protective gear. Even then, he says, it would open just one of its eight doors to the outside and take only two victims at a time, after each has had a decontamination shower. St. Vincent's has coordinated its plan with local police, who could be called on short notice to guard the outside of the building.

In Houston, St. Luke's Episcopal Hospital is vaccinating up to 75 of its staffers against the smallpox virus. But since smallpox doesn't have a cure and kills about 30% of its victims, hospital officials say they would lock down the moment conditions were deemed unsafe for those within.

Such a policy "may not have the needs of the [smallpox] victims in mind," says Herbert DuPont, chief of internal medicine at St. Luke's, but he says St. Luke's first priority should be to its patients, staff and their families.

Last year, as part of push for smallpox preparedness, the Centers for Disease Control and Prevention urged state planners to identify facilities that might house patients in the event of an outbreak. But health-care facilities proved reluctant participants. Some feared losing revenue; others worried about a lingering stigma.

Still, in the matter of turning away victims of contagious diseases, or nuclear or chemical attack, many hospitals either haven't tackled the issue or rather have tackled it in such a way that they are hoping to meet the needs of the community with the resources they have. Some have no specific policy to lock down but won't rule it out as a last resort. For now, however, St. Luke's and St. Vincent's are not in the mainstream.

"Most [hospitals] have said it's not our job to shut people out," says Jim Bentley, senior vice president for strategic policy planning for the American Hospital Association in Washington, D.C.



David Hooper, chief of the infection-control unit at Massachusetts General Hospital, says, "Our goal is to take care of people who need medical help. Some may be on our doorstep, others may be in our hospital. But we're not closing our doors."

But health-care officials say that hospitals are generally ill equipped to deal with bioterrorism. A just-released report by the U.S. General Accounting Office found U.S. hospitals would need capital improvements and additional equipment to deal with an extraordinary bioterrorism attack -- from medical stockpiles to decontamination facilities.

"Bioterrorism preparedness is expensive and hospitals are reluctant to create capacity that is not needed on a routine basis and may never be utilized," the report concluded.

Since hospital accreditation requires disaster planning, many hospitals are ready to take emergency steps, such as following an American Hospital Association preparedness checklist, which includes a three-day supply of specified pharmaceuticals, emergency power, a loudspeaker and outdoor decontamination showers.

A group of Rhode Island hospitals are backing a state plan to use a mothballed mental-health facility in Pawtucket as a place to treat potential smallpox victims so that local facilities aren't overwhelmed, their staff and patients contaminated or infected.

Providence's Rhode Island Hospital has acquired two inflatable decontamination tents, raising its decontamination capacity to 150 from 30 in the case of a chemical attack and allowing the process to take place outside its regular facility. "We're just taking what we do on an everyday basis and extending it," says Thomas Magliocchetti, who heads emergency preparedness for the hospital.

Washington Hospital Center, Washington, D.C.'s largest trauma center, is using a \$2.2 million grant from the Department of Health and Human Services to draw up plans for what it calls "EROne." Hospital officials are scheduled to unveil the design next month and they say construction will follow.

Among the features: ambulance access to the emergency room modeled after automobile drop-off and pickup at airports and rooms equipped with negative pressure, where air is vented outdoors, rather than recirculated through the hospital. "The objective is to handle three to four times the normal load with graceful degradation as opposed to catastrophic failure," says Mark Smith, chairman of emergency medicine at Washington Hospital Center.

At Washington Hospital Center, overflow in the event of a terror attack would likely be in the parking lot. "To try to isolate ourselves from the community would be hard," says Christopher Wuerker, medical director, MedSTAR transport at Washington Hospital Center.

The center has vaccinated 24 of its staff against smallpox, and intends to vaccinate all employees should the hospital treat a single case. But Dr. Wuerker says a full-fledged epidemic could possibly force the hospital to discharge some of those infected for lack of space. And, he says, locking down the hospital in the midst of such a crisis isn't out of the question. "It's sad to think that's what might be needed," he says. "But that's the reality" ([UCLA, 2003](#)).

**Title:** Utah Implements Harsh Triage Guidelines For Bioterror, Epidemic Emergencies

**Date:** May 19, 2010

**Source:** [Homeland Security News Wire](#)

**Abstract:** Utah's new triage health emergency guidelines would see some children and some seniors turned away from hospitals during a bioterror or epidemic emergency; those who are severely burned, have incurable and spreading cancer, fatal genetic diseases, end-stage multiple sclerosis, or severe dementia will be turned away; people older than 85 also would not be admitted in the worst pandemic; those who have signed "do not resuscitate" orders could be denied a bed

When a killer flu strikes, with several thousand sick or injured and no room to spare in understaffed hospitals, care will be denied to the sickest adults and children. Those who are severely burned, have

incurable and spreading cancer, fatal genetic diseases, end-stage multiple sclerosis, or severe dementia will be turned away. They can be sent elsewhere for comfort care, such as painkillers, but they will not be treated for the flu, according to controversial Utah triage guidelines being modeled across the country.

People older than 85 also would not be admitted in the worst pandemic. Those who have signed “do not resuscitate” orders could be denied a bed. Doctors could remove ventilators from patients deemed unlikely to recover, to give them to other patients.

The *Salt Lake Tribune*’s Heather May [writes](#) that these triage guidelines envision an outbreak — or another public health emergency — so severe that the health care system is unrecognizable. They apply to disasters from bioterrorism to an earthquake.

Developed by the Utah Hospitals and Health Systems Association for the Utah Department of Health, they aren’t mandatory and rely on physician judgment. “The choice is: When you don’t have enough, who do you do it for?” said state epidemiologist Robert Rolfs, who joined hospital medical officers, nurses, emergency doctors and an ethicist who wrote the recommendations. Their answer: Provide the greatest good for the greatest number. Priority will be given to patients who will most likely recover with treatment. People likely to die even with treatment, or likely to survive without it, will not get care.

Largely finalized in January, the guidelines were required as part of the Governor’s Taskforce for Pandemic Influenza Preparedness, created by then-Governor Jon Huntsman Jr. in 2006.

May writes that a group convened by the hospital association spent years studying how others allocated scarce resources, including during a severe acute respiratory syndrome outbreak in Toronto in 2003, said Deb Wynkoop, its director of health policy. She said more than a dozen states have adopted some or all of Utah’s guidelines.

The state could have decided to provide care on a first-come, first-serve basis or use a lottery, said medical ethicist Jay Jacobson, a workgroup member. Instead, it used a wartime triage model. “It was difficult grappling with the idea we would say no for any reason,” he said.

The recommendations would have been implemented if the H1N1 outbreak in Utah had escalated, Wynkoop said. In the year since the outbreak started in April 2009, the flu has hospitalized 1,334 Utahns and killed 49.

May notes that by comparison, the triage guidelines anticipate thousands being hospitalized at once: Every emergency department would be overwhelmed, the state is 5,300 hospital beds would be full, along with another 1,100 beds placed in offices, conference rooms and exam space. Hospitals would be operating with 60 percent to 80 percent of their staff. Ventilators would be in high demand and short supply, without enough respiratory therapists to oversee their use.

Once the governor declared a public health emergency, the guidelines would apply in hospitals but also to physician offices, clinics, long-term care facilities and paramedics, so they do not transfer patients who would not be admitted.

Providers could not be sued for denying care in an emergency, except in cases of gross negligence or criminal conduct, under a 2007 state law.

The guidelines show eleven ways an adult can be excluded from care, ranging from a “severe neurologic event” with minimal chance of recovery, such as a stroke, to certain stages of cystic fibrosis. They do not address how to treat pregnant women, a matter to be decided in the fall.

Children 13 and younger would be turned away for six reasons, including underlying conditions that are often terminal by age 2, including Trisomy 13 or 18 and spinal muscular atrophy. Premature babies with an 80 percent or greater chance of dying would not be resuscitated.

Peter DeWeerd, a family medicine doctor who works in the emergency room of St. Mark's Hospital, participated last summer in a mock drill to test the guidelines. "It's going to be pandemonium," DeWeerd predicted, noting that denying life-sustaining care runs counter to what doctors and nurses are trained to do. He recalled a mock mother fighting to get treatment for her 7-year-old daughter, who was in a wheelchair and had severe chronic respiratory illness. "She was doing everything she could to break through security," he said recently. "There's a point we say, 'We're sorry, we don't have the ability to treat your child.'"

He emphasized the need for prevention through vaccinations and having emergency storages of food, water, medicine and blankets. "Those are the things that are going to keep me and my colleagues from having to make as many of those gut-wrenching, once-in-a-lifetime decisions."

Guideline authors said they tried to avoid judging the quality of someone's life. They acknowledge, though, that they did so when it comes to dementia, based in part on surveys asking whether people would want life-sustaining treatment if they had it, said ethicist Jacobson. "There is a judgment [that] even if they did survive, the duration of survival and quality of that survival is poor in terms of the value to society," said Rolfs, the epidemiologist.

Physician Norman Foster agrees it is reasonable to allocate scarce care based on a person's underlying cognitive abilities. He worries, though, about the guidelines' vague language. He is unaware of anyone with expertise in geriatrics or neurological diseases being consulted on the guidelines.

Foster, director for the Center for Alzheimer's Care, Imaging and Research at the University of Utah, said most Utah dementia patients are not properly evaluated. That means medical staff in a triage situation would not know if the condition was severe, he said. He fears staff could deny care to more people than intended, including people with mild forms of dementia, those with reversible delirium, those with speech problems or the elderly in general.

"Dementia care is not a priority in our health system or among health professionals," he wrote in an e-mail. "There is a significantly greater risk of abuse of these patients in a triage system of any kind."

Other language excludes those with end-stage multiple sclerosis "requiring assistance with activities of daily living."

That language should be eliminated, since "there are many healthy, high-functioning people who require such assistance," the National MS Society said in a statement.

May writes that Utah has also been criticized for using DNR status as a reason to deny care. "Do not resuscitate" refers to not wanting life-sustaining measures if a person's heart or breathing stops. People who sign them likely would not anticipate they would be denied a ventilator for the flu.

The orders "reflect individual preferences" more than "an accurate estimate of survival," said a report by the Institutes of Medicine, which evaluated crisis guidelines from Utah and other states.

Helen Rollins, a retired nurse who helped develop end-of-life care programs in Utah hospitals, said patients typically sign DNRs when they are critically ill. If they get better, it would be "unfair" to use that status to refuse treatment during a separate emergency, she said.

Excluding patients based on DNR status "is one that continues to worry me a little bit," said Rolfs, the epidemiologist. "Judgment [by a physician] is needed."

Besides excluding certain patients, the recommendations prioritize patients for admission and use of a ventilator based on the Modified Sequential Organ Failure Assessment — a tool that predicts mortality.

One point could make the difference between being sent home or getting a bed — or being removed from a ventilator. The scale “was not designed as a prospective predictor of survival,” the IOM report said, noting it is unknown whether the difference of a single point means a patient is more likely to recover.

Wynkoop said Utah doctors evaluated the scale by examining the records of past intensive care patients. Those who would be denied care under the guidelines died even after the most aggressive treatment, she said. “We’ve got to start from somewhere,” she said. “Just saying we’re not going to have any [evaluation tool] doesn’t appear to be humane.”

Patients denied care would be sent home or to another facility and provided with sedatives and painkillers to keep them comfortable until they die. “Many of us have a family member or a friend who is on that exclusion list,” Rolfs said. “You look at it and you think about it. ‘These are not going to be easy times.’” ([Homeland Security News Wire, 2010](#)).

# Bio Terror Bible

## EXPOSING THE COMING BIO-TERROR PANDEMIC

**BIOTERRORBIBLE.COM:** In the aftermath of a bio-terror attack and subsequent pandemic, there will be tremendous public pressure on the U.S. government to identify the source of the bio-terror agent. Although there is always a possibility that the bio-terror agent came from an alleged "bio-terrorist", history indicates that [the attack will come from government](#).

**Title:** Scientific Speed Is the Key In Fighting Bioterror

**Date:** May 1, 2002

**Source:** [LA Times](#)

**Abstract:** It's human nature: The United States' fear of another biological attack is fading fast. But it shouldn't.

In Kandahar, U.S. forces have discovered an Al Qaeda laboratory that was to produce anthrax. And one of the Sept. 11 hijackers may have been treated in Florida for cutaneous anthrax last June. The threat of biological terrorism is real.

So far, our efforts have focused on improving the care of potential biological victims. And whether last year's perpetrator, still at large, is a lone "bio Kaczynski" or an organized "bio Bin Laden" is somewhat beside the point. The primary issue is that the United States must devise a broader plan to prevent, deter and respond to the long-term threats of biological terrorism.

How could we do this? The complete DNA sequence of anthrax is to be unveiled next week in a public database. A practical solution to the biological security problem would take advantage of such scientific knowledge and the fact that different strains of anthrax are readily identifiable with molecular fingerprinting technology.

The means exist to create a high-speed laboratory and molecular forensic database against germs like anthrax. Such a laboratory would provide for positive identification and source tracing for anthrax and many other "select germs" identified by Congress, including hantavirus and plague.

Proposed laws to strengthen homeland security call for more guards, padlocks, record-keeping and personnel checks at laboratories that handle select germs. Such measures would be expensive and time-consuming. Yet forensic security can ease the burdens of physical security.

Here's how it might work: Researchers would be required to periodically submit samples of their labs' select germs for high-speed fingerprinting. This practice would automatically maintain a list of institutions and investigators who handled select germs (something that does not exist at present) and an up-to-date forensic database on them. If germs from a legitimate institution were used in a biological attack, we would uncover this quickly, perhaps overnight.

The 1972 Biological Weapons Convention, agreed to by 162 nations, bans the maintenance of offensive bioweapons programs but offers no provisions for verification and compliance.

The high-speed laboratory could provide a new technical foundation for sensitive and effective inspection procedures based on molecular forensics. For example, if an insecticide plant was inspected and found to contain traces of anthrax, we would take action. That's prevention.

There are about 20 rogue countries and organizations with secret offensive biological weapons programs, and the number is growing. If we had a high-speed laboratory, it would help in the covert monitoring of their capabilities and in fingerprinting their germs. And we could put such states on notice that, if their weapons were ever used against us, we would pinpoint their origins and act with guaranteed force. That's deterrence.

In the event of a biological attack, the high-speed laboratory could test thousands of samples each day. It would help public health officials to save lives, reduce confusion and speed recovery operations. That's response.

In addition, more information on bioterror germs would benefit medical research. It could speed the development of new drugs and vaccines. Because of this, the forensic database should be made available to scientists and not completely "walled off" behind government top security.

A handful of anthrax letters has made it apparent that Americans are vulnerable to biological attacks. The first time we were relatively lucky--five deaths, a dozen or so hospitalizations, 30,000 people on prophylactic antibiotics. The next attack could kill thousands and cause havoc in our collective psyche and national economy.

The U.S. has comprehensive plans to prevent, deter and respond to potential nuclear and conventional attacks. Now we need a plan for biological attacks. Every dollar spent on a high-speed system would save much more ([LA Times, 2002](#)).

**Title:** Biometrics Against Bioterrorism; Steps For Trans-National Countermeasure Strategies

**Date:** June, 2011

**Source:** [IDSA](#)

### **Abstract:**

#### **Introduction**

Due to various factors like advances in biomedical technology, emerging infectious diseases research and other related activities, knowledge, materials, and equipment needed for manufacturing biological weapons are spreading rather rapidly. Consequently, fears relating to mass casualty terrorism and gross violations of Biological Weapons Convention (BWC) are also rising. Unlike nuclear weapons, where at least 5–15 kilograms of fissile material is required to build a rudimentary fission bomb, no such barrier exists for biological weapons. The dual-use nature of the equipment and supplies make biological weapon programs easy to hide under the guise of legitimate biomedical activities. Only small quantities of pathogens are required for seed stocks, and biological agents emit no detectable signal, making them virtually impossible to detect remotely. There is a general term, biometrics, which includes processes for verification and identification of individual or a group to ensure safety and security for the general public from any threat. Biometrics involves the autonomous recognition of human's physical and behavioral characteristics through sensory mechanism. Biometric provides a comprehensive defence capability against threats from adversaries which increases its robustness. This can be done by using a detector to detect virus, bacteria, other micro organisms and biotoxins. It is expected to provide the complete safety of the individual and the country.

#### **History**

Biometrics has become a critically important topic of research for scientist, researchers and engineers after 9/11. Following the fears of Anthrax and other agents' usage, there is a heightened level of attention to this kind of threats and more measures are being put in place in order to avert these threats. It is needless to stress that biometrics plays a major role in serving the purpose. On the other hand, India relies heavily on the traditional security apparatus of the police and other security agencies to deal with many security challenges including cross border terrorism, illegal migration and monetary exchanges. Since 26/11, there is a need to do more with reference to maritime security as well. These kinds of threats make it necessary for the Indian security system to adapt biometric applications. However, despite this, research and development activities in this field are lagging behind in India as not many institutes are involved in biometrics research. Therefore, its time India



brings strong institutional support for research and development in this area since it can play a crucial role in counter-terror strategies.

Developed countries like the United States are paying much attention to add biotechnology to their biometrics approach. This can be observed by looking at the advancement of biotechnology in the United States. It is estimated that by the end of the 20th Century, biotechnology contributed nearly half a million jobs and \$47 billion in business revenue annually to the US economy.<sup>1</sup> Similarly, China now has about 20,000 people working in 200 biotechnology laboratories.<sup>2</sup> Mostly laboratories like these work towards developing defence mechanism against biological attacks.

### **Using Biotechnology in Identifying a Biological Attack**

Biotechnology applications are extremely useful for tracking the source of any biological attacks and also for taking further action against the culprits of that attack. However, the complexity of the system would require advance setup of coordination efforts between different agencies of the government and outside. This is because a large count of known viruses and bacteria can be used in attacks and there can be unknown new microorganisms used for the same. These can cause disease in humans, animals and crops. Even the worst case is that the terrorists can project their attack from the subtle to the apocalyptic. Therefore, the first task would be to bring about congruence in the disease-surveillance data from a variety of government and public health sources towards determining which areas might get affected and to what degree. An effective defence requires setting priorities which includes indentifying the most likely near-term threats and implementing research, detection and response agendas designed to be able to better manage future threat scenarios.

Biometrics is a source that is rich in profiling information related to the biology like all DNA synthesis orders from all suppliers worldwide. Importantly, anticipation of potential terrorist strategies, analyses of the symptoms related to all the probable diseases etc forms the basis for a promising technology. A biometric system makes use of various sensory mechanisms to assess both identity and physiological state of an agent. It also includes checking the symptoms of the individual by face recognition and diagnostic tests. These data are then transferred to data management body where it is matched with disease surveillance data. In case an emergency situation is identified as a biological attack, the next step is to identify the source organism which leads to the next step of speedy disbursement of necessary antibiotics and drugs in the affected areas. Fumigation of the ozone and other disinfectants are immediately used in the disease prone area. Improved international disease surveillance might also detect the presence of covert biological weapon programs in the event of an accident that infects the local population.

## **International Efforts**

### **A. Diplomatic Coordination:**

Efforts by the World Health Organization (WHO) to implement the Global Outbreak Alert and Response Network are well placed and the recently revised WHO International Health Regulations, which require reporting of any disease of international public health concern within 24 hours, when fully implemented, will have public health and security benefits for all nations. These efforts need sustained and global diplomatic and financial backing.<sup>3</sup> Ultimately governments around the world must know that this spreading of disease does not depend on boundaries and public health is a great issue for all mainly during international travel and commodity transfer. Also this leads to the development of vaccine against that particular microorganism and to be served to people for their future security.

### **B. Research Coordination:**

Exchanges of best practices at pathogen collections or biocontainment facilities that work with deadly pathogens can be undertaken in order to improve safety and security so that the risks associated with accidents or diversion could be reduced. This would help promote interaction among biomedical practitioners engaged in potentially dangerous research. International association and collaboration among biologists, medical professionals, and public health practitioners would help address emerging infectious diseases and the transparency produced through such collaborations would have, as a collateral benefit, the potential to detect covert activities.

Implementing defensive countermeasures against biological attacks will require not only research but drug development and distribution plan. According to the reports of the Biotechnology Industry

Organization, nearly 100 companies are seriously engaged in advanced research on finding answers to bioterrorism and its effects.<sup>4</sup> Their research includes using technology facilities to develop new antibiotics, vaccines and antiviral drugs. Some of these are reported to be in the advanced medical trial stages. Research is also in progress in order to develop advanced oral vaccines that are capable of boosting immunity in a shorter period compared to the existing medicines<sup>5</sup>. These developments, if effective will be useful against bioterrorism attacks. Similar research is underway on other diseases as well

Pre-emptive measures can be taken to destroy the weapon before they can be launched, it can be done practically by opening the wings of biological facilities and weapons are easy to find. Research is also underway to identify simpler way to destroy these pathogens. Efforts to improve intelligence on suspect groups or individuals are useful; however, there are no technical fixes in the offing that will allow intelligence agencies to improve their ability to detect covert biological weapon programs in the future.

### **Conclusion**

The best way for the defence is to discover and implement anti factor on organism-by-organism basis so that one can win in this biological arms race.<sup>6</sup> It will be vital from a strategic perspective to consider carefully what types of biodefence work should be classified. It needs to be debated further whether it would be legal and wise to have classified biodefence research produce genetically modified pathogens that to our knowledge, no adversary has yet created. Claire Fraser once said, "Terrorists could potentially make use of public genome sequences, however it is also argued that such sequences should remain in the public domain because these 'maps' are still relatively rough. Genomics should be used to identify and fight bioterrorism, not to restrict research.<sup>7</sup> Hence with the advancement of biotechnology, its results and new products should be included to biometrics so that the future biological attack can be easily recognised and may be stopped before it will become epidemic. It is the right time for India to pay attention to the biometric side along with the research in biotechnology. This will certainly make the nation to stand against any future bioterror attack. Vaccines, antibiotics and drugs should also be produced against every new microorganism. There should be complete database of all discovered genome sequences which can help in the research activities of the nation ([IDSA, 2011](#)).

# Bio Terror Bible

## EXPOSING THE COMING BIO-TERROR PANDEMIC

**BIOTERRORBIBLE.COM:** In the aftermath of a bio-terror attack and subsequent pandemic, the legal question of who is in charge will surly surface. Based on bio-terror drills and recent legislation passed by the U.S. Congress, [martial law will be called](#) in the wake of a pandemic and whoever is the sitting U.S. President will dictate jurisdiction and all civil liberties will be suspended.

**Title:** Thompson Acknowledges Confusion Over Who's In Charge Of Bioterrorism Cases

**Date:** April 18, 2002

**Source:** [UCLA](#)

**Abstract:** Congress may have to intervene to clear up confusion over whether law enforcement or health agencies are in charge of bioterrorism investigations, the secretary of Health and Human Services said Thursday.

Tommy Thompson told a Senate panel that his department has enjoyed "great cooperation" with the FBI on anthrax cases, but conflicting federal regulations make it unclear who has the final say.

Sen. Max Cleland, D-Ga., contended the confusion threatens to put critical evidence, such as anthrax spores, in the hands of criminal investigators rather than health officials who can better warn and protect the public from outbreaks.

"You have the resources, and you ought to be the lead dog," Cleland told Thompson during the Governmental Affairs Committee hearing.

Thompson did not endorse Cleland's proposal to make the Atlanta-based Centers for Disease Control and Prevention the lead agency on bioterrorism investigations. He acknowledged, however, that it would help for CDC to get the evidence first so it can issue a public health alert if necessary.

"I personally think CDC should get this stuff immediately," Thompson said.

[Anthrax-tainted letters](#) delivered last fall to Senate Majority Leader Tom Daschle, D-S.D., and Senate Judiciary Chairman Patrick Leahy, D-Vt., were sent first to an Army research lab in Fort Detrick, Md. Only later did the CDC get small samples of the anthrax to study.

An executive order by President Clinton in 1995 designated the FBI as lead agency for all domestic terror incidents. But an order signed last year by President Bush gave that authority to the director of homeland security.

Also, Congress approved the Public Health Service Act and the Public Health Threats and Emergencies Act last year, which put CDC and the secretary of Health and Human Services in charge of bioterrorism matters.

"We've got about 20 different agencies involved in bioterrorism," Cleland said. "What I'm trying to do here is sort out the protocol."

Thompson didn't endorse a specific piece of legislation but said after the hearing that Congress is best equipped to clarify the procedures.

When asked by committee Chairman Joseph Lieberman, D-Conn., to rate on a scale of 1 to 10 the country's readiness for another act of bioterror, Thompson said: "Six, going on seven."

Most states have submitted emergency response plans for bioterrorism attacks, Thompson said. Most plans, especially for particularly deadly outbreaks like smallpox, would require an area to be quarantined and nearby residents vaccinated, starting with health and emergency personnel.

Sen. Jim Bunning, R-Ky., asked why these so-called "first responders" aren't vaccinated now. Thompson said the department is considering doing that, although his spokesman said later the discussions are just beginning ([UCLA, 2002](#)).

**Title:** Who's in Charge? Leadership During Epidemics, Bioterror Attacks, And Other Public Health Crises

**Date:** June, 2010

**Source:** [Pub Med](#)

**Abstract:** Dr Laura Kahn has produced a useful book that provides a brief historical background on public health and terrorism, followed by interesting examples of leadership during outbreaks and events that escalated to public health crises. The roles of astute clinicians, public health professionals, appointed public health leaders, and elected officials are described by the players themselves. These insights provide important perspectives and are fascinating reading, but each event includes the voices of only a few of many participants. This omission may leave the reader hungry for a wider variety of viewpoints.

Kahn takes the reader through a thought-provoking overview of the complexity of leadership and some early milestones in public health. Kahn makes it clear that politics, economics, communications, and interpersonal relations are as central to today's public health crises as they were in the past.

Persuasive examples support Kahn's main thesis that political leadership is critical during a public health crisis, whether the crisis results from natural causes or from bioterrorism. Kahn says, "Questions about leaders and leadership have intrigued scholars in both Western and Eastern civilizations for centuries. Plato, Confucius, and Machiavelli all speculated about leaders... and the qualities of leadership." Kahn concludes that 1) informed, engaged, and prepared elected officials are essential to effective response; 2) because crisis response decisions inevitably will be made in the absence of perfect information, leaders require judgment and common sense; 3) elected and appointed leaders must be effective; and 4) dual leadership during a crisis can cause confusion.

The author provides a convincing case for her conclusions with lively examples and first-hand accounts and offers several concrete suggestions to prepare elected officials for leadership roles. The same compelling case is not made for Kahn's assertion of a "legal conundrum when dealing with the bioterrorism attack." She suggests that the Centers for Disease Control and Prevention (CDC) should lead the public health response to such episodes but alleges that legal and organizational impediments hinder CDC from fulfilling that lead role.

Unquestionably, CDC must and does play a lead role during large-scale, multistate public health events. The legal and organizational impediments to fulfilling that role are not obvious to this reviewer, especially given CDC's success in addressing many such crises. Kahn may be referring to impediments within the federal structure and chain of command. However, current law specifies the roles of CDC and the departments of Health and Human Services, and Homeland Security. CDC has ample legal authority to supplement its technical and scientific leadership during an emergency, especially when state and local capacities are outstripped.

Kahn suggests federalizing and centralizing the national response system through changes in the legal framework and organizational structures of the public health system, arguing that if CDC were organized for response as the Environmental Protection Agency or the Federal Bureau of Investigation is, delays, leadership confusion, and communication issues would be resolved. She identifies some leadership problems but fails to acknowledge the strong collegial relationship between state public health authorities and CDC that has produced innumerable successful responses to crises. Restructuring the traditional relationship between states and the federal government seems unnecessary.

This problem does not overshadow an otherwise informative and engrossing book. In an era of emerging infectious diseases, bioterrorism, and large-scale natural disasters, we will continue to have to address the types of events Dr. Kahn describes. Those involved in responding to such events would benefit from studying the lessons of the past to better manage future emergencies ([Pub Med, 2010](#)).

# Bio Terror Bible

## EXPOSING THE COMING BIO-TERROR PANDEMIC

**BIOTERRORBIBLE.COM:** There are seven major bio-terror surveillance and response networks that have been identified as operational throughout the United States and the World. Should a major bio-terror attack occur followed by a real or engineered pandemic, the following entities will be responsible for monitoring, guiding, **hying** and ultimately stopping the pandemic.

1. [BioWatch](#)
2. [ESSENSE](#) (Electronic Surveillance System For The Early Notification of Community-Based Epidemics)
3. [GEIS](#) (Global Emerging Infections Surveillance)
4. [HAN](#) (Health Alert Network)
5. [LRN](#) (Lab Response Network)
6. [RODS](#) (Real-Time Outbreak Disease Surveillance)
7. [SS](#) (Syndromic Surveillance)

## 1. BioWatch

**Title:** BioWatch

**Date:** 2012

**Source:** [Wikipedia](#)

**Abstract:** BioWatch is a United States Federal Government program to detect the release of [pathogens](#) into the air as part of a [terrorist](#) attack on major [American](#) cities. Reportedly operating in [Philadelphia](#), [New York City](#), [Washington, DC](#), [San Diego](#), [Boston](#), [Chicago](#), [San Francisco](#), [St. Louis](#), [Houston](#), [Los Angeles](#) and 21 other cities, the BioWatch program was created in 2001 in response to the increased threat of bioterrorism sparked by the [2001 anthrax attacks](#), and was announced in [President George W. Bush's State of the Union Address](#) of 2003.

The program, described as "the nation's first early warning network of sensors to detect biological attack" operates via a system of filters located within existing [Environmental Protection Agency](#) air filters which monitor the quality of the air. Results from these filters are analyzed by the [Centers for Disease Control and Prevention](#) who then pass any significant results to the Federal Bureau of Investigation ([Wikipedia, 2012](#)).

**Title:** U.S. Is Deploying A Monitor System For Germ Attacks

**Date:** January 22, 2003

**Source:** [UCLA](#)

**Abstract:** To help protect against the threat of bioterrorism, the Bush administration on Wednesday will start deploying a national system of environmental monitors that is intended to tell within 24 hours whether anthrax, smallpox and other deadly germs have been released into the air, senior administration officials said today.

The system uses advanced data analysis that officials said had been quietly adapted since the Sept. 11 attacks and tested over the past nine months. It will adapt many of the Environmental Protection Agency's 3,000 air quality monitoring stations throughout the country to register unusual quantities of a wide range of pathogens that cause diseases that incapacitate and kill.



Officials said that although the system would not by itself protect Americans against a germ attack, early detection of such a strike would give the government more time to mobilize medical resources that could save thousands, and even hundreds of thousands of lives. The faster those exposed to most deadly pathogens are vaccinated against a disease, or treated with antibiotics to combat it, the lower the death rate.

Under the system, the E.P.A. monitoring stations will send samples of a tissue-like paper from newly upgraded machines that filter air to the closest of some 120 laboratories across the country associated with the federal Centers for Disease Control and Prevention. Results will be available within 24 hours, and possibly within 12 hours.

Although officials declined to say which or how many E.P.A. monitoring stations would ultimately be used, experts on the government's program said the first environmental monitoring stations in the new system, called Bio-Watch, were in New York. The city has more than seven such stations. The stations, which are all outdoors, now mainly monitor for air pollution.

"We will ramp up to other cities and areas of concentrated populations very quickly," one official said. "Within a matter of days, we will be able to tell in almost any major urban area whether a large release of a dangerous pathogen has occurred, what was released, and where and when it occurred."

Officials said today the introduction of the system by the newly created Department of Homeland Security was not linked to a specific terrorist threat. The intelligence community, one senior official noted, has "no credible evidence that Al Qaeda has acquired biological weapons, or any weapon of mass destruction at this time."

But the system is being deployed as the Bush administration moves toward deciding whether to use military force against Iraq. After the 1991 Persian Gulf war, Iraq declared having made thousands of gallons of liquid anthrax, botulinum toxin and other pathogens that cause disease, and it may have kept stocks of deadly smallpox virus as well.

Although Baghdad says it has destroyed these stockpiles, American officials believe it is hiding some of its chemical and germ agents, and that it tested anthrax as an aerosol before the gulf war.

However, one senior official said, the new environmental surveillance system was not being deployed specifically because of Iraq, but "to prepare the country for whatever the weapon and whomever the culprit might be."

While environmental monitoring does not provide instant detection of the release of a dangerous germ, the new system is aimed at giving health officials more time to send doctors, vaccines, antibiotics and medical equipment to the scene of a bioterror attack. Doctors and terrorism experts have long said that the lack of such a system is one of the most glaring deficiencies in the nation's biodefenses.

While the government is still working to develop cheap and reliable instant detectors, the technology has yet to be perfected, officials said. The hand-held detectors, which have been distributed in some cities, and others that are now being tested provide what experts call too many "false positives" — mistaken identifications of a germ release.

The new environmental surveillance system uses monitoring technology and methods developed in part by the Department of Energy's national laboratories. Samples of DNA are analyzed using polymerase chain reaction techniques, which examine the genetic signatures of the organisms in a sample, and make rapid and accurate evaluations of that organism.

Officials who helped develop the system said that tests performed at Dugway Proving Ground in Utah and national laboratories showed that the system would almost certainly detect the deliberate release of several of the most dangerous pathogens. "Obviously, the larger the release, the greater the probability that the agent will be detected," an official said. "But given the coverage provided by the

E.P.A. system, even a small release, depending on which way the wind was blowing and other meteorological conditions, is likely to be picked up."

The [anthrax attacks](#) of October 2001 would probably not have been detected by the new system, officials said, mainly because the outbreak was caused by a tiny amount of anthrax — one to two grams — and because the release was indoors, where the sensors do not monitor.

Officials said the new system would not detect releases in such places as shopping malls, subways and other covered areas.

"But the system is calibrated to detect relatively small amounts of some of the agents of greatest concern," an official said, referring to smallpox and larger releases of anthrax.

While officials declined to disclose how much the program would cost, they said it was relatively inexpensive. They said it would cost about \$1 million to provide upgraded filters to the selected air quality monitoring stations and another \$1 million per city a year for analyzing samples.

A senior administration official said the White House did not plan to announce the start of the system ([UCLA, 2012](#)).

## 2. ESSENCE

**Title:** Essence (Electronic Surveillance System For The Early Notification of Community-Based Epidemics)

**Date:** 2012

**Source:** [Wikipedia](#)

**Abstract:** Essence is the [United States Department of Defense](#)'s Electronic Surveillance System for the Early Notification of Community-based Epidemics. Essence's goal is to monitor health data as it becomes available and discover [epidemics](#) and similar health concerns before they move out of control ([Wikipedia, 2012](#)).

**Title:** ESSENCE II And The Framework For Evaluating Syndromic Surveillance Systems

**Date:** September 24, 2004

**Source:** [CDC](#)

**Abstract:** The Electronic Surveillance System for the Early Notification of Community-Based Epidemics (ESSENCE II) is a prototype syndromic surveillance system for capturing and analyzing public health indicators for early detection of disease outbreaks.

### Objectives

This paper presents a preliminary evaluation of ESSENCE II according to a CDC framework for evaluating syndromic surveillance systems.

### Methods

Each major topic of the framework is addressed in this assessment of ESSENCE II performance.

### Results

ESSENCE captures data in multiple formats, parses text strings into syndrome groupings, and applies multiple temporal and spatio-temporal outbreak-detection algorithms. During a recent DARPA evaluation exercise, ESSENCE algorithms detected a set of health events with a median delay of 1 day after the earliest possible detection opportunity.

### Conclusions

ESSENCE II has provided excellent performance with respect to the framework and has proven to be a useful and cost-effective approach for providing early detection of health events.

## Introduction

In response to the threat of biologic terrorism and the resurgence of virulent forms of infectious diseases, technologic advances are being applied to disease surveillance. Syndromic surveillance systems have emerged to capture and analyze health-indicator data to identify abnormal health conditions and enable early detection of outbreaks. Given the limited public health experience with biologic terrorism and the variety of possible terrorism scenarios, the research community is exploring the application of advanced detection technology to prediagnostic syndromic data. In 2003, CDC issued a draft framework for evaluating syndromic surveillance systems (1), which was later revised and published in MMWR (2). The CDC framework is designed for evaluation of relatively mature, fully operational syndromic surveillance systems. The technology to support syndromic surveillance is just maturing, with current operational experience gained from test-bed use. This paper applies the framework to the Electronic Surveillance System for the Early Notification of Community-Based Epidemics (ESSENCE), a series of prototype systems developed by Johns Hopkins University Applied Physics Laboratory (JHU/APL) and the Division of Preventive Medicine at the Walter Reed Army Institute of Research.

## System Description

### Purpose

Multiple versions of ESSENCE have been developed, each for different purposes. ESSENCE I provides worldwide surveillance for military personnel and their dependents at all military treatment facilities by using ambulatory records generated for TriCare, the military's health-care system. ESSENCE II is a regional system that supports advanced surveillance within the National Capital Region (NCR) test bed. The system is being developed by JHU/APL in collaboration with the Maryland Department of Health and Mental Hygiene, the District of Columbia Department of Health, and the Virginia Department of Health. Other versions of ESSENCE have been developed for military facilities and deployed forces. This description focuses on ESSENCE II only.

ESSENCE II is a test-bed system for 1) evaluating nontraditional health-care indicators, 2) developing and evaluating analytic techniques for early identification of abnormal disease patterns, and 3) providing an integrated view of NCR military and civilian health department data (3) ([Figure 1](#)). The system captures data on military ambulatory visits and prescription medications and merges them with civilian emergency department (ED) chief-complaint records, school-absenteeism data, over-the-counter (OTC) and prescription medication sales, civilian ambulatory visits, veterinary health records, and health department requests for influenza testing. All data are de-identified by their providers before being transferred to ESSENCE II, where they are archived, analyzed, and provided through secure Internet sites to local health departments and to hospitals that have data-sharing agreements with their health departments.

### Stakeholders

NCR health departments conduct surveillance by using ED chief-complaint data from hospitals within and around the District of Columbia metropolitan area. ESSENCE II helps automate the processes of capturing hospital data, parsing chief-complaint text strings, and analyzing data for abnormalities.

ESSENCE technology is being used to form a regional collaborative disease-surveillance network. The network consists of four major nodes, one at each state and District of Columbia health department and a regional node for performing analysis across jurisdictional boundaries. The architecture permits fully identifiable information to be captured and archived at health departments for patients within their jurisdiction. The regional node negotiates the acquisition and distribution of data (e.g., military health-care data and OTC medication sales) across the region. The architecture also permits de-identification, aggregation, and sharing of information among the region's health departments while increasing the sensitivity for detection of abnormal health events occurring across jurisdictional boundaries.

### Operation

The data flow through an ESSENCE II node is illustrated. First, to expedite data collection and maintain confidentiality, the data providers create automated query software to extract recent data elements from their archives. These extractions are assembled into a de-identified update record, encrypted, and posted to a secure file transfer protocol (FTP) site. The query software automatically

executes at a regular interval (e.g., daily at midnight or once every 8 hours) that can be changed easily. Although ESSENCE II can accept Health Level 7 (HL7) (4) data streams, the majority of data providers prefer the automated query approach. ESSENCE II polls the FTP sites to look for new entries, which are then ingested, cleaned, formatted, and archived in the primary system archive.

Data-sharing policies across the region have not been approved by all NCR health departments. After these policies are approved, selected data fields or aggregates of counts will be transmitted to other nodes in the network.

Chief-complaint data from hospital EDs 1) are received as text strings, which are of variable length; 2) include punctuation, misspellings, or abbreviations; and 3) can use varying syntax and vocabularies. A chief-complaint parsing algorithm developed for ESSENCE II converts text strings into syndrome groupings (5). The syndrome groupings agreed to by the NCR health departments are death, gastrointestinal, neurologic, rash, respiratory, sepsis, unspecified, and other, but the chief-complaint parsing algorithm can easily accommodate modifications. After ED data are entered into the primary archive, the parsing algorithm automatically converts the text strings into syndrome groupings. When the parser's performance is compared with that of human coders, the parser provides, on average, 97% sensitivity and 99% specificity. Whenever new hospital EDs are added to the system, the parser's performance is assessed to adjust for unfamiliar textual information. The algorithm provides approximately perfect conversion into syndrome groupings for the most prevalent syndromes (respiratory and gastrointestinal) and degraded performance for those less frequent (neurologic).

In addition to ED chief-complaint information, ESSENCE II also receives data from physician-encounter claims in the form of International Classification of Diseases, Ninth Revision (ICD-9) codes and from retail merchants in the form of Universal Product Codes (UPCs) for OTC medications. These data are grouped into the same syndrome categories as the chief-complaint data to enable outbreak detection by syndrome.

Next, ESSENCE II applies outbreak-detection algorithms. These algorithms use a working archive known as the detection archive. New records are moved into the detection archive at the launching of the detection process. The detection algorithms are run every 4 hours, although this interval is adjustable. ESSENCE II can accommodate HL7 data streams if they are available from the hospital. Temporal and spatio-temporal algorithms are implemented in ESSENCE II to determine abnormalities. Also included are reference algorithms for assessing the performance enhancement provided by the ESSENCE II algorithms. CDC's Early Aberration Reporting System (6) algorithms were chosen as reference algorithms because they were already in use by regional health departments.

ESSENCE II uses two temporal algorithms: 1) an autoregressive modeling algorithm that predicts syndrome counts and looks for differences between actual counts and estimates and 2) the exponentially weighted moving average (EWMA), a statistical process control method. Details on these algorithms are published elsewhere (7). The autoregressive algorithm is based on a linear regression model that predicts a continually fluctuating daily expected count and threshold. The model bases its daily predictions on the previous 4 weeks of ESSENCE data, accounting for the day of the week and whether the day is a holiday or the day after a holiday. (The holiday function serves to explain artificial peaks in the data attributable to surges in patient visits after days when clinics are closed.) EWMA compares each observation to an average of past data that weights observations exponentially by time so that the most recent observations are most influential. Therefore, EWMA can be used when daily visit counts do not have the temporal structure required by a regression model. ESSENCE II uses a built-in goodness-of-fit statistic to determine whether the regression is useful in explaining the data; when this test fails, the automated checking process switches to EWMA.

A variant of the spatial scan statistic (8) is used to form clusters in time and space across the region by using zip codes as the smallest spatial resolution. The scan statistic has been modified to include multiple sources (9), which increases the sensitivity while controlling the false-alert rate.

ESSENCE II uses a secure website to transfer information to its users. Users must use individual passwords to access the website and can only access information for their respective jurisdictions. Four ESSENCE II portals enable users to view raw data and results from processed data:

1. A map portal displays geographic distribution of raw data and clusters formed by scan statistics. The user can select data elements for geographic display and access details by clicking on the location of the data provider or the zip code(s) of interest. The details can be presented as tables or time graphs.
2. The second portal provides alert lists for the output of the detection processes. These lists consist of color-coded flags to indicate algorithm outputs that are higher than expected. Upper confidence limits (UCLs) for the daily predictions are computed and used as alerting thresholds. If an observed count exceeds the 95% UCL but not the 99% UCL, a low-level (yellow) alert is generated; if it exceeds the 99% UCL, a high-level (red) flag results. The user can organize the lists to provide flags on data of interest, sort lists by elements of interest, and access data or link to the map portal to view the spatial distribution that resulted in the flag.
3. The query portal enables a user interested in specific data to select from drop-down menus and view selected data elements over a selected timeframe as graphs or tables. All tabular information can be cut and pasted into a spreadsheet program for analysis offline.
4. The fourth portal enables users to generate summary reports for export outside ESSENCE II. The user can select any data elements in the archive and view historic counts as well as upward or downward trends. This portal also contains tutorial material on operating ESSENCE II and a message board for making suggestions to developers or sharing thoughts with other users.

## **Outbreak Detection**

### **Timeliness**

The purpose of syndromic surveillance is to detect as early as possible abnormal disease patterns that could result in high mortality. This new technology should be evaluated and compared with traditional techniques to determine whether it improves upon detection timeliness. At least five layers of possible improvement exist ([Figure 4](#)). At each layer, the improvement is compared with a standard method to determine whether timelier notification is possible.

1. The first layer is the acquisition of a data source that contains an early indicator. For example, one promising data source is the nurse hotline service provided by certain health-care organizations.
2. The second layer involves filtering of the data stream to more closely match the population that exhibits early symptoms of disease. For example, because symptoms consistent with the release of a biologic agent at a facility (e.g., the Pentagon) would probably be observed among active-duty personnel at that facility, military data could be filtered by age to separate active-duty, retired, and dependent populations.
3. The third layer removes confounders from nontraditional data sources. For example, OTC medication sales are strongly influenced by sales promotions, seasonal effects, and day-of-week activity, as well as by the socioeconomic status of the community in which the sale occurred. ESSENCE II uses algorithms to model these confounders and remove their influence, thus allowing identification of the underlying pattern attributable solely to increases in disease.
4. The fourth layer addresses improvements to outbreak-detection algorithms that use a single data stream. Signal processing, regression modeling, and process control methods have been used to monitor single data streams.
5. The fifth layer addresses multivariate methods for gaining sensitivity needed for early recognition of an abnormality.

Improvements at any of the five layers or combination of layers can improve notification timeliness.

CDC's framework ([1,2](#)) provides a timeline, consisting of nine "anchor points," for measuring timeliness and performance of syndromic surveillance. The first three anchor points, point-source exposure, symptom onset, and health-seeking behavior, are independent of system performance; symptom onset is a function of the incubation period of the disease, and health-seeking behaviors depend on socioeconomic factors. The fourth anchor, capture of the behavior in the record, varies by

data source, taking only seconds for scanning in OTC medications or hours to days for electronic claims. The fifth anchor point, data source ready to share, depends on the data provider and on system requirements for data updates. Data can be sent in real time (e.g., an HL7 feed from a hospital), hourly, daily, or at other predetermined intervals (e.g., ED chief-complaint data could be accumulated over 1 day and sent at midnight). ESSENCE II accepts both HL7 and ED chief-complaint data feeds. The data-ingestion module within ESSENCE II automates the capture data into the system process (anchor point six) within seconds. The seventh anchor point, apply pattern-recognition tools/algorithms, is also a function of the data-capture rate. If data are captured in real time, the detection algorithms must also operate in near real time. If data are captured daily, then the algorithms must be applied daily. ESSENCE II captures data throughout the day and applies the detection process every 4 hours but can alter the processing period when real-time data are received. After the detection process is complete, the automated alert generation process (anchor point eight) takes only seconds to minutes. The ninth anchor point, initiate public health response, depends upon policies and personnel at individual health departments and is independent of the syndromic surveillance system.

### **Validity**

Algorithm performance can also be evaluated by detection of actual disease events within the community. In summer 2003, the ESSENCE II project participated in a blind evaluation conducted by the Defense Advanced Research Projects Agency (DARPA) Bio-ALIRT Program ([11](#)). This evaluation provided the opportunity for independent validation of results from the ESSENCE II outbreak-detection process and independent evaluation of participating syndromic surveillance systems. To conduct the evaluation, DARPA assembled an independent team of epidemiologists and physicians to identify respiratory and gastrointestinal events in data streams from five cities. The data included military and civilian ambulatory records and military prescription records. Team members identified eight respiratory and seven gastrointestinal events and, given only the raw data streams, were asked to estimate 1) start dates for the event, 2) date when a health department might recognize the event, 3) the peak of the event, and 4) the end of the event. Participants whose algorithms were being evaluated were provided only the raw data streams and asked to identify events.

Three ESSENCE II detection methods were selected for this evaluation ([10](#)): 1) a multivariate statistical process control algorithm applied to the residuals of a regression technique used to control for unexplained data dropouts, 2) a multiple univariate method based on the EWMA control chart, and 3) a Bayesian Belief Network applied to the outputs of the first two algorithms to optimize the decision for the two detectors. The results of these algorithms' detection performance and timeliness are provided as a function of false-alert rate, for rates of one false alert every 2 weeks, 4 weeks, or 6 weeks ([Figure 5](#)). In this context, a false alert does not imply the need for a laborious outbreak investigation but rather a more detailed review of the data and use of human judgment to dismiss alerting flags. For the highest false-alert rate, all three algorithms detected the eight respiratory events with a median detection time of 1 day after the start of the event (as determined by the epidemiology team). If the false-alert rate was constrained to once every 6 weeks, only the multiple univariate SPC method maintained its level of performance. For gastrointestinal events, only the Bayesian Belief Network successfully detected all seven events with a median delay of 1 day. Results might vary when the same algorithms are applied to other data streams and other seasons.

The majority of events used in the evaluation were seasonal epidemics attributable to colder weather, limited outdoor activity, and increased communicability during holiday gatherings; few, if any, of the cases comprising these events would result in death or were reportable diseases.

### **Experience**

#### **System Usefulness**

ESSENCE II is used routinely by the Montgomery County (Maryland) Department of Health and Human Services for different purposes, including to accredit county hospitals for the capability to respond to mass casualties resulting from terrorism, to identify foodborne outbreaks, and to provide general knowledge of the county's health status. The department also requests changes to detection thresholds during high-profile events in the region that might affect public health in the county. The county health department continues to find new uses for ESSENCE II outputs; in 2004, it used the system to determine when to initiate and cancel an influenza-vaccination program.

Flexibility and Portability



ESSENCE II acquires data feeds with minimal burden to data providers. The system accepts different data standards for acquisition and data sharing. Adding a new data source is more of a legal chore than a technical one because sources can be added with minimal hours of coordination or software development. ESSENCE is designed to enable persons with minimal programming skill to create new syndrome categories or change syndrome groupings in minutes. The system also allows users to access historic data to perform retrospective studies.

Multiple versions of ESSENCE II exist to accommodate different jurisdictions, data volumes, and data providers for both military preventive medicine and civilian health departments. ESSENCE II is also being provided to state and local health departments. Modifications are needed for local geographic shape files, zip codes, and data providers; these modifications can be performed by state health department IT staff.

#### System Acceptability

Acceptance by the majority of data providers has been exceptional. Currently, the test-bed version of ESSENCE II is used primarily when the level of risk increases. After the NCR network is fully implemented, usage levels are expected to increase. Full implementation is expected in 2004.

#### System Stability

Versions of ESSENCE II have been acquiring data since 1999 and have operated since then with minimal interruption. The system's size and complexity have expanded from the NCR military population and certain Maryland counties to include all of Maryland, Virginia, and the District of Columbia.

#### System Costs

System size and cost are a function of the jurisdiction's size, the number of data providers, and the size of the epidemiology department assigned to surveillance and follow-up. A minimum county-level configuration requires one or two computers, \$15,000 for off-the-shelf software, one part-time epidemiologist, and one part-time IT professional. Cost-effectiveness depends upon the resources of the health department and the vulnerability of its population.

#### Conclusions

ESSENCE II is the first disease-surveillance system to incorporate both military and civilian data to improve the sensitivity and specificity of detecting abnormal disease occurrence. The design requires minimal resources from data providers, thus encouraging their participation. Research into algorithm improvements has been enhanced by operation of a test bed and by rapid upgrades to test improvements in an operational environment. Implementation of the NCR disease-surveillance network should provide operational insights for other jurisdictions considering collaborative surveillance systems.

CDC's framework for evaluating syndromic surveillance systems provides a needed reference for developers and health departments wishing to develop and implement new systems. Evaluation would be enhanced if CDC provided standard data sets to test the processes embedded within the systems and provide a benchmark for comparing system performance ([CDC, 2012](#)).

**Title:** Spotting The Hot Zones: Now We Can Monitor Epidemics Hour By Hour

**Date:** June 23, 2008

**Source:** [Wired](#)

**Abstract:** If you want to stop a disease outbreak — or a bioterrorist attack — you have to act fast. But health information typically moves at the pace of the receptionist at your doctor's office. The goal of Essence, the Department of Defense's Electronic Surveillance System for the Early Notification of Community-based Epidemics, is to pick up the tempo. Begun in 1999 to collect health data in the Washington, DC, area, Essence now monitors much of the Military Health System, which includes 400 facilities around the world.

"You don't have to be accurate to detect things," says Jay Mansfield, director of strategic information systems at the Global Emerging Infections Surveillance and Response System, one of the agencies that developed Essence. "But you do need to be precise."

Reports from every clinic, doctor, and pharmacy get broken into broad syndrome categories rather than specific diseases. One doctor might diagnose bronchitis and another pneumonia, but Essence doesn't care. It's just looking for similar illnesses and where and when they occur. "It's like a fire alarm," Mansfield says. "It goes off if there's smoke, so you can get in the kitchen and see what's going on."

Because 100 megabytes of data come in every day — the team stores 18 months' worth, about 2.5 terabytes — there's often more smoke than fire. A pharmacy running out of antidiarrheals could signal an outbreak of *E. coli* or just a two-for-one sale.

Essence expanded to include new sources (like radiology and laboratory tests) this spring, which means the data issues just got even more complicated. The trick is parsing the data as it comes in so that patterns emerge in hours instead of days. "We detected a gastrointestinal outbreak in Korea," Mansfield says. "I called my boss, and he asked me, 'When did it happen?'" Korea is 13 hours ahead of Washington. So Mansfield simply answered: "Tomorrow" ([Wired, 2008](#)).

**Title:** Assessment Of ESSENCE Performance For Influenza-Like Illness Surveillance After An Influenza Outbreak --- U.S. Air Force Academy, Colorado, 2009

**Date:** April 8, 2011

**Source:** [CDC](#)

**Abstract:** The Electronic Surveillance System for the Early Notification of Community-Based Epidemics (ESSENCE), version II, designed by the Johns Hopkins University Applied Physics Laboratory and the U.S. Department of Defense (DoD), is an Internet-based syndromic disease surveillance system used by civilian and military health departments ([1](#)). ESSENCE was designed to increase the timeliness of outbreak detection, serving as an early warning system and providing opportunities to prevent and control the spread of infection. After a 2009 pandemic influenza A (H1N1) outbreak at the U.S. Air Force (USAF) Academy in Colorado, CDC was invited to conduct an evaluation of the ESSENCE influenza-like illness (ILI) surveillance system to assess its performance during the outbreak ([2,3](#)). Medical records at the USAF Academy clinics from June 25 through July 8, 2009, the period of the outbreak, were reviewed. This report summarizes the results of the evaluation, which demonstrated strengths in data quality, flexibility, and representativeness; however, ESSENCE was not useful for detecting or monitoring the H1N1 outbreak because of its lack of timeliness (1--3 day delay), inadequate sensitivity (71.4%), and poor predictive value positive (PVP) (31.8%) for identifying ILI cases. In this localized, single-source outbreak, ESSENCE did not serve as an early warning system for an emerging infectious disease and did not detect the outbreak soon enough to institute prevention and control measures that might have slowed the spread of infection. More frequent Internet data transmissions from the clinics to the ESSENCE server could improve timeliness, and PVP could be enhanced by including measured body temperature in the ESSENCE ILI case definition.

The utility of syndromic disease surveillance for early outbreak detection and improvement of public health response remains controversial ([4-7](#)). A survey of U.S. health departments indicated that the most common application for syndromic surveillance was to monitor the start and stop of the annual influenza season, but that it was less useful for local outbreak detection ([4](#)). Other studies found that syndromic surveillance has been useful to identify localized respiratory, dermatologic, and gastrointestinal disease outbreaks ([5-7](#)).

During June 25--July 24, 2009, an H1N1 outbreak occurred at the USAF Academy in Colorado, with 134 cases confirmed among a population of USAF 1,376 basic cadet trainees ([3](#)). Although ESSENCE is used at the USAF Academy, public health officials became aware of the outbreak before ESSENCE indicated the increase in ILI cases. After this large outbreak, the USAF Academy invited CDC to evaluate ESSENCE as an ILI surveillance system.

The U.S. military has used ESSENCE since 2003 to detect and monitor disease outbreaks. DoD provides an annual budget for system maintenance and development and releases updated versions of the system as surveillance needs change. ESSENCE identifies patients based on provider-assigned International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM)

codes that are entered into the electronic medical record (1). The ESSENCE ICD-9-CM code set for ILI\* was established based on an analysis of medical records and respiratory specimens to determine the codes that most accurately represent ILI (8,9). By regular secure data transmissions via the Internet, the ESSENCE server identifies new cases and, using temporal algorithms that predict expected daily fluctuation, determines whether an increasing trend has occurred, indicating a possible outbreak (1,8,9). Raw data and aggregate reports, in the form of line graphs, are available via a password-protected ESSENCE website. An increase in syndromic cases above predicted thresholds is highlighted as a color-coded alert. Privacy and confidentiality are maintained with patient identification numbers and annual information protection training for users. In 2003, using past military and civilian data, an initial evaluation determined that ESSENCE detected eight of eight respiratory disease outbreaks within an average of 1 day after the event.

CDC's Updated Guidelines for Evaluating Public Health Surveillance Systems was used to assess the usefulness, simplicity, flexibility, data quality, acceptability, representativeness, timeliness, stability, sensitivity, and PVP of ESSENCE for the USAF. To determine sensitivity and PVP, medical record data from ILI case-patient visits at the USAF Academy acute care and cadet clinics during June 25--July 8, 2009, were collected. For the medical record review, ILI was defined as measured temperature  $\geq 100.0^{\circ}\text{F}$  ( $\geq 37.8^{\circ}\text{C}$ ) and cough or sore throat. Medical record data collection included cough, sore throat, measured temperature, and the results of respiratory disease laboratory tests for influenza A, influenza B, H1N1, adenovirus, and group A streptococcus bacteria. Patients from the same period were identified on the ESSENCE ILI website to collect the ICD-9-CM codes. Sensitivity and PVP were calculated using 1) medical record--confirmed ILI, as defined and 2) laboratory confirmation of a respiratory infection, as criterion standards. USAF Academy, USAF School of Aerospace Medicine (USAFSAM), DoD, and CDC staff members who used ESSENCE daily were interviewed to assess the remaining evaluation criteria.

This evaluation found that the usefulness of ESSENCE varied by user. CDC, which used the aggregate USAF and DoD data, found ESSENCE useful to monitor national syndromic disease activity, and USAFSAM staff members found it useful to monitor disease activity at each base. The USAF Academy indicated ESSENCE was useful to monitor the local influenza season and determine syndromic baselines. Although users investigated ESSENCE alerts and worrying trends, most alerts and trends were time-consuming false alarms that revealed normal disease variations.

Regarding simplicity of operations and structure, the ESSENCE website's aggregate reports, line graphs, and color-coded alerts were easy to comprehend. ESSENCE's flexibility to adapt was demonstrated by the updated versions released by DoD based on user feedback and changes in surveillance needs, and the raw data query functions available to ESSENCE users. Data quality, or the completeness and validity of the data, was established by extracting demographic and medical information from official DoD systems, and scheduling automated batched data transmissions to the ESSENCE server at night, during periods of lower Internet usage to reduce transmission interruptions. For acceptability, or the willingness to participate in the surveillance system, data transmission to the ESSENCE server was automated, and personnel at the Academy and USAFSAM had passwords, although cumbersome to attain and maintain, to use ESSENCE in their daily operations. ESSENCE was determined to have a high degree of representativeness, in that it included all DoD beneficiaries visiting all USAF outpatient clinics, and thus it reported all medical events. Timeliness, or the time of the clinic visit to the time the information appeared on the ESSENCE website, was 1--3 days (10). Stability, or the reliability and availability of the system, was maintained by the annual DOD budget and the infrequent occasions when ESSENCE was unavailable to the user.

Of the 540 medical records reviewed to assess sensitivity and PVP, 189 had a laboratory test result. Compared with medical record--confirmed ILI, ESSENCE ILI sensitivity was calculated at 71.4% and PVP at 31.8%. Compared with laboratory-confirmed respiratory infections, ESSENCE ILI sensitivity and PVP were 78.6% and 49.5%, respectively. When the evaluators added a documented, measured body temperature of  $\geq 100.0^{\circ}\text{F}$  ( $\geq 37.8^{\circ}\text{C}$ ) to the ESSENCE ILI case definition, the ESSENCE ILI sensitivity, compared with medical records, remained the same, but PVP increased to 95.5%; however, when compared with laboratory confirmation, ILI sensitivity was 65.7%, and PVP was 66.7%.

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### Editorial Note

This evaluation found that the major strength of ESSENCE ILI surveillance was its usefulness for monitoring annual seasonal influenza activity. Other strengths included simplicity, flexibility, data quality, representativeness, and stability. Weaknesses included low PVP, lack of timeliness, and limited usefulness to detect and monitor an ILI outbreak.

Retrospectively, ESSENCE showed an increasing ILI trend 2--4 days before an Academy mass gathering; however, the combination of the ESSENCE time delay, occurrence of the gathering over a holiday weekend, and short incubation period of H1N1 meant the increasing trend was not detected in time to institute preventive measures. To improve timeliness, medical data transmission could be scheduled in smaller, more frequent batches throughout the day so that changing trends would appear on the ESSENCE website sooner.

After USAFSAM judged that the ILI PVP of the surveillance system was too low to distinguish actual outbreaks, the addition of a measured body temperature  $\geq 100.0^{\circ}\text{F}$  ( $\geq 37.8^{\circ}\text{C}$ ) to the ESSENCE case definition was evaluated to determine whether PVP, and potentially sensitivity, could be improved. Compared with medical record--confirmed ILI and laboratory-confirmed respiratory infections as criterion standards, PVP did increase with the addition. An independent study using only laboratory confirmation and ICD-9-CM--based ILI surveillance also found that PVP increased by adding measured body temperature (10). The large PVP increase with medical record confirmation was attributed to the low number of ESSENCE ILI cases with an elevated temperature at the clinic, potentially resulting from antipyretic use or actual afebrile infection. When compared with laboratory-confirmed respiratory infections, sensitivity decreased. However, with medical record confirmation, sensitivity stayed the same, because all the ILI cases still had an elevated temperature, per the medical record case definition, and an ILI ICD-9-CM code, per the ESSENCE case definition. Despite the improvement in PVP by adding a measured body temperature to the ESSENCE case definition, the potential loss in sensitivity might reduce the ability to detect actual ILI outbreaks. Users need to determine if this loss is acceptable for their purposes.

The findings in this report are subject to at least three limitations. First, as new data arrive in ESSENCE, the web page does not record the date additional case-patients appeared. Therefore, evaluators could only estimate when ESSENCE issued an alert to the ILI outbreak, based on historical documentation. Second, this evaluation collected data from only one outbreak at one USAF base. Additional outbreak analyses from other USAF bases are needed to judge the effectiveness of ESSENCE as an early-warning outbreak system for the USAF. Finally, the results of this evaluation are not generalizable to the other military services or civilian public health agencies, which might use ESSENCE differently.

This evaluation showed that, despite strengths in data quality, flexibility, and representativeness, ESSENCE did not serve as an early warning system for an emerging infectious disease during a localized, single-source outbreak, and did not detect the outbreak soon enough to allow prevention and control measures to be instituted. For enhanced outbreak detection and monitoring, more frequent Internet data transmissions would improve ESSENCE's timeliness. Additionally, the inclusion of measured body temperature in the ESSENCE ILI case definition could improve PVP, but with a possible loss in sensitivity resulting from exclusion of afebrile cases. As the strengths, weaknesses, and limitations of ILI surveillance as an early warning system for emerging infectious disease become better understood, future development should investigate how informatics and information technology can overcome ILI surveillance weaknesses.

### Acknowledgments

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### 3. GEIS (Global Emerging Infections Surveillance)

**Title:** Global Emerging Infections Surveillance (GEIS) Operations

**Date:** 2012

**Source:** [AFHSC](#)

**Abstract:** The Global Emerging Infections Surveillance and Response System (GEIS) Operations Division at AFHSC aims to be a scientifically credible and recognized worldwide surveillance system for emerging infections. Through developing, implementing, supporting and evaluating an integrated global emerging infections surveillance and response system, GEIS contributes to protection of all DoD health care beneficiaries and the global public health community.

GEIS has developed several strategic goals to bolster DoD and global public health efforts. These goals include surveillance and detection, response and readiness, integration and innovation, cooperation and [capacity building](#) with partner host countries, and the integration of the World Health Organization's International Health Regulations (2005) core capacities into all surveillance activities.

**Each strategic goal encompasses five emerging disease priorities:**

1. [Respiratory infections \(RI\)](#), especially influenza;
2. [Gastrointestinal infections \(GI\)](#);
3. [Febrile vector-borne infections \(FVBI\)](#) with an emphasis on [malaria](#);
4. [Antimicrobial resistant organisms \(AR\)](#); and
5. [Sexually transmitted infections \(STI\)](#).

Surveillance activities are conducted through a network of Continental US (CONUS) and Outside the Continental US (OCONUS) partners ([AFHSC, 2012](#)).

### 4. HAN (Health Alert Network)

**Title:** Health Alert Network

**Date:** 2012

**Source:** [Wikipedia](#)

**Abstract:** The Health Alert Network (HAN) is a program under the [Centers for Disease Control and Prevention](#) which is an agency of the [United States Department of Health and Human Services](#). The HAN project is intended to "ensure that each community has rapid and timely access to emergent health information; a cadre of highly-trained professional personnel; and evidence-based practices and procedures for effective public health preparedness, response, and service on a 24/7 basis." Currently, HAN is a strong national program, providing vital health information and the infrastructure to support the dissemination of that information at the state and local levels, and beyond. A vast majority of the State-based HAN programs have over 90% of their population covered under the umbrella of HAN. The HAN Messaging System currently directly and indirectly transmits Health Alerts, Advisories, and Updates to over one million recipients. The current system is being phased into the overall PHIN messaging component ([Wikipedia, 2012](#)).

**Title:** Health Alert Network (HAN)



**Date:** 2012

**Source:** [CDC](#) (Center for Disease Control)

**Abstract:** Providing Health Alerts, Health Advisories, Updates, and Info Service Messages to State and Local Health Officers, Public Information Officers, Epidemiologists and HAN Coordinators as well as Clinician organizations.

### What is HAN?

The Health Alert Network (HAN) is a strong national program, providing vital health information and the infrastructure to support the dissemination of that information at the State and Local levels, and beyond. A vast majority of the State-based HAN programs have over 90% of their population covered under the umbrella of HAN.

### HAN ensures that each community has:

1. Rapid and timely access to emergent health information.
2. A group of highly-trained professional personnel.
3. Evidence-based practices and procedures for effective public health preparedness, response, and service on a 24/7 basis.

The HAN Messaging System currently directly and indirectly transmits Health Alerts, Advisories, Updates, and Info Service Messages to over one million recipients.

### HAN Message Types

1. **Health Alert:** Conveys the highest level of importance; warrants immediate action or attention.
2. **Health Advisory:** Provides important information for a specific incident or situation; may not require immediate action.
3. **Health Update:** Provides updated information regarding an incident or situation; unlikely to require immediate action.
4. **Info Service:** Provides general information that is not necessarily considered to be of an emergent nature. ([CDC, 2012](#)).

**Title:** Dimension Data Launches Health Alert Network Solution To Help Combat Bioterrorism

**Date:** August 28, 2007

**Source:** [PR Newswire](#)

**Abstract:** Increased risk for potential major bioterrorist activities has raised an immediate need for comprehensive systems to share information quickly and securely. Dimension Data Holdings, plc (London: DDT), a global technology services company, has developed a Health Alert Network portal solution to allow secure, immediate and collaborative content sharing and alerting functions.

Dimension Data has developed its solution in compliance with the Centers for Disease Control and Prevention's (CDC) mandate for all local and state governments to implement a nationwide, integrated information and communications system that links emergency medical responders with public health officials. The company is currently doing work with one of the major U.S. metropolitan cities to address its health response initiatives. Dimension Data's Health Alert Network portal solution enables early warning information, surrounding unusual disease outbreaks and bioterrorist events, to be distributed quickly and facilitates sharing of diagnostic and treatment information.

Doctors and hospital workers can have immediate access and distribution rights to documents such as disease fact sheets, protocols, and clinical guidelines. The portal is designed to educate, support, and mobilize communities of interest on distinct health threats via a proven platform and intuitive interface that provides a high level of security. Dimension Data's portal solution was developed in conjunction with HP, Intel and Microsoft and was designed using the company's expertise in the healthcare industry. Depending on a state or local health department's budget, resources, and existing IT infrastructure, Dimension Data's Health Alert Network can be either fully customized, custom packaged, or subscription- based. In addition to the distribution of health alerts and prevention



guidelines, the system brings departments of health and the CDC a coordinated communications channel to conduct initiatives such as national disease surveillance and electronic laboratory reporting.

**Main features of the Dimension Data's Health Alert Network include:**

1. High-speed, secure Internet connection to provide instantaneous access to disease reports, CDC information, and response plans
2. Early warning systems, including multi-channel alerting capabilities with sophisticated call-down abilities, to alert authorities and media of potential emergency situations
3. Coordinated public health response
4. Secure and scalable channel for local, state, and federal health authorities to coordinate with each other and law enforcement \* Distance-learning capacity to educate health care professionals
5. Central library of current, accessible, and searchable clinical material for researching treatments

**Some examples where the Health Alert Network portal solution could be of use include:**

1. A health department administrator posts an alert to the system. The system recognizes the alert and sends a message to the alert broadcast system. This system sends the message to local hospitals and CDC through pagers, cell phones, and e-mail.
2. Hospital "A" uploads a document and Hospital "B" downloads the same document, healthcare professionals at both locations can log into a chat room to discuss it.
3. The department of health has an infectious disease specialist giving a seminar so hospitals can log into the conferencing system to view the seminar online.

Dimension Data is uniquely equipped to provide state and local governments with the multi-faceted communication system. The company's Health Alert Network solution includes a network assessment, building and deployment of the portal application, infrastructure integration, as well as training, hosting and maintenance. Departments of Health can rely on Dimension Data as a single source throughout the lifecycle of the engagement thereby avoiding the need to manage multiple vendors. "For local and state governments, implementing an integrated communications system can be a daunting challenge," said Andrew Cohen, director of homeland security initiatives for Dimension Data North America. "The Health Alert Network provides governments with an easy-to-implement, cost effective system that meets the CDC's requirements and, at the same time, delivers far-reaching benefits for citizens" ([PR Newswire, 200?](#)).

## 5. LRN (Laboratory Response Network)

**Title:** Laboratory Response Network

**Date:** 2012

**Source:** [Wikipedia](#)

**Abstract:** The Laboratory Response Network (LRN) is a collaborative effort within the US federal government involving the [Association of Public Health Laboratories](#) and the [Centers for Disease Control and Prevention](#) (CDC). Most state public health laboratories participate as reference laboratories (formerly level B/C) of the LRN. These facilities support hundreds of sentinel (formerly level A) laboratories in local hospitals throughout the United States and can provide sophisticated confirmatory diagnosis and typing of [biological agents](#) that may be used in a [bioterrorist](#) attack or other bio-agent incident. The LRN was established in 1999.

### Levels

The LRN consists of a loose network of government labs at three levels.

### Sentinel Laboratories

These laboratories, found in many hospitals and local public health facilities, have the ability to rule out specific bioterrorism threat agents, to handle specimens safely, and to forward specimens to higher-level labs within the network.

### Reference Laboratories

These laboratories (more than 100), typically found at [state health departments](#) and at military, veterinary, agricultural, and water-testing facilities, can rule on the presence of the various biological threat agents. They can use [BSL-3](#) practices and can often conduct [nucleic acid amplification](#) and [molecular typing studies](#).

### **National Laboratories**

These laboratories, including those at CDC and [U.S. Army Medical Research Institute of Infectious Diseases](#) (USAMRIID), can use [BSL-4](#) practices and serve as the final authority in the evaluation of potential bioterrorism specimens. They provide specialized reagents to lower level laboratories and have the ability to bank specimens, perform serotyping, and detect [genetic recombinants](#) and [chimeras](#) ([Wikipedia, 2012](#)).

**Title:** Detecting Biothreat Agents: The Laboratory Response Network

**Date:** 2003

**Source:** [ASM News](#) (PDF)

**Abstract:** In response to the threat of bioterrorism and following a presidential order, officials at the Centers for Disease Control and Prevention (CDC), Association of Public Health Laboratories (APHL), Federal Bureau of Investigation (FBI), and United States Army Medical Research Institute of Infectious Diseases (USAMRIID) established the Laboratory Response Network (LRN) in 1999. This national system is designed to link state and local public health laboratories with other advanced-capacity clinical, military, veterinary, agricultural, water, and food-testing laboratories, including those at the federal level.

The LRN is a critical component of CDC's public health mission, enhancing U.S. readiness to detect and respond to bioterrorism incidents. In addition to biothreat agents, the LRN is expanding to include the ability to detect chemical agents. Funding for LRN to build infrastructure, obtain state-of-the-art equipment, and train personnel is helping to rebuild the country's public health laboratory capacity, improving our ability to respond not only to bioterrorism incidents but also to other infectious diseases outbreaks.

Part of these efforts include developing a welltrained laboratory workforce, including members who are certified by the American Board of Medical Microbiology (ABMM) or its equivalent, raising the capacity of LRN to respond quickly and appropriately to public health emergencies.

After officials in the Department of Health and Human Services told CDC to prepare the public health system for dealing with the bioterrorism threat, CDC developed a series of cooperative agreements with every state and several large municipalities that focus on preparedness.

These agreements initially emphasized five critical areas: (i) preparedness planning and readiness assessment; (ii) surveillance and epidemiology capacity, (iii) biologic laboratory and chemical laboratory capacity, (iv) health alert network, and (v) information technology. Since the Bacillus anthracis bioterrorism incident of late 2001, CDC has added several critical areas, including communicating health risks, disseminating health information, education, and training.

Bioterrorism may be either covert or overt. Because a covert release of a biological agent would likely not be noticed immediately, the first signs could come days or weeks later when individuals seek medical care. Thus, the first responders will likely be astute clinicians, laboratorians, or public health workers who recognize the index case or identify the infectious agent. In the case of an announced release, traditional first responders will likely respond to actual biological agents or hoaxes. In all these cases, the incident could occur anywhere, necessitating a comprehensive public health plan for responding to bioterrorism or any infectious disease outbreak. This response will involve epidemiologic investigation, medical treatment and prophylaxis for affected persons, and other disease prevention activities. The success of these activities also depends on rapidly and accurately identifying threat agents ([ASM News, 2003](#)).

## 6. RODS (Real-Time Outbreak Disease Surveillance)

**Title:** RODS (Real-Time Outbreak Disease Surveillance)

**Date:** Present

**Source:** [Wikipedia](#)

**Abstract:** Real-time outbreak and disease surveillance system (RODS) is a [biosurveillance](#) system developed by the [University of Pittsburgh](#), Department of Biomedical [Informatics](#). It is "prototype developed at the University of Pittsburgh where real-time clinical data from emergency departments within a geographic region can be integrated to provide an instantaneous picture of symptom patterns and early detection of [epidemic](#) events."

**RODS uses a combination of various monitoring tools:**

1. The first tool is a [moving average](#) with a 120-day sliding phase-I-window.
2. The second tool is a nonstandard combination of [CUSUM](#) and [EWMA](#), where an EWMA is used to predict next-day counts, and a CuSum monitors the residuals from these predictions.
3. The third monitoring tool in RODS is a [recursive least squares](#) (RLS) algorithm, which fits an [autoregressive model](#) to the counts and updates estimates continuously by minimizing [prediction error](#). A Shewhart I-chart[[clarification needed](#)] is then applied to the residuals, using a threshold of 4 [standard deviations](#).
4. The fourth tool in RODS implements a [wavelet](#) approach, which decomposes the time series using [Haar wavelets](#), and uses the lowest resolution to remove long-term trends from the raw series. The residuals are then monitored using an ordinary Shewhart I-chart with a threshold of 4 standard deviations ([Wikipedia, 2012](#)).

**Title:** History of the RODS Laboratory

**Date:** September 1999 - Present

**Source:** [University of Pittsburgh](#)

**Abstract:** In September 1999, researchers at the University of Pittsburgh created the Real-time Outbreak and Disease Surveillance (RODS) system. RODS, being based on earlier work by the same researchers in building a clinical event monitor (CLEM) and a clinical communication system, became operational almost immediately and has continued to grow in size, function, and use.

RODS is currently in use in multiple cities, states and countries. The RODS System represented the first real-time public health surveillance system. It contributed basic results about disease outbreak detection from coded chief complaints, from free text, and electronic laboratory reporting in real time. It also demonstrated methods for the rapid investigation of an outbreak using a link to an electronic medical record.

Initial funding for this research came from a grant from the National Library of Medicine (NLM 5 R29 LM06233) "Belief-Network Based Reminder Systems that Learn." The principal developers of the system are Drs. Rich Tsui, Jeremy Espino, and Michael Wagner. [Currently, several years after RODS coined the term, "real-time" has found its way into the active vocabulary of those not only describing the RODS system itself but also describing any information that can be immediately available and is geared towards identifying disease outbreaks.]

### RODS Milestones

1. September 1999 - Formation of the RODS Laboratory by Drs. Jeremy Espino, Fu-Chiang Tsui and Michael Wagner. Prototype of RODS Surveillance System begins to monitor emergency departments of University of Pittsburgh Medical Center.
2. October 2001 - Established 13 county surveillance of emergency departments for Western Pennsylvania. Deployment of the Health System Resident Component

3. November 2001 - Dr. Michael Wagner delivers a report on biosurveillance before the US Congress
4. January 2002 - Deployment of Utah RODS for 2002 Winter Olympics
5. February 2002 - President George W. Bush visits the RODS lab and calls RODS the "modern DEW line" 6
6. December 2002 - RODS Software is made publically available as free software
7. November 2002 - The National Retail Data Monitor is created
8. February 2002 - The Biomedical Security Institute is formed
9. August 2003 - The RODS Software is made open source
10. May 2006 - The Handbook of Biosurveillance is published
11. September 2009 - The University of Pittsburgh becomes a CDC Center of Excellence in Public Health Informatics

As a result of this project's success, Drs. Wagner and Tsui founded the RODS Laboratory with a mission to explore the use of information technology for the detection of disease outbreaks—both naturally occurring and bioterroristic. In 2000, additional funding for the research came from the Agency for Health Care Research and Quality (AHRQ/Mellon Pitt Corporation 290-00-0009) "Using Information Technology to Improve Clinical Preparedness for Bioterrorism." Two commissioned reports to the AHRQ formed the basis for the future direction of RODS research: The Nation's Current Capacity for the Early Detection of Public Health Threats including Bioterrorism (78 pages), delivered June 8 (revised September 26), 2001; and Availability and Comparative Value of Data Elements Required for an Effective Bioterrorism Detection System (184 pages), delivered November 28, 2001.

In October 2001, RODS began to demonstrate the feasibility of real-time data collection under a trusted broker arrangement in a 13-county region in Western Pennsylvania. This work demonstrated the use of Trusted Data Broker for public health surveillance, established a minimal de-identified data set that is widely available, and resulted in the creation of model memoranda of understanding and an application service provider (ASP) model.

Also beginning in October 2001, a Health-System-Resident component was created with extended funding from the CDC. The goal of this project was to explore in detail the interaction between health care and public health in the area of infectious disease control utilizing a special purpose component residing within a health system.

After the Anthrax attacks of October 2001, the work of the laboratory took on additional urgency and significance. On November 1, 2001, Dr. Wagner testified at the Hearing of the Oversight and Investigations Subcommittee of the House Committee on Energy and Commerce: ["A Review of Federal Bioterrorism Preparedness Programs: Building an Early Warning Public Health Surveillance System"](#) in Washington, D.C.

### **2002 Winter Olympics and Deployment of Utah RODS**

In January 2002, working in collaboration with Per Gesteland, M.D., Bob Rolfs, M.D., MPH, Reed Gardner, Ph.D., Peter Haug, M.D., and Brent James, M.D., MPH at the University of Utah, Intermountain Healthcare, and the Utah Department of Health, the laboratory helped deploy RODS in Utah for surveillance coverage of the 2002 Winter Olympic Games (see published papers from 2002 and 2003). Its successful deployment resulted in a permanent RODS system, currently collecting de-identified data for more than 80% of the healthcare visits in the state of Utah.

### **Recognition by Present George W. Bush**

On February 5, 2002 President George W. Bush, Homeland Security Director Tom Ridge, and Health and Human Services Secretary Tommy Thompson visited Pittsburgh for a demonstration of the RODS system. Following the demonstration, [The President called the system the "modern DEW line," referring to the Distant Early Warning radar system employed during the Cold War to guard against an attack from the Soviet Union.](#)

For Cover Story on the visit of President Bush, Homeland Security Director Tom Ridge, and Health and Human Services Secretary Tommy Thompson, see the [University of Pittsburgh "PITT" magazine \(June 2002 issue\).](#)

Additional and subsequent funding for RODS research came from the Defense Advanced Research Projects Agency beginning August 2001 (Air Force Research Laboratory Cooperative Agreement with Mellon Pitt Corporation, F30602-01-2-0550) "Scalable Bio-Surveillance Systems," and a \$6M grant from the Pennsylvania Department of Health beginning July 2002 (Center for Biomedical Informatics/Pennsylvania Department of Health, ME-01-737) "Building an Early Warning Public Health Surveillance System," the goal of which was to build an early warning public health surveillance system throughout the Commonwealth of Pennsylvania.

Graduate student personnel in the RODS Laboratory were, and continue to be, supported by research grants and a training grant from the National Library of Medicine (NLM 5 T15 LM/DE07059) "The Pittsburgh Biomedical Informatics Training Program" awarded to the Center for Biomedical Informatics (Principal Investigator: Gregory F. Cooper, PhD).

### **RODS Made Publically Available**

On December 2, 2002, U.S. Senators Arlen Specter (R-PA) and Rick Santorum (R-PA) visited Pittsburgh for an update on the growth and development of the RODS system and to announce that the University of Pittsburgh and Carnegie Mellon University were taking the unprecedented step of making the RODS software available without cost to other academic institutions and health departments capable of sharing this national responsibility. Senator Specter, the ranking member of the U.S. Senate's Veterans Affairs Committee and a member of the Defense Appropriations Subcommittee has provided important support for the RODS Laboratory.

### **The National Retail Data Monitor**

In November 2002, researchers at the RODS Laboratory unveiled the National Retail Data Monitor (NRDM; also see published article), which receives information about the quantity of over-the-counter (OTC) healthcare products, such as cough syrups, sold each day in different regions. What stores are selling is of great interest to the field of early-warning surveillance because when people are sick, they buy OTC products before they seek medical treatment.

### **The Biomedical Security Institute**

In February 2002, Dr. Wagner became the Co-Director of the Biomedical Security Institute (BMSI) at the University of Pittsburgh, together with Andrew W. Moore, Ph.D., A. Nico Haberman Associate Professor of Robotics and Computer, Science Carnegie Mellon University. Dr. Moore is also a member of the RODS Laboratory. (In 2005, Dr. Moore was tapped by Google Inc. to head the company's new engineering office in Pittsburgh.) BMSI was a research and development collaboration between the University of Pittsburgh and Carnegie Mellon University dedicated to the prevention of, preparation for, and response to acts of terrorism and natural events involving biological agents. BMSI received its initial funding in September 2000 from the Centers for Disease Control and Prevention (CDC) through a grant (U90/CCU318753) "Carnegie Mellon University Focus Area Immunization and Infectious Disease." The award was distributed between researchers involved in bioterrorism research at Carnegie Mellon University and the University of Pittsburgh. The RODS Laboratory received a substantial portion of the award, which helped hasten the growth of the RODS system. In January 2003, the expansion of the RODS system and the broadening mission of the RODS Laboratory led Drs. Wagner and Moore to stepdown as Co-Directors of the BMSI in order to focus exclusively on the RODS project.

### **The RODS Open Source Project**

In August 2003, the University of Pittsburgh open-sourced the RODS software under the GNU General Public License (GPL) and later the Affero GPL. The objectives of the RODS Open Source Project are to (1) accelerate the development of software for disease outbreak surveillance in terms of both quality and functionality, and (2) stimulate and support the formation of a community of disease outbreak surveillance developers. As a result of the open source licensing model of RODS, its use has grown throughout the world and code from the RODS system has been used in other biosurveillance systems.

### **The Department of Homeland Security and BioWatch**

In the summer of 2004, the Department of Homeland Security (DHS) initiated BioWatch—a Homeland Security program that guards 30 U.S. cities against possible biological attack. The RODS Laboratory was selected as one of two facilities to perform work under the BioWatch program. With funding from

DHS, the laboratory is installed the RODS system for the purpose of real-time data collection in civilian hospitals and outpatient facilities in several large BioWatch cities, extending the National Retail Data Monitor to support the project, conducting decision analyses of the decision problems faced by users of the BioWatch system, deploying and extending existing advanced detection algorithms developed by our group (including spatial scanning, Bayesian modeling, and inverse aerosol dispersion modeling that will combine BioWatch data, clinical, spatial, weather, and retail data to form overall probabilistic assessments of threat) and combining the probabilistic output of the detection algorithms and the results of decision analyses to create an implemented response decision-making system in conjunction with the response decision makers in each BioWatch city.

### **The Handbook of Biosurveillance**

In May 2006, the RODS Laboratory and its collaborators write and publish "The Handbook of Biosurveillance," the first book to comprehensively cover the field of Biosurveillance.

### **CDC Center of Excellence in Public Health Informatics**

In September of 2009, the RODS Laboratory along with the University of Pittsburgh's Graduate School of Public Health and Carnegie Mellon's Center for Human Computer Interaction was recognized as a CDC Center of Excellence in Public Health Informatics ([University of Pittsburgh, 2012](#)).

## **7. SS (Syndromic Surveillance)**

**Title:** Syndromic Surveillance

**Date:** Present

**Source:** [Wikipedia](#)

**Abstract:** Syndromic surveillance is the analysis of medical data to detect or anticipate [disease outbreaks](#). According to a [CDC](#) definition, "the term 'syndromic surveillance' applies to surveillance using health-related data that precede diagnosis and signal a sufficient probability of a case or an outbreak to warrant further public health response. Though historically syndromic surveillance has been utilized to target investigation of potential cases, its utility for detecting outbreaks associated with [bioterrorism](#) is increasingly being explored by public health officials.

The first indications of disease outbreak or [bioterrorist](#) attack may not be the definitive diagnosis of a physician or a lab.

Using a normal influenza outbreak as an example, once the outbreak begins to affect the population, some people may call in sick for work/school, others may visit their drug store and purchase medicine over the counter, others will visit their doctor's office and other's may have symptoms severe enough that they call the [emergency telephone number](#) or go to an emergency room.

Syndromic surveillance systems monitor data from school absenteeism logs, emergency call systems, hospitals' over-the-counter drug sale records, Internet searches, and other data sources to detect unusual patterns. When a spike in activity is seen in any of the monitored systems disease epidemiologists and public health professionals are alerted that may be an issue.

An early awareness and response to a bioterrorist attack could save many lives and potentially stop or slow the spread of the outbreak. The most effective syndromic surveillance systems automatically monitor these systems in real-time, do not require individuals to enter separate information (secondary data entry), include advanced analytical tools, aggregate data from multiple systems, across geo-political boundaries and include an automated alerting process.

A syndromic surveillance system based on search queries was first proposed by [Gunther Eysenbach](#), who began work on such a system in 2004. Inspired by these early, encouraging experiences, [Google](#) launched [Google Flu Trends](#) in 2008. More [flu](#)-related searches are taken to indicate higher flu activity. The results closely match [CDC](#) data, and lead it by - 1–2 weeks. The results appeared in [Nature](#). Extending [Google's](#) work researchers from the Intelligent Systems



Laboratory ([University of Bristol](#), UK) created [Flu Detector](#); an online tool which based on [Information Retrieval](#) and [Statistical Analysis](#) methods uses the content of [Twitter](#) to nowcast flu rates in the UK ([Wikipedia, 2012](#)).

**Title:** Syndromic Surveillance: An Effective Tool for Detecting Bioterrorism?

**Date:** 2004

**Source:** [Rand Corporation](#) (PDF)

**Abstract:** In responding to a bioterrorist attack, time is critical. The sooner public health officials know about a bioterrorist event, the more decisively they can intervene to stem its spread. To aid the early detection of bioterror events, public health officials and researchers have developed a new method called *syndromic surveillance*. This type of surveillance involves collecting and analyzing statistical data on health trends — such as symptoms reported by people seeking care in emergency rooms or other health care settings — or even sales of flu medicines. Because bioterrorist agents such as anthrax, plague, and smallpox initially present “flu-like” symptoms, a sudden increase of individuals with fever, headache, or muscle pain could be evidence of a bioterrorist attack. By focusing on symptoms rather than confirmed diagnoses, syndromic surveillance aims to detect bioterror events earlier than would be possible with traditional disease surveillance systems.

Many city and state public health agencies have begun investing substantial sums to develop and implement these surveillance systems. However, the method is new and still largely untested. To make informed decisions, public health officials need to know more about these systems, including how well they work, their limitations, and how they fit into the broader public health system.

To shed light on these issues, a team of analysts led by RAND Health researcher Michael Stoto examined the strengths and limitations of syndromic surveillance. The analysts also compared various types of syndromic surveillance and drew implications for public health decisionmaking. The findings raised questions about the effectiveness of syndromic surveillance. The study reached two main conclusions: (1) that syndromic surveillance systems face inherent trade-offs among their levels of sensitivity, timeliness, and false positive rates that limit their effectiveness as bioterror-detection tools and (2) that their benefits have not yet been clearly established.

**The study addressed three principal questions:**

1. Under what conditions is syndromic surveillance effective?
2. Do more sophisticated detection methods outperform simple methods?
3. How should syndromic surveillance be integrated into public health practice? ([Rand Corporation, 2004](#)).

# Bio Terror Bible

## EXPOSING THE COMING BIO-TERROR PANDEMIC

**BIO****TERROR****BIBLE.COM**: Yes, there are concentration camps in the United States of America. These camps have now been confirmed by both mainstream and alternative news sources and have been built for the wholesale slaughter of the American public in the wake of a biological or nuclear terror attack. When these camps will open for business is a question the whole world should be asking.

**Title:** Bombshell: FEMA Camps Confirmed

**Date:** November 10, 2010

**Source:** [Infowars](#)

**Abstract:** Former Gov. Jesse Ventura and his crew at *Conspiracy Theory* have blown the FEMA camp issue wide open in a truly groundbreaking episode from the program's second season on TruTV. The "Police State" episode proves once and for all that the feds have trained to take on American citizens, planned for riots and disasters and made preparations to maintain order at any cost. Tune in this Friday, Nov. 12 at 10 PM Eastern/ 9 PM Central and leave the denial at the door.

This powerful episode is the largest and most in-depth investigation into FEMA camps to date— and it is scheduled to air on television. Radio host and filmmaker Alex Jones returns to the series yet again, as the team takes you to confirmed on-the-ground facilities, confronts the legislators who authorized FEMA camps and breaks down the full-scale technologically-integrated police state that includes Fusion Centers, FEMA, the Department of Homeland Security and more.

At one of many real and verified FEMA locations, Jesse Ventura and Alex Jones approach a "Residential Center" run by Homeland Security in central Texas where they find locked doors, double-fences and escape warnings around the entire perimeter. Further inside the facility, they witness a playground complex, swings and slides for children. The crew walks up to the front door and attempts to get some answers.

But the officials refuse to either confirm or deny the facility's purpose, including whether or not American citizens are being held inside. However, our past investigations into this facility reveal that it has confined both children and adults, including immigrants, refugee seekers and American citizens. Despite hundreds of government documents identifying emergency and contingency plans, including plans to deal with mass fatalities, insurrection, internment and quarantines, Ventura and his team repeatedly encounter outrageous denial and avoidance by officials at every level.

The mainstream media have avoided and downplayed these on-the-record plans for FEMA Camps and Homeland Security Emergency Facilities for years. Clearly, it is not meant to be a public relations talking point, and it is no surprise that members of Congress, including those who wrote the bill to create FEMA camps in America, are reluctant to discuss the matter. So, Jesse Ventura, former Mayor and Governor, descends upon Washington to confront two important figures behind H.R. 645, the National Emergency Centers Establishment Act.

Despite going through official channels, Ventura finds that Jim Gerlach (P-Pennsylvania) repeatedly "ducks" TV cameras and refuses to answer questions about H.R. 645. Another Congressman who co-sponsored the bill starkly admits that FEMA camps exist, but rationalizes that they were put in place to deal with "happy children."

This bizarre admission is another confirmation that Congress and the leadership in Washington are out of touch with the oppressive measures that have been authorized against the American people. Later, Ventura and Jones visit the Deep South and discover what appears to be an active cover-up to

keep them from the truth. Outside the Atlanta, Georgia area is another confirmed location in FEMA's disaster preparation network.

They pay a visit to a facility storing thousands of plastic coffins where video has already confirmed the coffins in large numbers. Ventura and Jones discover upon arrival that a convoy of trucks has just left hauling away the evidence— thousands and thousands of liners the facility wanted to keep out of the way of cameras and public knowledge.

Various plastic coffin locations affiliated with FEMA, as well as plans for mass graves and large-scale fatalities, have been previously exposed and reported upon— including photographs sent by an Infowars listener of an Alabama facility in 2009 with thousands and thousands of plastic coffin liners. Why then would the officials in Georgia engage in such a desperate and hurried cover-up?

Further, the plans are already confirmed. DMORT and other divisions of Homeland Security have a contingency-structure in place to deal with mass fatalities and outbreaks in times of pandemics, natural disasters, terrorist attacks, national emergency or other disasters. Elements of these plans are in place on record, and coordinated via the 10 FEMA regions in the United States and via the "Fusion Centers" that are popping up at the Federal, State and Local levels all across the nation to spy on ordinary citizens.

Concerned about the fact that these programs admittedly monitor 'returning veterans,' 'Ron Paul, Bob Barr and Chuck Baldwin supporters' and beyond, the TV show contacted a Fusion Center spokesman to find out more about why they are targeting ordinary Americans. Spokesman Lance Clem told the show point blank that these domestic intelligence gathering centers have no oversight. Clem shockingly admitted, "We police ourselves."

The show's producers have told Alex behind the scenes that this episode turned out to be the most exciting from its entire Second Season line-up. It not only confronts the FEMA camp issue head on, but uncovers significant reason to worry about the actions of Homeland Security and other agencies. At location after location, it is clear that its administrators are nervous to discuss what they are preparing, but it is clear from their records and public documents that they are preparing for something big.

**TruTV's Episode Guide:** "It's been said the government has a plan to declare martial law and round up millions of United State citizens into concentration camps. Jesse may have found a conspiracy in plain sight as he investigates the proliferation of law enforcement Fusion Centers around the country. And they may be connected to hundreds of detention centers ready to accept prisoners at the stroke of a Presidential pen" ([Infowars, 2010](#)).

**Title:** Breaking: LAX FEMA Rendition Site Confirmed

**Date:** January 27, 2012

**Source:** [Infowars](#)

**Abstract:** FEMA CAMPS EXPOSED: Alex presents newly exposed footage filmed at LAX airport in Los Angeles confirming a 'rendition hub' capable of processing thousands of people per hour from straight off the tarmac and other transportation points.

Further, Alex dredges up video clips of other facilities used in the past for mass containment of dissenters- from Pier 57 in New York City used to detain those rounded-up during mass arrests at the 2004 Republican National Convention to the former Mueller Airport facility in Austin which news clips exposed had been converted to hold mass arrestees to the Sand Point Naval Station in Seattle used for 1999 WTO protesters.

This is, of course, only the tip of the iceberg, yet demonstrates the growing apparatus aimed at American dissenters in the Homeland ([Infowars, 2012](#)).

**Title:** FEMA Camp Rendition Hubs Discovered  
**Date:** January 27, 2012  
**Source:** [Infowars](#)

**Abstract:** On the Thursday evening edition of Infowars Nightly News, Alex Jones featured photo evidence of a FEMA rendition facility located at the airport in Los Angeles.

The photos and an interview with an eyewitness who described the facility and its inward facing barbed wire fence and one-way turnstiles add more compelling evidence to the indisputable fact that [FEMA operates as a modern version of the Gestapo](#).

Numerous FEMA camps scattered across the country are not designed to temporarily hold displaced citizens during natural disasters as the government would have us believe. Despite the denial and dismissal of the corporate media – most notably [Glenn Beck](#) – the camps are intended for the real enemy of the government and its banker overlords: the American people.

In the above video, Alex also spotlights rendition facilities located at the [Robert Mueller Airport](#) in Austin, Texas, the [Sand Point FEMA rendition hub](#) in Washington state, and the notorious site at [Pier 57](#) in New York City.

The LAX hub is especially pertinent as the military and [LA cops engage in Posse Comitatus busting exercises](#) this week. “The LAPD said the purpose of the training was in part to ensure the military’s ability to operate in urban environments,” [CBS Los Angeles](#) reported on Wednesday.

CBS, of course, did not draw any conclusions after it reported that military helicopters staged from Dodgers Stadium and ferried back and forth from local parks in the city. [Sports stadiums](#) have historically served as impromptu prisons for military dictatorships. (Editor’s note: see [this article](#). Miami is attempting to use stadiums to house the homeless, thus setting a precedent.)

The government has conducted a number of beta tests over the years in preparation for mass arrests and ultimately extraordinary renditions to [black site torture dungeons](#).

In addition to an alarming number of high profile military exercises, the government has worked in tandem with local police during events such as the the [Republican and Democrat national conventions](#) and periodic gatherings of the [globalist elite in Pittsburgh](#) and elsewhere. During the events, they have beta tested and honed their ability to [arrest large numbers of people](#) and hold them in squalid detention centers.

Infowars.com reporter [Rob Dew](#) experienced the process firsthand when he was arrested while covering the G20 in Pittsburgh and held at a military base.

#### Legal Precedents and Police State Preparations

The NDAA, [National Defense Authorization Act](#), and the [Enemy Expatriation Act](#) are recent efforts to build a legal – if entirely unconstitutional – foundation for the police state and its semi-secret network of gulags and rendition camps under the auspices of FEMA.

Prior to the NDAA, the government established important precedents through the Patriot Act and the [Military Commissions Act](#), the latter a direct effort to nullify habeas corpus and allow the government to disappear suspected citizens.

The Constitution-busting Patriot Act emerged from the hysteria following the attacks of September 11, 2001, and spawned a raft of proposed “anti-terror” legislation, including The Universal National Service Act of 2003 and Patriot Act II, an earlier effort to trash habeas corpus. See Alex Jones’ [The Secret Patriot Act II Destroys What Is Left of American Liberty](#) from early February, 2003.

NDAA allows for the wholesale kidnapping and disappearance of American citizens into the above mentioned FEMA camps. The legislation was paraded before the American people under the guise of

fighting phantom terrorists, but as a large number of legal experts, civil libertarians and commentators have noted, it is designed for the American people, not al-Qaeda miscreants.

The [National Emergency Centers Act or HR 645](#) was established to provide a legal context for the camps covered above. The bill mandates that six separate facilities be established in different Federal Emergency Management Agency Regions (FEMA) throughout the country. For more on this key legislation, see Paul Joseph Watson's [New Legislation Authorizes FEMA Camps In U.S.](#), posted in January of 2009.

In December, we covered a push by KBR to [outfit FEMA and U.S. Army camps](#) around the United States under federal government contract. KBR's call for FEMA camp service bids arrived soon after the NDAA was passed in the Senate.

Contingency plans to [suspend the Constitution](#) and abduct enemies of the state go back to at least the 1980s. [Rex 84](#), short for Readiness Exercise 1984, was established under the pretext of a "mass exodus" of illegal aliens crossing the Mexican/US border, the same pretense used in the language of the KBR request for services.

During the Iran-Contra hearings in 1987, however, it was revealed that the program was a secretive "[scenario and drill](#)" developed by the federal government to suspend the Constitution, declare martial law, assign military commanders to take over state and local governments, and detain large numbers of American citizens determined by the government to be "national security threats."

FEMA Rendition Camps: The Emergent Face of Fascism in America

Rex 84, [Operation Cable Splicer](#), and [Garden Plot](#) are programs specifically designed to facilitate the recently enacted NDAA and the above mentioned legislation and more [going back to Clinton](#) in the wake of the OKC bombing and the Waco massacre in the 1990s.

The effort to turn America into a military police state where free-thinkers not drinking the government's kool-aid can easily be disappeared into a nightmare world of secret CIA rendition flights to eastern European torture centers grew serious legs following the September 11 attacks and has entered a hyper state now that the NDAA is law.

Startling details on the rendition center at LAX adds more credence to the indisputable fact that the government is working to establish a network of camps for its political enemies. It underscores the fact that the controllers are hellbent on fully realizing fascism in America, complete with concentration camps where those opposed to the quest for global domination disappear, never to be seen again ([Infowars, 2012](#)).

**Title:** FEMA Puts Out Contract For Emergency Camps To House "Displaced Citizens"

**Date:** February 27, 2012

**Source:** [Infowars](#)

**Abstract:** The Federal Emergency Management Agency (FEMA) is looking for contractors to construct temporary emergency camps inside the United States which can be ready for occupancy within a 72 hour time period and used to house emergency responders as well as "displaced citizens".

The National Responder Support Camp contract, posted on the [Federal Business Opportunities](#) website, calls on contractors to "provide all necessary supervision, professional staff, labor support, material, supplies and equipment as necessary to make a RSC within a disaster-impacted area anywhere within the CONUS (Continental United States) within 72 hours after notification."

The camps are primarily designed to house emergency responders, but will also be utilized to shelter "displaced citizens," who will be "given the first opportunities for employment within the camp," according to the solicitation. The camps will be able to service up to 2,000 people at one time.

As well as natural disasters, the 72-hour camps are designed to deal with terrorist attacks, National Response Framework activities of federal agencies, National Special Security Events, “or any other situation where FEMA or an agency working through FEMA needs a RSC.”

The camps will be secured with fencing and barricades that will also serve to create areas that are “off limits” to certain occupants. Entry to the camp will be controlled through a photo ID system for all occupants and visitors.

Medical treatment facilities, dining facilities, mobile showers and “morale welfare and recreation” facilities are all required as part of the contract.

FEMA's latest efforts to satisfy the demand for emergency camps represents a continuation of preparations on behalf of the federal government to prepare for civil emergencies and potential social disorder.

Last December, Department of Homeland Security chief Janet Napolitano directed ICE (Immigration and Customs Enforcement) to [prepare for a mass influx of immigrants into the United States](#), calling for the plan to deal with the “shelter” and “processing” of large numbers of people.

In 2006, Halliburton subsidiary Kellogg, Brown and Root [was contracted by Homeland Security](#) to build detention centers designed to deal with “an emergency influx of immigrants into the U.S.,” or the rapid development of unspecified “new programs” that would require large numbers of people to be interned.

[Last year we received a leaked memo](#) from a state government employee detailing KBR's efforts to hire subcontractors to provide services required for temporary “emergency environment” camps located in five regions of the United States, indicating that many of the camps have now been constructed and are ready for use.

The construction of new detention camps inside the United States has provoked fears that the facilities could also be used to intern American citizens in the aftermath of a national emergency.

Rex 84, short for [Readiness Exercise 1984](#), was established under the pretext of a “mass exodus” of illegal aliens crossing the Mexican/US border, the same pretense used in the language of the KBR request for services.

During the Iran-Contra hearings in 1987, however, it was revealed that the program was a secretive “scenario and drill” developed by the federal government to suspend the Constitution, declare martial law, assign military commanders to take over state and local governments, and detain large numbers of American citizens determined by the government to be “national security threats.”

A provision within the National Defense Authorization Act, signed into law by President Obama on New Years Eve, hands the government power to have American citizens [arrested and detained without trial](#) (Infowars, 2012).



# Bio Terror Bible

## EXPOSING THE COMING BIO-TERROR PANDEMIC

**BIOTERRORBIBLE.COM:** The U.S. government formerly contracted with Kellogg, Brown & Root (KBR) to build tens of thousands of railcars for human transportation which are reportedly equipped with shackles to transport detained citizens against their will. Americans rounded up in a bio-terror pandemic will then be transported to [concentration camps operated by FEMA](#) where they will likely suffer the same fate as those who rode the trains in Nazi Germany.

According to diplomat and author Peter Dale Scott, the KBR contract is part of a Homeland Security plan titled "[Operation ENDGAME](#)", which sets as its goal the removal of "all aliens" and "potential terrorists" from the United States. This plan will likely be executed under the cover of a full-blown bio-terror pandemic.

**Title:** Rule By Fear Or Rule By Law?

**Date:** February 4, 2008

**Source:** [San Francisco Chronicle](#)

**Abstract:** Since 9/11, and seemingly without the notice of most Americans, the federal government has assumed the authority to institute martial law, arrest a wide swath of dissidents (citizen and noncitizen alike), and detain people without legal or constitutional recourse in the event of "an emergency influx of immigrants in the [U.S.](#), or to support the rapid development of new programs." Beginning in 1999, the government has entered into a series of single-bid contracts with Halliburton subsidiary [Kellogg, Brown and Root](#) (KBR) to build detention camps at undisclosed locations within the United States.

The government has also contracted with several companies to build thousands of railcars, some reportedly equipped with shackles, ostensibly to transport detainees. According to diplomat and author Peter Dale Scott, the KBR contract is part of a Homeland Security plan titled ENDGAME, which sets as its goal the removal of "all removable aliens" and "potential terrorists." Fraud-busters such as Rep. Henry Waxman, D-Los Angeles, have complained about these contracts, saying that more taxpayer dollars should not go to taxpayer-gouging Halliburton.

But the real question is: What kind of "new programs" require the construction and refurbishment of detention facilities in nearly every state of the union with the capacity to house perhaps millions of people? Sect. 1042 of the 2007 National Defense Authorization Act (NDAA), "Use of the Armed Forces in Major Public Emergencies," gives the executive the power to invoke martial law.

For the first time in more than a century, the president is now authorized to use the military in response to "a natural disaster, a disease outbreak, a terrorist attack or any other condition in which the President determines that domestic violence has occurred to the extent that state officials cannot maintain public order." The [Military Commissions Act of 2006](#), rammed through Congress just before the 2006 midterm elections, allows for the indefinite imprisonment of anyone who donates money to a charity that turns up on a list of "terrorist" organizations, or who speaks out against the government's policies.

The law calls for secret trials for citizens and noncitizens alike. Also in 2007, the White House quietly issued [National Security Presidential Directive 51](#) (NSPD-51), to ensure "continuity of government" in the event of what the document vaguely calls a "catastrophic emergency." Should the president determine that such an emergency has occurred, he and he alone is empowered to do whatever he deems necessary to ensure "continuity of government."

This could include everything from canceling elections to suspending the Constitution to launching a nuclear attack. Congress has yet to hold a single hearing on NSPD-51. U.S. Rep. Jane Harman, D-Venice (Los Angeles County) has come up with a new way to expand the domestic "war on terror." Her [Violent Radicalization and Homegrown Terrorism Prevention Act of 2007](#) (HR1955), which passed the House by the lopsided vote of 404-6, would set up a commission to "examine and report upon the facts and causes" of so-called violent radicalism and extremist ideology, then make legislative recommendations on combating it.

According to commentary in the Baltimore Sun, Rep. Harman and her colleagues from both sides of the aisle believe the country faces a native brand of terrorism, and needs a commission with sweeping investigative power to combat it. A clue as to where Harman's commission might be aiming is the Animal Enterprise [Terrorism](#) Act, a law that labels those who "engage in sit-ins, civil disobedience, trespass, or any other crime in the name of animal rights" as terrorists. Other groups in the crosshairs could be anti-abortion protesters, anti-tax agitators, immigration activists, environmentalists, peace demonstrators, Second Amendment rights supporters ... the list goes on and on.

According to author Naomi Wolf, the National Counterterrorism Center holds the names of roughly 775,000 "terror suspects" with the number increasing by 20,000 per month. What could the government be contemplating that leads it to make contingency plans to detain without recourse millions of its own citizens? The Constitution does not allow the executive to have unchecked power under any circumstances. The people must not allow the president to use the war on terrorism to rule by fear instead of by law ([San Francisco Chronicle, 2008](#)).

# Bio Terror Bible

## EXPOSING THE COMING BIO-TERROR PANDEMIC

**BIOTERRORBIBLE.COM:** The "Continuity of Operations Plan" or military martial law refers to the preparations and institutions maintained by the United States government for the survival of federal government operations in the case of catastrophic events. The George W. Bush administration put the "Continuity of Operations Plan" into effect for the first time directly following the September 11, 2001, attacks. Although the U.S. Constitution and Bill of Rights has been slowly eroded by various legislation passed by the U.S. Congress, the naked implementation of martial military law will only be revealed in the wake of a nuclear attack or biological pandemic.

**Title:** U.S. Federal Governmen's "Readiness Exercise 1984"

**Date:** 1967 – Present

**Source:** [Wikipedia](#)

**Abstract:** Short for *Readiness Exercise 1984*, is a contingency plan developed by the United States federal government to suspend the United States Constitution, declare martial law, place military commanders in charge of state and local governments, and detain large numbers of American citizens who were deemed to be "national security threats", in the event that the President declared a "State of Domestic National Emergency".

The plan stated that events that might cause such a declaration would be widespread U.S. opposition to a U.S. military invasion abroad, such as if the United States were to directly invade Central America.

To combat what the government perceived as "subversive activities", the plan also authorized the military to direct ordered movements of civilian populations at state and regional levels. Rex-84 was written by Lieutenant Colonel Oliver North, who was both the NSC White House Aide and NSC liaison to FEMA, and John Brinkerhoff, the deputy director of "national preparedness" programs for FEMA.

They patterned the plan on a 1970 report written by FEMA chief Louis Giuffrida, at the Army War College, which proposed the detention of up to 21 million "American Negroes", if there were a black militant uprising in the United States.

Existence of a master military contingency plan (of which REX-84 was a part), "Garden Plot" and a similar earlier exercise, "Lantern Spike" were originally revealed by journalist Ron Ridenhour, who summarized his findings in "Garden Plot and the New Action Army." Rex 84 was publicly mentioned during the Iran-Contra Hearings in 1987.

Exercises similar to Rex 84 happen regularly. For example, from 1967 to 1971 the FBI kept a list of over 100,000 persons to be rounded up as subversive, dubbed the "ADEX" list. The basic facts about Rex 84 and other contingency planning readiness exercises—and the potential threat they pose to civil liberties if fully implemented in a real operation—are taken seriously by scholars and civil libertarians ([Wikipedia, 2010](#)).

**Title:** Continuity Of Operations Plan

**Date:** September 11, 2001

**Source:** [Wikipedia](#)

**Abstract:** The Continuity of Operations Plan refers to the preparations and institutions maintained by the United States government, providing survival of federal government operations in the case of catastrophic events. The George W. Bush administration put the Continuity of Operations plan into effect for the first time directly following the September 11 attacks.-

Their implementation involved a rotating staff of 75 to 150 senior officials and other government workers from every federal executive department and other parts of the executive branch in two secure bunkers on the East Coast. Friends, family and co-workers were only able to reach them through a toll-free number and personal extensions. The Bush administration did not acknowledge the implementation of the COG plan until March 1, 2002.

Since September 11, 2001, the newly created Department of Homeland Security has conducted at least three exercises to test continuity plans. The first, named "Forward Challenge '04", took place from May 12 to May 13, 2004, and included more than 40 government agencies. The second major exercise took place from June 20 to June 24, 2005. Titled "Pinnacle", the exercise tested responses to various emergencies, including a hypothetical act of terrorism. "[Forward Challenge '06](#)" was the third major exercise, and took place on June 19, 2006. It reportedly involved nearly 4,000 government personnel.

In September 2010, President Barack Obama informed Congress that the [State of Emergency](#) in effect since September 14, 2001, will be extended another year. The [National Emergencies Act](#) grants various powers to the president during times of emergency, and was intended to prevent a president from declaring a state of emergency of indefinite duration.

In 2007, Professor Larry J. Sabato criticized the incomplete nature of the plan in his book [A More Perfect Constitution](#). In particular, he objected to the fact that there is no Constitutional procedure for replacing U.S. House members in the case of a large-scale attack which could potentially kill a large number of representatives. In regard to the Continuity of Operations Plan, Sabato said it "failed outright" during the September 11 attacks.

The [NORAD](#)- and [USNORTHCOM](#)-sponsored exercise "Vigilant Shield 2008" took place from October 15 to October 20, 2007 ([Wikipedia, 2011](#)).

**Title:** Civil-Liberties Issues Check Plans To Fight Bioterrorism

**Date:** May 17, 2002

**Source:** [UCLA](#)

**Abstract:** What would happen if another bioterrorist struck the U.S.?

Probably the same confusion, fear and uncoordinated response that happened during last fall's anthrax attacks. Federal and state plans to respond to bioterrorism have run up against civil libertarians and a host of others who worry their rights will be trampled. Even some hospital groups have fought against plans for bioterror attacks because they don't want contagious patients in their facilities.

Just seven months ago, when anthrax was killing people and closing parts of the U.S. Postal Service and Washington D.C., nothing seemed more important than preparing for bioterror. A model law, drafted at the request of the Centers for Disease Control and Prevention, was rushed to state governments last fall to help their governors and public-health departments strengthen their quarantine powers to deal with a newer, larger and more dangerous bioterror attack with a contagious disease such as smallpox.

But proposed legislation based on the model law was struck down in states including Idaho, Nebraska, Wyoming and Wisconsin and died in committee in Mississippi and Washington state. Groups ranging from the liberal American Civil Liberties Union to the conservative American Legislative Exchange Council decried what they saw as sweeping infringements of personal liberties. Although 11 states have passed some version of the act, it appears in many states the laws will be delayed or significantly diluted in scope, if implemented at all.

In the meantime, the nation remains vulnerable to bioterror, public-health officials and bill supporters say ruefully. Lawrence Gostin, a law professor at Georgetown University in Washington and one of the authors of the model law, calls opponents "ostriches with their heads in the sand."

The Model Emergency Health Powers Act, was intended to be a template for state laws around the country. It allowed state governors 30 days of emergency power, with the right to quarantine, isolate, test, treat and vaccinate people. People refusing to be treated or vaccinated could be put into quarantine. It also allowed officials to take over hospitals and pharmacies during an emergency, allocate drugs and vaccines, and even ration food and fuel. It further permitted the state to close, evacuate and, when necessary, destroy contaminated property. People seeking release from quarantine were provided court hearings, as well as compensation for property seized under the law.

The latest setback for the law's proponents came in California, where a sweeping Emergency Health Powers Act was gutted in a legislative committee and sent back for study. According to a glum Keith Richman, a physician and the Republican state legislator who introduced the legislation, "My bill is dead."

An autopsy of the California bill illustrates how far apart the two sides are.

The American Civil Liberties Union of California blasted the model act for having too broad a definition of bioterror emergency, and too narrow a set of safeguards for due process, medical privacy, and religious objections to procedures like cremation, spokeswoman Valerie Small Navarro says.

Also opposing the bill was the American Legislative Exchange Council, a free-market advocacy group. Sandy Liddy Bourne, a council official, said the proposed bill "puts a stranglehold on our civil liberties." She charged the act constituted an unwarranted expansion of state public-health powers and warned it would lead to declarations of quarantine "on the vague definition of a biological threat."

Some groups, including the Association of American Physicians and Surgeons, a conservative medical lobby, objected to the law's provisions for compulsory shots in an emergency. "Our group is against forcing vaccination on people," says Jane Orient, a Tucson doctor and executive director of the group, which lobbied statehouses from Albany to Sacramento conjuring images of forced treatment at gunpoint.

Measures to limit the spread of deadly contagious disease by temporary isolation of the sick also provoked opposition. The Capitol Resource Institute, a nonprofit family-advocacy group based in Sacramento, rejects any bill that might separate families.

Hospital quarantine of people with a disease such as smallpox is another flashpoint. "At a hospital, unless you empty out quickly, you risk exposing a lot of innocent people," says Jan Emerson, spokeswoman for the California Healthcare Association, which opposes the model act. The association, a lobby for 470 acute-care hospitals, proposes that patients check into a motel, gym, or "MASH"-style field infirmary.

Supporters say laws based on the model act would protect individual liberties better than existing laws. For instance, it provides court hearings for people improperly quarantined, rather than relying on writs of habeas corpus or laws against illegal imprisonment, as do some old state statutes.

"What's wrong with the current system is that most state laws are highly antiquated, and predate most of the advances in public-health sciences and constitutional law in America," says Georgetown's Prof. Gostin. Some states, he says, retain one set of rules for old diseases like smallpox and plague; another for polio and tuberculosis; and still another for newer diseases like West Nile virus.

Broad emergency health powers haven't been invoked in America since the hot summer of 1954, when polio put children into iron lungs, and officials closed off summer camps and swimming pools. In light of the opposition to the model law, some CDC officials wonder if today's Americans are so unused to limits on their liberty that they won't tolerate disease-induced restrictions, even for the greater good.

That possibility worries doctors in the trenches. "The best intelligence tells us that with bioterror, it's not a matter of if, but when," says Poki Namkung, director of public health for Berkeley, Calif. "Every drill that has been run has shown people are not prepared."

But in New York, Barry Steinhardt, director of the technology and liberty program of the ACLU's national office, is relieved most states are refusing to rush the new bioterror act into law. "The worst laws," he warns, "are made in time of emergency" ([UCLA, 2002](#)).

Senate bill "S-3081" allows for the infinite detention of any person, including American citizens, who is deemed to be an unprivileged enemy belligerent without criminal charges or trial for the duration of hostilities against the United States or its coalition partners in which the individual has engaged or which the individual has purposely and materially supported. This law basically allows any person at any time to be arrested and held without bail or trial for any amount of time deemed necessary by the U.S. government. This law paves the way for mass arrests and the wholesale extermination that is sure to follow.

**Title:** The Enemy Belligerent Interrogation, Detention, And Prosecution Act Of 2010

**Date:** May 4, 2007

**Source:** [Wikipedia](#)

**Abstract:** The Enemy Belligerent Interrogation, Detention, and Prosecution Act of 2010 (S. 3081) is a [bill](#) introduced by [United States Senator John McCain](#), sponsored by [Joe Lieberman](#) and eight other Republican Senators. Its counterpart in the [House](#) is H.R. 4892, introduced by [Howard McKeon](#) (R-CA). According to the bill's official summary, the bill requires that any person who is arrested on suspicion of terrorism against the United States or its coalition partners be placed in military custody for the purposes of initial interrogation and determination of status as an "unprivileged enemy belligerent". Such determination is to be made within 48 hours.

**The bill proceeds to define an "unprivileged enemy belligerent" as an individual who:**

1. Has engaged in hostilities against the United States or its coalition partners;
2. Has purposely and materially supported hostilities against the United States or its coalition partners; or
3. Was a part of al Qaeda at the time of capture.

The bill authorizes the President to establish a "high-value detainee interrogation group" consisting of executive branch personnel with expertise in national security, terrorism, intelligence, interrogation, or law enforcement to perform the interrogation and status determination. The bill defines that the paramount purpose of such interrogations is the protection of U.S. civilians and facilities through thorough and professional interrogation for intelligence purposes.

It further prohibits the use of Department of Justice (DOJ) appropriated funds to prosecute an unprivileged enemy belligerent in an Article III court. Finally, the bill allows for the detention of a person who is deemed to be an unprivileged enemy belligerent without criminal charges or trial for the duration of hostilities against the United States or its coalition partners in which the individual has engaged or which the individual has purposely and materially supported. S.3081 was co-sponsored in the Senate by: Scott Brown [MA], Saxby Chambliss [GA], James Inhofe [OK], George LeMieux [FL], Jeff Sessions [AL], John Thune [SD], David Vitter [LA], and Roger Wicker [MS] ([Wikipedia, 2010](#)).

**Title:** U.S. Congress' Violent Radicalization And Homegrown Terrorism Prevention Act Of 2007

**Date:** April 19, 2007

**Source:** [Wikipedia](#)

**Abstract:** A bill sponsored by Rep. Jane Harman (D-CA) in the 110th United States Congress. Its stated purpose is to deal with "homegrown terrorism and violent radicalization" by establishing a national commission, establishing a center for study, and cooperating with other nations.

The bill was introduced to the House on April 19 2007, and passed on Oct 23, 2007. It was introduced to the Senate on August 2, 2007 as S-1959. The bill defines some terms including "violent radicalization," "homegrown terrorism," and "ideologically based violence," which have provoked controversy from some quarters.



Amended the [Homeland Security Act of 2002](#) to add provisions concerning the prevention of homegrown terrorism (terrorism by individuals born, raised, or based and operating primarily in the United States).

**Directed the Secretary of Homeland Security to:**

Establish a grant program to prevent radicalization (use of an extremist belief system for facilitating ideologically-based violence) and homegrown terrorism in the United States;

Establish or designate a university-based Center of Excellence for the Study of Radicalization and Homegrown Terrorism in the United States;

Conduct a survey of methodologies implemented by foreign nations to prevent radicalization and homegrown terrorism.

Prohibited the [Department of Homeland Security's](#) efforts to prevent ideologically-based violence and homegrown terrorism from violating the constitutional and civil rights, and civil liberties, of U.S. citizens and lawful permanent residents.

**Defined Terms**

**Violent Radicalization:** The process of adopting or promoting an extremist belief system for the purpose of facilitating ideologically based violence to advance political, religious, or social change.

**Homegrown Terrorism:** The use, planned use, or threatened use, of force or violence by a group or individual born, raised, or based and operating primarily within the United States or any possession of the United States to intimidate or coerce the United States government, the civilian population of the United States, or any segment thereof, in furtherance of political or social objectives.

**Ideologically Based Violence:** The use, planned use, or threatened use of force or violence by a group or individual to promote the group or individual's political, religious, or social beliefs ([Wikipedia, 2010](#)).

**Title:** The White House National Security and Homeland Security Presidential Directive 51

**Date:** May 4, 2007

**Source:** [Wikipedia](#)

**Abstract:** National Security Presidential Directive: NSPD 51 was created and signed by United States President George W. Bush on May 4, 2007, is a Presidential Directive which claims power to execute procedures for continuity of the federal government in the event of a "catastrophic emergency".

Such an emergency is construed as "any incident, regardless of location, that results in extraordinary levels of mass casualties, damage, or disruption severely affecting the U.S. population, infrastructure, environment, economy, or government functions."

The unclassified portion of the directive was posted on the White House website on May 9, 2007, without any further announcement or press briefings ([Wikipedia, 2010](#)).

**Title:** H1N1 Martial Law?

**Date:** September 25, 2009

**Source:** [Fox News](#)

**Title:** Newsmax Calls For Military Coup In U.S.

**Date:** September 30, 2009

**Source:** [Newsmax](#)

**Abstract:** There is a remote, although gaining, possibility America's military will intervene as a last resort to resolve the "Obama problem." Don't dismiss it as unrealistic.

America isn't the Third World. If a military coup does occur here it will be civilized. That it has never happened doesn't mean it won't. Describing what may be afoot is not to advocate it. So, view the following through military eyes:

1. Officers swear to "support and defend the Constitution of the United States against all enemies, foreign and domestic." Unlike enlisted personnel, they do not swear to "obey the orders of the president of the United States."
2. Top military officers can see the Constitution they are sworn to defend being trampled as American institutions and enterprises are nationalized.
3. They can see that Americans are increasingly alarmed that this nation, under President Barack Obama, may not even be recognizable as America by the 2012 election, in which he will surely seek continuation in office.
4. They can see that the economy — ravaged by deficits, taxes, unemployment, and impending inflation — is financially reliant on foreign lender governments.
5. They can see this president waging undeclared war on the intelligence community, without whose rigorous and independent functions the armed services are rendered blind in an ever-more hostile world overseas and at home.
6. They can see the dismantling of defenses against missiles targeted at this nation by avowed enemies, even as America's troop strength is allowed to sag.
7. They can see the horror of major warfare erupting simultaneously in two, and possibly three, far-flung theaters before America can react in time.
8. They can see the nation's safety and their own military establishments and honor placed in jeopardy as never before  
Will the day come when patriotic general and flag officers sit down with the president, or with those who control him, and work out the national equivalent of a "family intervention," with some form of limited, shared responsibility?

Imagine a bloodless coup to restore and defend the Constitution through an interim administration that would do the serious business of governing and defending the nation. Skilled, military-trained, nation-builders would replace accountability-challenged, radical-left commissars. Having bonded with his twin teleprompters, the president would be detailed for ceremonial speech-making.

Military intervention is what Obama's exponentially accelerating agenda for "fundamental change" toward a Marxist state is inviting upon America. A coup is not an ideal option, but Obama's radical ideal is not acceptable or reversible.

Unthinkable? Then think up an alternative, non-violent solution to the Obama problem. Just don't shrug and say, "We can always worry about that later" ([Newsmax, 2009](#)).

**Title:** 'Continuity Of Government' Planning: War, Terror And The Supplanting Of The U.S. Constitution

**Date:** May 30, 2010

**Source:** [Peter Dale Scott](#)

**Abstract:** In July 1987, during the Iran-Contra Hearings grilling of Oliver North, the American public got a glimpse of "highly sensitive" emergency planning North had been involved in. Ostensibly these were emergency plans to suspend the American constitution in the event of a nuclear attack (a legitimate concern). But press accounts alleged that the planning was for a more generalized suspension of the constitution. As part of its routine Iran-contra coverage, the following exchange was printed in the New York Times, but without journalistic comment or follow-up.

**Congressman Jack Brooks:** Colonel North, in your work at the N.S.C. were you not assigned, at one time, to work on plans for the continuity of government in the event of a major disaster?

**Brendan Sullivan** [North's counsel, agitatedly]: Mr. Chairman?

**Senator Daniel Inouye:** I believe that question touches upon a highly sensitive and classified area so may I request that you not touch upon that?

**Congressman Jack Brooks:** I was particularly concerned, Mr. Chairman, because I read in Miami papers, and several others, that there had been a plan developed, by that same agency, a contingency plan in the event of emergency, that would suspend the American constitution. And I was deeply concerned about it and wondered if that was an area in which he had worked. I believe that it was and I wanted to get his confirmation.

**Senator Daniel Inouye:** May I most respectfully request that that matter not be touched upon at this stage. If we wish to get into this, I'm certain arrangements can be made for an executive session. But we have never heard if there was or was not an executive session, or if the rest of Congress was ever aware of the matter.

According to James Bamford, "The existence of the secret government was so closely held that Congress was completely bypassed." Key individuals in Congress were almost certainly aware. Brooks was responding to a story by Alfonzo Chardy in the Miami Herald. Chardy's story alleged that Oliver North was involved with the Federal Emergency Management Agency (FEMA) in plans to take over federal, state and local functions during a national emergency.

This planning for "Continuity of Government" (COG) called for "suspension of the Constitution, turning control of the government over to the Federal Emergency Management Agency, emergency appointment of military commanders to run state and local governments and declaration of martial law." To my knowledge no one in the public (including myself) attached enough importance to the Chardy story.

Chardy himself suggested that Reagan's Attorney General, William French Smith, had intervened to stop the COG plan from being presented to the President. Seven years later, in 1994, Tim Weiner reported in the New York Times that what he called "The Doomsday Project" – the search for "ways to keep the Government running after a sustained nuclear attack on Washington" – had "less than six months to live." To say that nuclear attack planning was over was correct, But this statement was also very misleading.

On the basis of Weiner's report, the first two books on COG planning, by James Bamford and James Mann, books otherwise excellent and well-informed, reported that COG planning had been abandoned. They were wrong. Mann and Bamford did report that, from the beginning, two of the key COG planners on the secret committee were Dick Cheney and Donald Rumsfeld, the two men who implemented COG under 9/11. What they and Weiner did not report was that under Reagan the purpose of COG planning had officially changed: it was no longer for arrangements "after a nuclear war," but for any "national security emergency."

This was defined in Executive Order 12656 of 1988 as: "any occurrence, including natural disaster, military attack, technological emergency, or other emergency, that seriously degrades or seriously threatens the national security of the United States." In other words extraordinary emergency measures, originally designed for an America devastated in a nuclear attack, were now to be applied to anything the White House considered an emergency.

Thus Cheney and Rumsfeld continued their secret planning when Clinton was president; both men, both Republicans, were heads of major corporations and not even in the government at that time. Moreover, Andrew Cockburn claims that the Clinton administration, according to a Pentagon source, had "no idea what was going on." The expanded application of COG to any emergency was envisaged as early as 1984, when, according to Boston Globe reporter Ross Gelbspan, Lt. Col. Oliver North was working with officials of the Federal Emergency Management Agency . . . to draw up a secret contingency plan to surveil political dissenters and to arrange for the detention of hundreds of thousands of undocumented aliens in case of an unspecified national emergency.

The plan, part of which was codenamed Rex 84, called for the suspension of the Constitution under a number of scenarios, including a U.S. invasion of Nicaragua. Clearly 9/11 met the conditions for the imposition of COG measures, and we know for certain that COG planning was instituted on that day in 2001, before the last plane had crashed in Pennsylvania.

The 9/11 Report confirms this twice, on pages 38 and 326. It was under the auspices of COG that Bush stayed out of Washington on that day, and other government leaders like Paul Wolfowitz were swiftly evacuated to Site R, inside a hollowed out mountain near Camp David. What few have recognized is that, nearly a decade later, some aspects of COG remain in effect. COG plans are still authorized by a proclamation of emergency that has been extended each year by presidential authority, most recently by President Obama in September 2009.

COG plans are also the probable source for the 1000-page Patriot Act presented to Congress five days after 9/11, and also for the Department of Homeland Security's Project Endgame — a ten-year plan, initiated in September 2001, to expand detention camps, at a cost of \$400 million in Fiscal Year 2007 alone. At the same time we have seen the implementation of the plans outlined by Chardy in 1987: the warrantless detentions that Oliver North had planned for in Rex 1984, the warrantless eavesdropping that is their logical counterpart, and the militarization of the domestic United States under a new military command, NORTHCOM.

Through NORTHCOM the U.S. Army now is engaged with local enforcement to control America, in the same way that through CENTCOM it is engaged with local enforcement to control Afghanistan and Iraq. We learned that COG planning was still active in 2007, when President Bush issued National Security Presidential Directive 51 (NSPD 51). This, for the sixth time, extended for one year the emergency proclaimed on September 14, 2001. It empowered the President to personally ensure "continuity of government" in the event of any "catastrophic emergency." He announced that NSPD 51 contains "classified Continuity Annexes" which shall "be protected from unauthorized disclosure."

Under pressure from his 9/11 truth constituents, Congressman Peter DeFazio of the Homeland Security Committee twice requested to see these Annexes, the second time in a letter signed by the Chair of his committee. His request was denied. The National Emergencies Act, one of the post-Watergate reforms that Vice-President Cheney so abhorred, specifies that: "Not later than six months after a national emergency is declared, and not later than the end of each six-month period thereafter that such emergency continues, each House of Congress shall meet to consider a vote on a joint resolution to determine whether that emergency shall be terminated" (50 U.S.C. 1622, 2002).

Yet in nine years Congress has not once met to discuss the State of Emergency declared by George W. Bush in response to 9/11, a State of Emergency that remains in effect today. Appeals to the Congress to meet its responsibilities to review COG have fallen on deaf ears. It is clear that the planning by Cheney, Rumsfeld and others in the last two decades was not confined to an immediate response to 9/11.

The 1000-page Patriot Act, dropped on Congress as promptly as the Tonkin Gulf Resolution had been back in 1964, is still with us; Congress has never seriously challenged it, and Obama quietly extended it on February 27 of this year. We should not forget that the Patriot Act was only passed after lethal anthrax letters were mailed to two crucial Democratic Senators — Senators Daschle and Leahy — who had initially questioned the bill. After the anthrax letters, however, they withdrew their initial opposition. Someone — we still do not know who — must have planned those anthrax letters well in advance. This is a fact most Americans do not want to think about.

Someone also must have planned the unusual number of war games taking place on 9/11. COG planners and FEMA had been involved in war games planning over the previous two decades; and on 9/11 FEMA was again involved with other agencies in preparing for Operation Tripod, a bioterrorism exercise in New York City. Someone also must have planned the new more restrictive instructions, on June 1, 2001, determining that military interceptions of hijacked aircraft had to be approved "at the highest levels of government" (i.e. the President, Vice-President, or Secretary of Defense).

The Report attributes this order to a JCS Memo of June 1, 2001, entitled "Aircraft Piracy (Hijacking) and Destruction of Derelict Airborne Objects." But the written requirements had been less restrictive before June 1, 2001, and I am informed that the change was quietly revoked the following December. In *The Road to 9/11* I suggest the change in the JCS memo came from the National Preparedness Review in which President Bush authorized Vice-President Cheney, together with FEMA, "to tackle the... task of dealing with terrorist attacks."

Not noticed by the press was the fact that Cheney and FEMA had already been working on COG planning as a team throughout the 1980s and 1990s. Weiner's article persuaded authors James

Mann and James Bamford that Reagan's COG plans had now been abandoned, because "there was, it seemed, no longer any enemy in the world capable of . . . decapitating America's leadership."

In fact, however, only one phase of COG planning had been terminated, a Pentagon program for response to a nuclear attack. Instead, according to author Andrew Cockburn, a new target was found: Although the exercises continued, still budgeted at over \$200 million a year in the Clinton era, the vanished Soviets were now replaced by terrorists. . . . There were other changes, too. In earlier times the specialists selected to run the "shadow government" had been drawn from across the political spectrum, Democrats and Republicans alike.

But now, down in the bunkers, Rumsfeld found himself in politically congenial company, the players' roster being filled almost exclusively with Republican hawks. . . . "You could say this was a secret government-in-waiting. The Clinton administration was extraordinarily inattentive, [they had] no idea what was going on."

The Pentagon official's description of a "secret government-in-waiting" (which still included both Cheney and Rumsfeld) is very close to the standard definition of a cabal, as a group of persons secretly united to bring about a change or overthrow of government. In the same era Cheney and Rumsfeld projected change also by their public lobbying, through the Project for the New American Century, for a more militant Middle East policy.

In light of how COG was actually implemented in 2001, one can legitimately suspect that, however interested this group had been in continuity of government under Reagan, under Clinton the focus of Cheney's and Rumsfeld's COG planning was now a change of government ([Peter Dale Scott, 2010](#)).

**Title:** USNORTHCOM Gears Up For Potential Attack On U.S. Soil

**Date:** June 9, 2010

**Source:** [The Intel Hub](#)

**Abstract:** USNORTHCOM has admitted that they are preparing military operations within the United States. This is the first time in history this has been done and they will be working with DHS, state and local law enforcement on U.S. soil. The focus of this operation will be in our own back yard. Northcom is planning on defending against enemy attacks and supporting civilian authorities with fighting an unconventional foe, all on US soil. NORTHCOM went on to say that the drill will be in the Gulf area. They anticipate no infrastructure and possible extreme weather conditions.

"Even more significant, this inspection marked the first time that any Air Force unit has been wartime validated in support of the security and defense of the United States of America. That's huge," Nelson said. "The survival of thousand Americans rests on this training". The Intel Hub believes that their could be a mass evacuation of the Gulf. The chemicals that are being used on this oil spill could, by themselves cause a tremendous amount of various health problems. We will keep you posted.

This could be part of [Operation Garden Plot](#), and possibly could be why there has been reports of hardened troops building up in the Gulf. BP is currently saying that the oil spill should be stopped by next week. One thing is for sure, the dispersant isn't going anywhere in months much less weeks ([The Intel Hub, 2010](#)).

**Title:** Eight Regional Homeland Response Force Units Announced

**Date:** July 16, 2010

**Source:** [Bio Prep Watch](#)

**Abstract:** The Department of Defense and the National Guard Bureau recently announced that eight more regional homeland response force units will be created in the 2012 fiscal year.

According to the American Forces Press Service, the new units will be formed as part of a restructuring of the U.S. chemical, biological, radiological, nuclear and high-yield explosive response enterprise.

The eight new units will join two others based in Ohio and Washington state, whose formation was announced on June 3. One unit will be based in each of ten Federal Emergency Management Agency

regions. In addition to Ohio and Washington, units will be located in Massachusetts, New York, Pennsylvania, Georgia, Texas, Missouri, Utah and California.

The new units will be expected to reach the site of an emergency within 12 hours, crossing state borders if necessary. Each unit will consist of at least 570 guardsmen, including a medical team, a search and extraction team, a decontamination team and a command and control element. When not deployed, the personnel from each unit will continue to train, plan and exercise on a regional level.

The Defense Department CBRNE consequence management enterprise, of which these units are considered the key element, will also include a defense CBRN Response Force, two consequence management command and control sections, 57 weapons of mass destruction civil support teams and 17 CBRNE-enhanced response force packages ([Bio Prep Watch, 2010](#)).

**Title:** Poll: Americans Trust Military, But Not Congress

**Date:** September 13, 2011

**Source:** [ABC News](#)

**Abstract:** Congress may be in the doghouse with the American public, but a new poll suggests that the broader government — especially the military — gets high marks for keeping the nation safe and secure.

What's more, nearly seven in 10 Americans are trying to make things better by volunteering, a sign that optimism survives in a nation riled by partisan policy fights and economic uncertainty.

"It's very healthy because it indicates that although we are annoyed, skeptical and have less trust than we'd like in our institutions, we are not hopeless," said David Eisner, president and CEO of the National Constitution Center, which partnered on the poll with The Associated Press. "We believe that the bedrock values and principles that we built our society on are right."

The public's contempt for Congress exceeds that of other American institutions, including banks, major corporations and the media. The broader government's performance "making sure that our nation is safe from foreign and domestic threats" received an uptick in confidence from 53 percent a year ago to 72 percent now. And a growing number of people said the government is doing a good job of "making sure all Americans feel safe, secure and free," up from 54 percent in August 2010 to 63 percent now.

The military in particular earns the most respect of the survey, with 54 percent deeply confident in the institution.

But deep contempt for Congress and aspects of President Barack Obama's health care law remain among Americans tired of partisan standoffs over basic pocketbook issues. The Associated Press-National Constitution Center poll of 1,000 adults, conducted Aug. 18-22, found that 57 percent have little or no confidence in Congress, up from 49 percent last year.

So while Boise, Idaho, retiree Dale Shoemaker, 54, feels safer, he doesn't give the nation's political institutions credit.

"I think we're more secure. There are a lot of professional, talented people doing a tremendous job," Shoemaker, who used to consider himself a Republican but now is more of an independent. "But the leadership of the Congress and the Senate are not making decisions about what to do, and they're leaving people hanging."

It's notable news on the brink of an election year for Obama, the health care law's chief author and the one who made the call in May to take out terrorist chief Osama bin Laden. Congress, too, is taking note of its estimation in the eyes of the voting public as both parties gird for battle over control of the House and Senate.



No party profited politically from the standoff over the nation's finances much of the year, especially by the unseemly debt limit dispute that earned the nation a credit rating downgrade and sank approval ratings for all policymakers involved. The bickering continued even as the unemployment rate refused to drop much below 10 percent.

A poll last month found the infighting sank Congress' approval rating to 12 percent.

Congress and the broader government give Americans heartburn, with one central feature of Obama's signature health care overhaul standing out as an example. More than eight in 10 people surveyed — 82 percent — say the federal government should not have the power to require Americans to buy health care insurance. Politically important independents were more aligned with Republicans on the mandate question, with 87 percent who don't identify with one of the two major parties saying government should have no right to require insurance; 95 percent of Republicans agreed, according to the poll.

"I just think that people should have the right to buy health insurance, or not," said Daisy Mallory, 78, a retired factory worker from La Grange, Ill., who says Medicare covers her health care costs. Obama, she said, may have misjudged public's opposition to health care mandates. "I think he understands it better now," she said.

Obama himself acknowledged that his party took a "shellacking" in the 2010 midterm elections, when Republicans made the health care law and the Democrats who muscled it through Congress their Issue No. 1 — and won enough seats to control the House. Obama has said he believes the Supreme Court will uphold the law's constitutionality, but Republicans continue to mention it as a key example of government overreach that they would repeal.

But after nine months in control of the House, Republicans haven't boosted the public's view of Congress.

In the AP-NCC poll, just 8 percent say they are confident in the people running Congress, 10 percent in the federal government. Majorities of Republicans and Democrats lack confidence in congressional leaders, with politically crucial independents showing the sharpest increase in distrust of Congress over the past year. That's up from 49 percent in 2010 to 62 percent now.

Even so, most Americans feel safe and more have confidence in the government to keep it that way, the poll shows.

The uptick in approval for the government's handling of national security crosses party lines, but Republicans have shifted sharply. Last year, just 32 percent of Republicans gave the government positive reviews on keeping the nation safe; now, 61 percent of Republicans agree on that. And on making sure Americans feel "safe, secure and free," the same group has jumped from 33 percent who said the government is doing a "good job" to 54 percent now, the poll shows.

The urge to contribute through volunteerism remains strong, according to the poll. Nearly six in 10 Americans say the country needs more sense of community and people helping one another. Most — 69 percent — have volunteered in the past year. Eight in 10 said they have made a charitable donation of \$25 or more during that time.

The AP-National Constitution Center poll was conducted Aug. 18-22 by GfK Roper Public Affairs and Corporate Communications. It involved landline and cellular telephone interviews with 1,000 adults nationwide and has a sampling error of plus or minus 4.1 percentage points ([ABC News, 2011](#)).

**Title:** FEMA Communication Takeover Test Scheduled For November 9

**Date:** October 18, 2011

**Source:** [Infowars](#)

**Abstract:** FEMA, the FCC, and Homeland Security plan to commandeer the airwaves next month. The Emergency Alert System (EAS) will be [tested at 1 PM EST on November 9](#). EAS alerts are transmitted over radio and television broadcast stations, cable television and other media services.

Local and state EAS components are tested weekly and monthly, but this will be the first national test of the system. It is significant that FEMA will conduct the mandatory test.

FEMA was created by executive fiat. [EO 12148](#) was signed into law by a stroke of Jimmy Carter's pen on July 20, 1979. FEMA is described as a federal agency designed to coordinate government response to natural disasters that overwhelm the resources of local and state authorities.

In fact, the federal agency was established as part of a martial law mechanism.

Under Reagan, FEMA was headed by [Louis O. Giuffrida](#), the former national guard general who contributed to the Garden Plot and Cable Splicer, two sub programs under [REX 84](#), a plan to establish concentration camps in America. Operation Cable Splicer is [described](#) as "the program for an orderly takeover of the state and local governments by the federal government." For more information on these martial law programs, see Mary Louise, [Stalag 17, American Style Plans For Civilian Internment \(& Worst\)](#).

Giuffrida, a counterinsurgency enthusiast, focused the agency's resources on the "civil disturbance" aspect of its charter and worked to undermine Posse Comitatus. In 1982, Reagan formally militarized FEMA with National Security Decision Directive ([NSDD 26](#)). The result was a series of national training exercises led by the military. Under REX 82, civilian police from around the country received what FEMA euphemistically referred to as "military police methods" for quelling domestic political unrest.

Under Reagan, with Giuffrida at the helm, FEMA mutated "civil defense planning into a military/police version of civil society," a plan on a collision course with Posse Comitatus.

"Hidden behind FEMA's benevolent face as the body whose chief responsibility is disaster relief, another FEMA exists," [Ritt Goldstein](#) wrote in 2002, referring to Bush's effort to turn the agency into a counter-terrorism and "enemy combatant" detention outfit under the newly established Department of Homeland Security.

"At present, the final contents and disposition of the Reagan security initiatives, part of a national crisis plan, remains beyond public knowledge," Goldstein writes. "But given the 'War On Terror's' scope, even if a formal crisis is not declared, speculation exists that a de facto drift into an effective deployment of FEMA's crisis powers could occur."

Next month's EAS test represents the public notification aspect of that national crisis plan. It is significant that EAS will be tested nationally. Natural disasters are usually regional affairs and do not require a nationwide response. The new national EAS system is designed for a more significant event that conforms to the implementation of martial law as envisioned under Garden Plot and Cable Splicer, a plan that was nearly revealed when [Representative Jack Brooks](#) of Texas grilled Oliver North during the Iran-Contra hearings in 1987 ([Infowars, 2011](#)).

**Title:** President Obama Signs Executive Order Allowing For Control Over All US Resources

**Date:** March 17, 2012

**Source:** [Examiner](#)

**Abstract:** On March 16th, President Obama signed a new Executive Order which expands upon a prior order issued in 1950 for Disaster Preparedness, and gives the office of the President complete control over all the resources in the United States in times of war or emergency.

The National Defense Resources Preparedness order gives the Executive Branch the power to control and allocate energy, production, transportation, food, and even water resources by decree under the auspices of national defense and national security. The order is not limited to wartime implementation, as one of the order's functions includes the command and control of resources in peacetime determinations.

Section 101. Purpose. This order delegates authorities and addresses national defense resource policies and programs under the Defense Production Act of 1950, as amended (the "Act").

(b) assess on an ongoing basis the capability of the domestic industrial and technological base to satisfy requirements in peacetime and times of national emergency, specifically evaluating the availability of the most critical resource and production sources, including subcontractors and suppliers, materials, skilled labor, and professional and technical personnel; - [White House](#)

Additionally, each cabinet under the Executive Branch has been given specific powers when the order is executed, and include the absolute control over food, water, and other resource distributions.

Sec. 201. Priorities and Allocations Authorities. (a) The authority of the President conferred by section 101 of the Act, 50 U.S.C. App. 2071, to require acceptance and priority performance of contracts or orders (other than contracts of employment) to promote the national defense over performance of any other contracts or orders, and to allocate materials, services, and facilities as deemed necessary or appropriate to promote the national defense, is delegated to the following agency heads:

(1) the Secretary of Agriculture with respect to food resources, food resource facilities, livestock resources, veterinary resources, plant health resources, and the domestic distribution of farm equipment and commercial fertilizer;

(2) the Secretary of Energy with respect to all forms of energy;

(3) the Secretary of Health and Human Services with respect to health resources;

(4) the Secretary of Transportation with respect to all forms of civil transportation;

(5) the Secretary of Defense with respect to water resources; and

(6) the Secretary of Commerce with respect to all other materials, services, and facilities, including construction materials.

(e) "Food resources" means all commodities and products, (simple, mixed, or compound), or complements to such commodities or products, that are capable of being ingested by either human beings or animals, irrespective of other uses to which such commodities or products may be put, at all stages of processing from the raw commodity to the products thereof in vendible form for human or animal consumption. "Food resources" also means potable water packaged in commercially marketable containers, all starches, sugars, vegetable and animal or marine fats and oils, seed, cotton, hemp, and flax fiber, but does not mean any such material after it loses its identity as an agricultural commodity or agricultural product.

Executive Orders created for national defense and national preparedness are not new in American history, but in each instance they brought about a Constitutional crisis that nearly led standing Presidents to hold dictatorial power over the citizenry. [During the Civil War](#), President Lincoln halted freedom of speech and freedom of the press, while at the same time revoking Habeas Corpus and the right to a fair trial under the sixth amendment. [During World War I](#), when Congress refused to grant Woodrow Wilson extended power over resources to help the war effort, he invoked an Executive Order which allowed him complete control over businesses, industry, transportation, food, and other economic policies.

In both cases, it was only after the death of each President that full Constitutional powers were restored to the citizens of the United States.

The economy of the United States is based on the free flow of resources, energy, and the rights of consumers to buy and sell as they see fit. Any interference in this economic process quickly leads to shortages, rising prices, and civil unrest. The purpose of President Obama signing this new Executive Order is yet unclear, however, it may coincide with [information](#) coming out of Israel yesterday that plans for a tactical or strategic strike on Iran are accelerating. Oil prices in Europe rose over \$3 a barrel for Brent crude after the Israeli actions, and US oil prices rose \$2 for WTI.

The Obama administration appears to be preparing for a long drawn out war in the Middle East, or at the very least, an expected crisis that will require the need to override Constitutional authority and claim dominion over all resources in the United States under the guise of national defense. With the rise in [Disaster Preparedness](#) growing for both individuals and states leading up to yesterday's Executive Order, the mood of the nation points strongly towards some event or disaster that will require massive preparations on a national as well as local scale.

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**Title:** Martial Law By Executive Order

**Date:** March 21, 2012

**Source:** [Huffington Post](#)

**Abstract:** President Obama's National Defense Resources Preparedness Executive Order of March 16 does to the country as a whole what the 2012 National Defense Authorization Act did to the Constitution in particular -- completely eviscerates any due process or judicial oversight for any action by the Government deemed in the interest of "national security." Like the NDAA, the new Executive Order puts the government completely above the law, which, in a democracy, is never supposed to happen. The United States is essentially now under martial law without the exigencies of a national emergency.

Even as the 2012 NDAA was rooted in the Patriot Act and the various executive orders and Congressional bills that ensued to broaden executive power in the "war on terror," so the new Executive Order is rooted in the Defense Production Act of 1950 which gave the Government powers to mobilize national resources in the event of national emergencies, except now virtually every aspect of American life falls under ultimate unchallengeable government control, to be exercised by the president and his secretaries at their discretion.

The 2012 NDAA [deemed](#) the United States a "battlefield," as Senator Lindsey Graham put it, and gave the president and his agents the right to seize and arrest any U.S. citizen, detain them indefinitely without charge or trial, and do so only on suspicion, without any judicial oversight or due process. The new [Executive Order](#) states that the president and his secretaries have the authority to commandeer all U.S. domestic resources, including food and water, as well as seize all energy and transportation infrastructure inside the borders of the United States. The Government can also forcibly draft U.S. citizens into the military and force U.S. citizens to fulfill "labor requirements" for the purposes of "national defense." There is not even any Congressional oversight allowed, only briefings.

In the NDAA, only the president had the authority to abrogate legitimate freedoms of U.S. citizens. What is extraordinary in the new Executive Order is that this supreme power is designated through the president to the secretaries that run the Government itself:

1. The Secretary of Defense has power over all water resources;
2. The Secretary of Commerce has power over all material services and facilities, including construction materials;

3. The Secretary of Transportation has power over all forms of civilian transportation;
4. The Secretary of Agriculture has power over food resources and facilities, livestock plant health resources, and the domestic distribution of farm equipment;
5. The Secretary of Health and Human Services has power over all health resources;
6. The Secretary of Energy has power over all forms of energy.

The Executive Order even stipulates that in the event of conflict between the secretaries in using these powers, the president will determine the resolution through his national security team.

The 2012 NDAA gave the Government the right to abrogate any due process against a U.S. citizen. The new Executive Order gives the government, through the Secretary of Labor, the right to proactively mobilize U.S. citizens for "labor" as the government deems necessary and to coordinate with the Secretary of Defense to maintain data to coordinate the nation's work needs in relation to national defense.

What is extraordinary about the Executive Order is that, like the NDAA, this can all be done in peacetime without any national emergency to justify it. The language of the Order does not state that all these extraordinary measures will be done in the event of "national security" or a "national emergency." They can simply be done for "purposes of national defense," clearly a broader remit that allows the government to do what it wants, when it wants, how it wants, to whomever it wants, all without any judicial restraint or due process. As Orwell famously said in 1984, "War is peace. Peace is war." This is now the reality on the ground in America.

Finally, the 2012 NDAA was hurried through the House and Senate almost like a covert op with minimal public attention or debate. It was then signed by the president at 9:00 PM on New Year's Eve while virtually nobody was paying attention to much other than the approaching new year. This new Executive Order was written and signed in complete secret and then quietly released by the White House on its website without comment. All this was done under a president who studied constitutional law at Harvard.

It is hard to know what to say in the face of such egregious disregard for the integrity of what America has stood and fought for since its founding. It is hard in part because none of us thought such encroachments would ever happen here, certainly not under the watch of a "progressive" like Obama.

At one level, the prospect for war with Iran is probably an immediate justification. But the comprehensiveness of the Executive Order, like that of the 2012 NDAA, speaks to something much deeper, more sinister. I would suggest that this Order, like the NDAA, has been in the works for some time and is simply the next step in the logic of the "global war on terror." Our political elites have come to consider democracy an impediment to effective governance and they are slowly and painstakingly creating all the democratic legalities necessary to abridge our democratic rights with impunity, all to ensure our "security." Of such measures do republics fall and by such measures tyrants emerge.

The only thing that really remains is the occasion to test the new rules of the game. Perhaps that will be war with Iran, perhaps some contrived emergency, or perhaps, as long as the public and media remain asleep, no occasion will be necessary at all. It will just slowly happen of its own accord and we, like the frog in the pot of slowly boiling water, will just sit there and be consumed by our own turpitude ([Huffington Post, 2012](#)).

# Bio Terror Bible

## EXPOSING THE COMING BIO-TERROR PANDEMIC

**BIOTERRORBIBLE.COM:** Mass coffins have been appearing at strategic locations throughout the United States over the last few years. While U.S. government officials state that these coffins are only for catastrophic weather emergencies, there is a growing suspicion amongst Americans that these coffins will be used in a government generated bio-terror pandemic. Whatever event is about to transpire, the U.S. government will be able to bury hundreds of thousands if not millions of people in an extremely short amount of time.

**Title:** Is FEMA & DHS Preparing For Mass Graves And Martial Law Near Chicago?

**Date:** February 13, 2009

**Source:** [Infowars](#)

**Abstract:** An Indiana county municipal official in the vicinity of Chicago reveals the contents of his meetings with FEMA and the Department of Homeland Security. The initial requests seem reasonable enough when FEMA asks the county officials to prepare a Hazard Mitigation Plan to deal with flooding, fires, high winds and tornadoes.

But as the required meetings and calls with FEMA and DHS continue over a two year period their request become more unusual, raising suspicions of county officials

*"We want to know every important thing in this county. We want to know where police departments are. Where weapons are stored. Hazardous material. Where can we land a helicopter. Where are the airports. How big a plane can you land at the airport. Where are all the bridges. Where are all the power stations. Where are all the generating stations. Where are all the substations. They literally wanted to know where everything was. I'm sitting there thinking man if there was ever martial law. This kind of information is exactly the kind of stuff they are going to want. We're just laying it all out for them right there."*

**During the legally mandated meetings held with FEMA and DHS different disaster scenarios were revealed to county officials:**

1. In late December 2008 municipal officials were invited to Indianapolis for a briefing on the state of Indiana. There were told if industry were to collapse for example GM going bankrupt resulting in mass unemployment a depression would soon follow and municipalities could expect to lose 40% of their funds.
2. Every county in the nation would be required to prepare a Hazard Mitigation Plan.
3. The county should prepare a plan to vaccinate the entire population within 48 hours and practice the plan several times.
4. FEMA inquired to where mass graves could be placed in the county and would they accept bodies from elsewhere.
5. The sheriff's department via the state sheriff association was told that no .223 ammunition rounds would be available as the military would be purchasing all stocks.
6. The county was asked to make plans for "hardening" of police and fire stations, putting in hardened bunker type buildings around town.
7. The county was asked to make plans for the possibility of up to 400,000 refugees from Chicago ([Infowars, 2009](#)).



**Title:** Military Industrial Complex Prepares Mass Graves For U.S. Citizens

**Date:** March 25, 2009

**Source:** [Infowars](#)

**Abstract:** A usually quiet U.S. Department of Veterans Affairs Cemetery, has been unusually active lately. The National Memorial Cemetery of Arizona is a beautiful 225 acre facility located in Phoenix.

For the past 30-45 days in the early hours of the morning until sunset, a massive construction operation has been underway. Major amounts of earth have been excavated out about 9-10 feet deep and 600-1000 feet wide. There is multiple locations on the property like this. From the satellite view there appears to be more sections that have been covered with the concrete lids and backfilled to look as if nothing is there. ABC rock is put in place under the burial vaults for good drainage and solid bedding. This will help not contaminate ground water sources from decomposition of human bodies. The cleanliness of the heavy equipment operation and the large perfect cuts of earth is impressive.

These Massive concrete boxes are transported from a nearby storage yard on various privately owned flatbed semi-trucks, then unloaded and put into place a half mile away at the actual mass grave site. They are installed tight together side by side with no space in between. An interview was conducted between my friend and a truck driver involved in this operation. After beating around the bush for ten minutes, the driver admitted " I got paid a whole lot of money to speak good English." Take it for what it's worth but that sounds suspect. The truck driver also admitted "Each burial vault holds four caskets."

I took note that if caskets were not used you could fit 40 bodies or more in each one. So if these were to hold four troops each and the truck driver did know what he was talking about; this would mean that there are plans in advance for over 4000 U.S. soldiers deaths. If these are not to contain caskets and only bodies are inserted there could be room for over 40,000 civilians bodies ([Infowars, 2009](#)).

# Bio Terror Bible

## EXPOSING THE COMING BIO-TERROR PANDEMIC

**BIO TERROR BIBLE.COM:** Recent legislation and drills indicate that the United States is preparing for the mass exodus and repatriation of millions of people currently living in America. There is also legislation which strips Americans of their citizenship and passport if they are a suspected terrorist or have failed to pay their taxes to the IRS. In the wake of a bio-terror attack and subsequent pandemic, mobility of citizens will become extremely limited.

**Title:** Senate Bill Authorizes Feds To Revoke Citizenship Of Americans

**Date:** January 16, 2012

**Source:** [USIF](#)

**Abstract:** A bill has been introduced in the United States Senate which will authorize the federal government to revoke the citizenship, creating practical expatriates, of American citizens.

Introduced by Connecticut Independent Joe Lieberman and Massachusetts Republican Scott Brown, S 1698, the "Enemy Expatriation Act," is a simple, 2 page document which offers apparently innocent amendments and additions to existing federal legislation. (1)

That legislation, known as Title 8, "...outlines the role of aliens and nationality in the U.S. Code." And it is just one small piece of this massive and complex law which the Enemy Expatriation Act seeks to modify, that being Section 349, the means by which "a person who is a national of the United States whether by birth or naturalization, shall lose his nationality..." that is, his citizenship. (2)

Though there is currently little contained in Section 349 which would alarm any American citizen, one phrase added to the legislation by the "Enemy Expatriation Act" would change everything. For it states that anyone voluntarily "engaging in, or purposefully and materially supporting, hostilities against the United States" will lose his "nationality." And nationality means citizenship! (1)

To be sure, most of us would be in favor of revoking American citizenship if it has been improperly, perhaps surreptitiously attained by Muslim terrorists who have entered the United States only to commit acts of violence and murder ([USIF, 2012](#)).

**Title:** Drill Prepares San Bernardino County, Federal And State Agencies For Repatriation Efforts

**Date:** January 31, 2012

**Source:** [Contra Costa Times](#)

**Abstract:** Miles was among 20 agencies - at the federal, state, and local level - that participated in a full-scale exercise testing their ability to screen and process U.S. citizens returning from a foreign country following a natural disaster or crisis.

Tuesday's drill, held at LA/Ontario International Airport's Terminal 1, brought together 150 officials from participating agencies and about 80 volunteers who played the role of citizens in need of assistance.

Each volunteer, or actors as they were dubbed, were given their own character with different ailments and medical situations.

"You never know what you're going to get," Miles said about the drill. "This drill identifies any gaps we might have, and you need to be prepared for everything."

In this scenario, Miles was helping Americans who were, for various reasons, in Japan when an 8.5 earthquake struck near Tokyo.

As her first task Miles was told to pick up one minor and supervise the repatriation process.

"Originally, we were told one child but when we got there, there were four children," Miles said. "Thankfully, we had sent another social worker."

The actors went from table to table, describing their situation to various agencies such as the American Red Cross and getting the necessary assistance, like lodging, transportation and medical attention.

Tuesday's repatriation drill was the culmination of four years of planning, said Oscar Ramirez, spokesman for the state Department of Social Services.

In 2008, the U.S. Department of Health and Human Services sent a letter to then Gov. Arnold Schwarzenegger, asking that the state update its Emergency Repatriation Plan.

Since then, under the direction of the state's Emergency Management Agency and social services, an updated plan was developed. The agencies work with the Office of Refugee Resettlement, which oversees the national emergency repatriation plan.

ONT is the only airport in the state to be designated in the plan as a port of entry. The airport was selected because of its proximity to Los Angeles and because its old terminal could be used without interrupting daily operations at the facility, Ramirez said.

San Bernardino County agencies weren't the only ones in attendance at Tuesday's exercise. Representatives from the FBI, Centers for Disease Control and Prevention, and Transportation Security Administration all stopped by to observe the drill, he said.

Agencies will meet Wednesday to review the drill and identify any improvements that can be made.

On an annual basis, the San Bernardino County Fire Department's Office of Emergency Services will coordinate a review with the participating agencies to make any necessary updates, he said.

"This will not be a perfect exercise but that's the whole point, we learn," Ramirez said ([Contra Costa Times, 2012](#)).

**Title:** US Boosts Passport Fees, Sets Value Of Citizenship

**Date:** February 2, 2012

**Source:** [Fox News](#)

**Abstract:** U.S. citizenship is priceless to some, worthless to others. But now the [State Department](#) has a dollar figure: U.S. citizenship is worth \$450.

At least that's what it will cost you to renounce it.

Under new consular fees published Thursday in the Federal Register, the cost of processing a formal renunciation of U.S. citizenship skyrocketed from \$0 to \$450. The announcement locks in [fee hikes](#) that had been proposed in 2010 and instituted on an interim basis.

The State Department doesn't say how or why it calculated the cost. Citizenship is free for most Americans who are accorded the privilege at birth. The department says only that it "has decided that the renunciant should pay this fee at the visit during which he or she swears the oath of renunciation."

It's also getting more expensive if you want to keep your U.S. citizenship and need a passport to prove it. The application fee for a passport is jumping by 27 percent, from \$55 to \$70 with a 100 percent increase, from \$20 to \$40, in the passport security surcharge.

In addition to the increase in the application fee, the department will now charge \$82 -- up from nothing -- to add new pages to a U.S. passport. It says the fee is needed to offset the cost of the pages, the time spent affixing the pages into the [passport book](#), endorsing the passport and performing a quality-control check.

And, registering the overseas birth of an American child is going up as well. It will now cost \$100 to apply for a report of a birth abroad, up from \$65.

The cost of getting a document notarized at a U.S. embassy abroad is also going up. The new price is \$50 for a single page, up from \$30, according to the new fee schedule ([Fox News, 2012](#)).

**Title:** DHS To Congress: Biometric Immigrant Exit Tracking System Coming Within 'Weeks'

**Date:** March 6, 2012

**Source:** [Fox News](#)

**Abstract:** The Department of [Homeland Security](#) is finalizing its plan for a biometric data system to track when immigrants leave the [United States](#) and will present it to Congress within "weeks," a top department official told a House Homeland Security subcommittee Tuesday.

An exit system to track who is leaving the country and when has been sought since before the Sept. 11 terrorist attacks. DHS officials, including Secretary [Janet Napolitano](#), have agreed with the need for such a program but have previously said it would be too costly.

John Cohen, the department's deputy counter terrorism coordinator, did not discuss the cost in his testimony about the problem of immigrants who overstay visas. He said the department's report to Congress will explain how DHS plans to better determine who has overstayed their visa.

The criminal case against Amine El Khalifi, 29, of Alexandria, Va., accused in an alleged bomb plot against the U.S. Capitol, has renewed the debate about how the U.S. government -- a decade after the terror attacks of 2001 -- routinely fails to track millions of foreign visitors who remain in the country longer than they are allowed. El Khalifi was arrested in a parking lot, wearing what he thought was an explosive-laden suicide vest. He had been living illegally in the United States for 12 years.

The Obama administration doesn't consider deporting people whose only offense is overstaying a visa a priority. It has focused immigration enforcement efforts on people who have committed serious crimes or are considered a threat to public or national security.

Cohen said improvements in how data from immigrants is collected and stored has made it easier for law enforcement to identify visa overstays and determine if they pose a threat to national security or public safety.

Rep. Candice Miller, R-Mich., who led Tuesday's hearing, said El Khalifi "follows a long line of terrorists, including several of the 9/11 hijackers, who overstayed their visa and went on to conduct terror attacks." His tourist visa expired the same year he arrived from his native [Morocco](#) as a teenager in 1999.

She said 36 people who overstayed visas have been convicted of terrorism related charges since 2001.

"We have to recognize that we do have this problem," Miller said. "The truth is, in the 40 percentile of all the illegal (immigrants) are in this country on expired visas. They came in right through the front door."

El Khalifi, who is charged with attempting to use a weapon of mass destruction, never came to the attention of federal law enforcement agencies even after a series of minor run-ins with police in northern Virginia from 2002 to 2006, including disobeying a traffic sign and speeding. Programs that could have identified him if he had been jailed by local authorities, including the Security Communities program that shares fingerprints from local jails with the [FBI](#), were not in place at the time.

The Moroccan national didn't face a felony charge -- possession of marijuana with intent to distribute - until last September, about nine months after he became the target of the FBI probe related to the alleged plot to destroy the Capitol. He has waived his right to a preliminary hearing.

El Khalifi, unemployed when he was arrested last month, is one of an estimated millions of illegal immigrants who came to the United States with a government-issued visa and never left. He never applied to become a U.S. citizen.

Immigration and Customs Enforcement, the agency responsible for deporting illegal immigrants, has routinely combed through visa records to try to identify people who have overstayed their welcome and deport those considered threats to the community or national security.

Cohen said Tuesday that more than 37,000 people who overstayed visas were deported from 2009 to 2011

Last year, ICE reviewed a backlog of about 1.6 million suspected overstay cases involving people who had come to the U.S. since 2004. The Homeland Security Department said the review concluded that about half of those people have either left the country or applied to change their immigration status. Of the remaining half, the cases of about 2,700 people were given further review. ICE officials have not said how many of those people were deemed a national security threat or were otherwise considered priority for deportation.

For the more than 797,000 others whose cases were not reviewed further, DHS officials said their overstay status was noted in electronic files in case any of them commit crimes in the future or otherwise become a priority to be deported.

Visa overstays have long been a concern of lawmakers and law enforcement. Some estimates suggest that as many as half of the country's estimated 11 million illegal immigrants have overstayed visas.

But finding illegal immigrants who, like El Khalifi, came to the United States before biometric data was collected and records were computerized around 2004 -- and who overstayed visas but haven't committed a crime -- can be difficult, if not impossible.

"It's very difficult to find those individuals, and those individuals aren't priorities until they commit a crime," said Julie Myers Wood, who was head of ICE from 2006 to 2008.

James Ziglar, who was head of the old Immigration and Naturalization Service from 2001 until it was folded into DHS in 2002, said immigration authorities made efforts to locate immigrants thought to be a threat to national security after the Sept. 11 terrorist attacks. But simply having overstayed a visa wouldn't have made illegal immigrants like El Khalifi a priority.

"We were certainly focused on trying to find bad people and connecting the dots with the Department of State and their visa records," Ziglar said. "I doubt very seriously he (El Khalifi) would have come up on the radar. He might have if you kept drilling down further and further just because of where he was from. But he would not have been, I think, an earlier target, just because there were more suspicious types" ([Fox News, 2012](#)).

**Title:** Owe The IRS? Bill Would Suspend Passport Rights For Delinquent Taxpayers

**Date:** April 4, 2012

**Source:** [CBS News](#)

**Abstract:** A bill authored by a Southland lawmaker that could potentially allow the federal government to prevent any Americans who owe back taxes from traveling outside the U.S. is one step closer to becoming law.

[Senate Bill 1813](#) was introduced back in November by Senator Barbara Boxer (D-Los Angeles) to "reauthorize Federal-aid highway and highway safety construction programs, and for other purposes"

After clearing the Senate on a 74 – 22 vote on March 14, SB 1813 is now headed for a vote in the House of Representatives, where it's expected to encounter stiffer opposition among the GOP majority.

In addition to authorizing appropriations for federal transportation and infrastructure programs, the "Moving Ahead for Progress in the 21st Century Act" or "MAP-21" includes a provision that would allow for the "revocation or denial" of a passport for anyone with "certain unpaid taxes" or "tax delinquencies".

Section 40304 of the legislation states that any individual who owes more than \$50,000 to the Internal Revenue Service may be subject to "action with respect to denial, revocation, or limitation of a passport".

The bill does allow for exceptions in the event of emergency or humanitarian situations or limited return travel to the U.S., or in cases when any tax debt is currently being repaid in a "timely manner" or when collection efforts have been suspended.

However, there does not appear to be any specific language requiring a taxpayer to be charged with tax evasion or any other crime in order to have their passport revoked or limited — only that a notice of lien or levy has been filed by the IRS.

Boxer vowed last week to push House Republicans to pass the bipartisan transportation bill that would keep the Highway Trust Fund from going bankrupt.

"Thousands of businesses are at stake, and eventually we are talking about nearly three million jobs at stake," she said in a statement. "There are many people on both sides of the aisle in the Senate who want to get our bill, MAP-21, passed into law, and I am going to do everything I can to keep the pressure on the Republican House to do just that" ([CBS News, 2012](#)).



# Bio Terror Bible

## EXPOSING THE COMING BIO-TERROR PANDEMIC

**BIOTERRORBIBLE.COM:** Based on the 2001 bio-terror war-game entitled "[Dark Winter](#)", and recent comments by U.S. Secretary of State Hillary Clinton, the United States will consider using a nuclear weapon upon any nation or people unlucky enough to be scapegoated in the wake of a bio-terror attack.

**Title:** Final Script: Dark Winter Exercise: Bioterrorism Exercise Andrews Air Force Base June 22-23, 2001

**Date:** June 22-23, 2001

**Source:** [UPMC](#)

### Public Opinion Divided on Nuclear Response to Bioattack

1. An overnight CNN/gallup poll states that slightly less than half (48%, poll's margin for error +/- 5%) of Americans believe that President should consider using nuclear weapons against any nation proven to be responsible for attacking the US with smallpox.

### The third and final NSC meeting opens with a review of news video clips:

1. The number of smallpox cases has reached 16,000, with 1,000 people now dead. The epidemic has spread to 25 states and 10 other countries. Although investigation suggests all cases are related to the initial attack in three states, the evidence does not rule out additional or ongoing attacks.
2. The U.S. is suffering severe economic damage. In Atlanta and Philadelphia, most businesses are closed and massive traffic jams are occurring across the state as people try to flee the disease.
3. A New York Times poll indicates that most Americans think that the state and federal governments have lost control of the epidemic. A CNN/Gallup poll says nearly half of Americans think the President should use nuclear weapons against any nation proven responsible for the smallpox attack.
4. Violence is spreading across the nation as individuals try to keep others suspected of having smallpox at a distance. In New York, two police officers and three family members were killed when the police tried to escort two family members with smallpox to an isolation area.

**Title:** Dark Winter: A Simulated Terrorist Attack On Three American Cities Using Weaponized Smallpox

**Date:** June 22-23, 2001

**Source:** [Backwoods Home](#)

**Abstract:** June 22-23, 2001, nearly three months before the attack that toppled New York's World Trade towers, the United States conducted a major simulation of a terrorist smallpox attack against three American cities. It was named Dark Winter, and it lived up to its name. Within seven weeks, one million Americans were dead and the disease had spread to 25 states and 13 foreign countries. **In the face of the out of control epidemic, panic had spread across America, interrupting vital services such as food deliveries to supermarkets, and our Government considered the possibility of a nuclear response, although against whom it was not clear.**

The Dark Winter exercise ends with the NSC discussing how to respond. If the American people demand they use nuclear weapons, against who? Should they withdraw U.S. troops from the Persian Gulf? And finally, with no vaccine remaining and the epidemic out of control, how do they control the current spread of smallpox and any new attacks with disease?

**Title:** Secretary Of State Clinton Says U.S. Will Consider Nuclear Response To Bioterror

**Date:** April 12, 2010

**Source:** [Bio Prep Watch](#)

**Abstract:** U.S. Secretary of State Hillary Clinton has struck back at critics of the nation's new nuclear weapons stance, telling CBS' "Face the Nation" that "all bets are off" in the event of a biological attack.

Clinton was joined by Defense Secretary Robert Gates, who said that both Iran and North Korea would be exceptions to the new policy of nuclear response as both nations have defied UN resolutions on their atomic programs.

"If we can prove that a biological attack originated in a country that attacked us, then all bets are off," Clinton said in an interview on "Face the Nation."

Gates, when asked why Iran and North Korea were exceptions to the newly unveiled nuclear policy, added, "They're not in compliance with the nuclear non-proliferation treaty. So for them, all bets are off. All the options are on table."

A new arms control deal with Russia, Clinton and Gates said, along with the revised nuclear policy, bolsters the diplomatic leverage held by President Obama in his quest to isolate Iran and North Korea over their nuclear programs.

The duo also rejected Republican criticism that the new nuclear policy sent signals of weakness to the world.

"We have still a very powerful nuclear arsenal," Gates told NBC's "Meet the Press" ([Bio Prep Watch, 2010](#)).

# Bio Terror Bible

## EXPOSING THE COMING BIO-TERROR PANDEMIC

**BIO****TERROR****BIBLE.COM**: "Operation ENDGAME" essentially allows the U.S. government to round-up, arrest, detain and imprison any person they wish, regardless of citizenship. This operation will be carried out in the wake of a nuclear or biological attack and will likely result in the deaths of millions of people.

**Title:** Operation Endgame

**Date:** 2003-2012

**Source:** [Wikipedia](#)

**Abstract:** "Operation Endgame" is a 2003-2012 plan under implementation by the [Office of Detention and Removal Operations](#) of the [U.S. Department of Homeland Security Bureau of Immigration and Customs Enforcement](#) to detain and deport all [removable aliens](#) and "suspected terrorists" currently living in the United States by 2012.

The objectives of the plan are described in a memorandum from the director [Anthony S. Tangelmann](#) to the Deputy Assistant Director of Field Operations dated June 27, 2003:

The [DRO](#) provides the endgame to immigration enforcement and that is the removal of all removable aliens. This is also the essence of our mission statement and the 'golden measure' to our successes.

A document issued by the Office of Detention and Removal Operations titled "Strategic Plan, 2003-2012 Detention and Removal Strategy for a Secure Homeland" describes Operation Engame as follows:

Endgame is the [Immigration and Customs Enforcement](#) (ICE), Office of Detention and Removal (DRO) multi-year strategic enforcement plan. It stresses the effective and efficient execution of the critical service DRO provides its partners and stakeholders to enforce the nation's immigration and naturalization laws. The DRO strategic plan sets in motion a cohesive enforcement program with a ten-year time horizon that will build the capacity to "remove all removable aliens," eliminate the backlog of unexecuted final order removal cases, and realize its vision ([Wikipedia, 2011](#)).

# Bio Terror Bible

## EXPOSING THE COMING BIO-TERROR PANDEMIC

**BIOTERRORBIBLE.COM:** In the wake of a bio-terror attack and subsequent pandemic, people will likely be quarantined under [martial law](#) and sent to [FEMA concentration camps](#) via [human cattle cars](#) where they will likely be exterminated in mass. Quarantine will be the excuse given as the government orders the removal of citizens from their homes and properties.

**Title:** Where Would Bioterrorism Victims Be Quarantined?

**Date:** September 22, 2002

**Source:** [Seattle Times](#)

**Abstract:** The state's plan to deal with bioterrorism details the powers of local health officers to quarantine victims of an attack, but fails to answer a critical question: Where would all those people go?

Nowhere in the proposed new rules -- issued by the state Board of Health on the first anniversary of Sept. 11 -- or in existing law does it say how a local health officer would go about confiscating a building, such as a hospital, hotel or other business to house those with a dangerously contagious disease.

And after nearly a year of discussions, no local hospital has agreed to be designated as the place where large numbers of infectious patients could be isolated, despite the guideline from the federal Centers for Disease Control and Prevention (CDC) that local planners designate such a facility before it is needed.

Dr. Alonzo Plough, head of Public Health -- Seattle & King County, says hospital CEOs don't doubt that local health officers have the power to take over a facility.

During the year, hospitals and public-health officials have worked with "great cooperation and collegiality," Plough said, toward a collaborative regional plan for the care of infectious patients.

But hospitals here and around the country continue to voice concerns, many of them economic, about being designated "the" smallpox hospital.

"The hospitals are very reluctant to stand up and say, 'Pick me!' " said Dr. Nancy Auer, vice president of medical affairs for Swedish Medical Center, which operates three hospital campuses in Seattle.

Signing up to be the smallpox isolation and care facility, she said, amounts to signing up to turn away all surgery and immune-suppressed patients, which would include those receiving chemotherapy or organ transplants. The financial impact? "It's enormous," Auer said.

Compensation for lost revenue isn't addressed, she said. "I don't even think there's a (billing) code for smallpox. You could pick 'rash.' Well, there's a big winner."

The Board of Health's plan attempts to pull together outdated laws, codes and rules and meld them with modern due-process protections, such as rights to hearings and appeals.

Dr. Tom Locke, state Board of Health member, acknowledges that clear procedures for "commandeering and expropriating facilities" also are necessary in a comprehensive bioterror

response plan. "Where you isolate them, where you quarantine them, is an issue -- it's an inescapable issue."

But for now, the board is not addressing the touchy subject head-on. "You have to establish priorities," Locke said. Besides, he said, the process will work better if a voluntary agreement can be reached.

"We don't want to stage an armed assault of a major urban hospital," said Locke, who also is health officer for Jefferson and Clallam counties. "That's a failure of planning."

In the back of everyone's mind, though: What if "something" happens before there is an agreement? Plough will say only that there's been good progress. "We need a coherent King County plan, which we're marching toward."

### **Similar Situations**

These are sensitive discussions, and local health officials all around the country have been struggling to work out agreements, said Dr. Joanne Cono of the CDC's Bioterrorism Preparedness and Response Program. "What's going on in Seattle is not at all unusual," Cono said. "People are working hard on this, and it hasn't been an easy situation."

Health officials say no hospital in the nation has agreed publicly to take large numbers of infectious patients.

At first, some observers assumed Harborview Medical Center, the county hospital, would be the prime candidate here. But CDC guidelines say a designated facility should not be used for any other purpose, and Harborview is the only hospital in the region that can handle the highest level of trauma cases.

Recently, an intriguing option has surfaced: Some hospital administrators are looking at the federally owned Veterans Hospital in Seattle and Madigan hospital at Fort Lewis.

"Looking at?" said one hospital official. "With binoculars!"

This state, like others, drew from the "Model State Emergency Health Powers Act" circulated by the CDC in late 2001 as a template for state bioterror rules. Washington, however, did not adopt its "control of property" section.

That section says the public-health authority can immediately take over a health-care facility if deemed "reasonable and necessary" for emergency response.

Locke said he doesn't like such "one-size-fits-all" rules.

"In Seattle, it will probably involve taking whole hospitals or whole hospital communities as a place for the very acutely ill. In Sequim or Port Angeles, you can't commandeer the hospital, because it's the only one. It would have to be a hotel or some other place."

### **State of Emergency**

Although Washington law does not address specifically the right of officials to confiscate facilities, or outline the procedure, Senior Assistant Attorney General Joyce Roper said the governor has broad powers under a declaration of emergency. Local health officers also have broad authority to "control and prevent the spread of any dangerous, contagious or infectious diseases that may occur within his or her jurisdiction."

Because the liberty of individuals is constitutionally protected, the state needed to spell out due-process rights in the rules for isolation and quarantine, Roper said. But taking over a hospital -- and the economic impact -- is a different matter.

"We don't see a fundamental constitutional interest at stake here, as compared to taking away somebody's liberty," Roper said.

However, a Washington state court case on compensation for an emergency confiscation, though not of a hospital, is on appeal. "We'll see if the court says we were right or wrong," Roper said.

So for now, the state Board of Health plans to stay narrowly focused on questions surrounding isolation and quarantine of individuals.

Regarding the proposed rules on quarantine and isolation, the state is generally going in the right direction, said Roger Leishman, an attorney who reviewed the plan for the American Civil Liberties Union.

For example, while a health officer has the power to order someone into quarantine for 10 days, the person has the right to a court hearing within 72 hours of requesting one.

But Leishman and others say draft language is sometimes overly broad. For example, the definition of "contaminated," he said, covers any material posing long-term health hazards.

"Nutrasweet or cigarettes fall under that definition," he said.

Leishman doesn't expect the Health Department to start slapping smokers into isolation. "But the problem is when you use language that's that broad, it could be used down the road. ... The real goal here should be to have the words say what they mean, to give clear guidance to health professionals trying to do their job."

In other sections, the draft specifies that a quarantined person who becomes infected with a "communicable or possibly communicable disease" must be promptly placed in isolation.

"Someone quarantined because they've been exposed to biological threats shouldn't be placed in isolation because they have a cold or Hepatitis C," Leishman said.

Another section tries to respect religious beliefs, saying that people have the right to rely on "spiritual means" to treat a communicable disease. But it limits those rights to those who ascribe to a "well-recognized church or religious denomination."

"We should be careful to accommodate even religious beliefs that are out of the mainstream," Leishman said.

Ken Wing, a professor of health law at Seattle University, says rules like this need to be very clear. "If you're holding it up to the light and trying to figure out what they're trying to do, that's not good," he said. "Just having good motives is not enough."

For now, Plough and Locke say they're forging ahead with the hospital administrators, ironing out other parts of a bioterrorism readiness plan.

They hope the process will result in voluntary solutions. And if that doesn't happen?

"If we find we're unable to get that sort of cooperation, what all parties think is a viable plan, we could be looking to new authority to commandeer facilities," Locke said. "It may come to that. We haven't crossed that bridge yet" ([Seattle Times, 2002](#)).



# Bio Terror Bible

## EXPOSING THE COMING BIO-TERROR PANDEMIC

**BIOTERRORBIBLE.COM:** In the wake of a bio-terror attack and subsequent pandemic, people will be told that they need a vaccine to stay alive. Although vaccines are deadly and will likely be the cause of millions of deaths, they will be readily available to the public in a number of different forms. In order to cash in on the fear generated by the mass media, the vaccines must be available before the alternative media can inform the public of the inherent dangers that vaccines pose.

**Title:** St. Louis Will Be Part Of Bioterrorism Study

**Date:** March 28, 2006

**Source:** [St. Louis Post-Dispatch](#)

**Abstract:** The Centers for Disease Control and Prevention is planning to place antibiotics in 5,000 homes in the St. Louis area in a first-of-its kind test to learn how people would handle drugs given them to prepare for a bioterrorism attack.

Starting next month, some 20,000 people will be screened to see which households receive "MedKits" that contain antibiotics for each member of the family.

Households will be randomly selected from three groups: public health responders such as firefighters; workers at a single, as yet unidentified corporation; and recipients of publicly funded health care at clinics. The drugs would be distributed at no cost.

The pilot project is aimed at finding the best way to distribute drugs in case of emergencies and whether people would store the drugs properly and save them for when they are needed.

"This is an important project that not only helps us prepare in this area, but also helps inform national policy," said Bruce Clements, director of the Center for Emergency Response and Terrorism in the Missouri Department of Health and Senior Service.

The state will play a significant role in the federally sponsored project. The study area has not been pinned down but will include St. Louis, St. Louis County, probably St. Charles County and perhaps more of the metropolitan area, Clements said. Illinois communities will not be involved.

Clements said St. Louis was chosen because of its national reputation in bioterrorism preparedness gained from pioneering research at both Washington University and St. Louis University.

The CDC published the broad outlines for its Home MedKit Evaluation Study on Feb. 23 in the Federal Register. No further public announcement has been made.

Existence of the project was first disclosed this week by Government Security News, a New York-based magazine.

CDC spokesman Von Roebuck described the study as "still a work in progress" and promised more details soon.

He added, "The whole idea is that if we ever had an emergency situation - say it involved smallpox - we would be able, whatever the location, to augment what states could do."

The antibiotics in question were chosen for their capacity to prevent infections in the event of exposure to dangerous bacteria. They will be distributed in see-through bags along with instructions on how to use them.

The MedKits will contain either Doxycycline or Ciprofloxacin, better known as Cipro. Doxycycline is often mentioned as a treatment for anthrax, among other bacteria. Cipro also could be used to ward off infections from a variety of intentionally introduced agents, including plague, smallpox, botulism and tularemia.

Family members will go through medical screening before being chosen. The antibiotics in question have side effects and must be used carefully. For instance, Doxycycline is not to be given children because, among other things, it might discolor their teeth.

The antibiotics would later be checked to see whether families are storing them properly and keeping them for bioterrorism emergencies. In addition, the study is designed to "explore attitudes, perceptions and other social and psychological factors" related to the drugs, according to the Federal Register.

Since 9/11 and the anthrax scare that followed, the government has been exploring ways to distribute drugs.

Health and Human Services Secretary Mike Leavitt said in a speech last year that those might include storing caches of pharmaceuticals around the country for use when needed or distributing them via first-responders or perhaps the Postal Service.

He also raised the possibility of putting them in homes, noting that the medications then would be closest to those who need them. But he added that the government needs to better understand whether such a system would work.

Clements observed that the nation has conducted no studies, and therefore has no data, on the possible pitfalls of placing drugs in homes. "All we have is assumptions. We know that people can be irresponsible with a variety of different drugs. But we don't know whether they would be irresponsible with these drugs. This is cutting-edge research, and we're excited in Missouri to be hosting it," he said ([St. Louis Post-Dispatch, 2006](#)).

**Title:** Bioterror Drill To Test Distribution Of Drugs

**Date:** September 7, 2007

**Source:** [Boston.com](#)

**Abstract:** White cardboard boxes small enough to fit in a medicine cabinet will be delivered Sept. 23 to the mailboxes and doorsteps of more than 23,000 Boston households.

The packages will be empty, but the purpose of their delivery will be deadly serious.

The parcels will be tangible evidence of how effectively and swiftly antibiotics can be delivered if terrorists attack with anthrax. Boston will be the third US city to participate in such an exercise, pairing mail carriers, police officers, and public-health specialists.

The fake pill boxes will be delivered to every residence in two ZIP codes: 02132, in West Roxbury, and 02118, which covers most of the South End and a sliver of Roxbury.

The exercise will yield clues about how medication could be dispensed during other health emergencies.

"We feel that it is a way to get an initial push of life-saving medications out to residents on a very fast basis and allaying, hopefully, any sense of panic among the public," said John Jacob, acting director of the city's Public Health Preparedness Office.

Since the Sept. 11, 2001, terrorist attacks and the arrival of rogue letters containing anthrax a month later, big cities such as Boston have been engaged in campaigns to prepare for assaults involving biological agents such as anthrax, plague, and tularemia. Antibiotics work stunningly well against those bacteria, but they have to be administered within 48 hours of exposure.

Typically, doctors would be loathe to even consider blanketing a city with drugs without first assessing patients individually. That would change, though, in the midst of a bioterror attack.

"Normally, we prefer to have a health professional do it, but when we're dealing with the prospect that there could be thousands or tens of thousands of deaths and speed could mitigate that, for me and many of my colleagues, the ethical calculus is pretty clear," said Dr. William Raub, science adviser to Mike Leavitt, US secretary of Health and Human Services.

In the event of a biological attack, cities would establish drug-dispensing centers in schools and community centers. In Boston, the city's Public Health Commission would open 30. But because it would take time to get those centers running, health authorities became intrigued by the possibility of using mail carriers to deliver an initial supply of antibiotics. The drug of choice against anthrax would be Doxycycline.

The federal government is underwriting the cost of the exercises, which cost "well under \$100,000" each, Raub said.

"The idea is you can hit a lot of households fast," said James Apa, communications manager for Public Health - Seattle & King County, where the first drill was held in Washington state in November. "It actually went quicker than expected; it ran ahead of schedule."

In Boston, more than 30 pairs of US Postal Service carriers and Boston police officers will venture onto the streets of the two ZIP codes at 7 a.m., Sept. 23.

Those two areas were selected because of their diversity and differences. In West Roxbury, the residents tend to be older, and mail is often ferried by vehicles. In the other ZIP code, carriers travel on foot, and, Jacob said, "the South End is just a really great, widely varied demographic."

Authorities decided to conduct the experiment on a Sunday, in part because they did not want to disrupt mail delivery on regular service days. They also figured that if terrorists struck, regular mail delivery would stop and people would stay indoors.

Health agencies quickly identified mail carriers as their best option for emergency deliveries, and the Postal Service agreed.

"Getting these medications out to people as fast as possible will be of utmost importance," said Bob Cannon, spokesman for the Postal Service in Boston. "The letter carriers know the streets, they know where the mailboxes are, they know how to walk these routes."

The mail service did have one major concern: the safety of their carriers if they're dropping off medication that could be widely coveted during an emergency. That's why a police officer is being paired with each letter carrier.

The boxes are meant to simulate containers that would carry 20 pills of Doxycycline. Once the drill is completed, recipients of the boxes can recycle them or, Jacob said, save them as a keepsake ([Boston.com](http://Boston.com), 2007).

**Title:** Unknowning Residents To Take Part In Terror Drill  
**Date:** September 7, 2007  
**Source:** [WCVB TV](#)

**Abstract:** About 23,000 Boston residents are weeks away from taking part in a bioterror drill, and many probably don't even know it.

Health officials plan to have mail carriers deliver tiny white cardboard boxes to the doorsteps and mailboxes of thousands of residents in the city's West Roxbury and South End neighborhoods on Sunday, Sept. 23.

"Anytime you are talking about a release of anthrax in the city, you are talking about pretty much a worst case scenario where you need to get medications to people as quickly as possible," said John Jacob of the Boston Public Health Commission.

The empty boxes will be used to simulate how quickly antibiotics could be delivered to residents in the event of a bioterror attack.

"No one knows the streets, knows the deliveries, knows where the houses are and the sequence they are set up in better than letter carriers do," said Bob Cannon of the U.S. Postal Service.

In the event of a real emergency when the antibiotics are highly coveted, the mail carriers will have a police escort.

"There is no emergency whatsoever. This is just a test, and this is a way for us to figure out if this particular delivery option is a good fit for Boston," Jacob said.

If it were a real emergency, each box would hold 20 pills ([WCVB TV, 2007](#)).

**Title:** U.S. Postal Service To Be In Charge Of Drug Delivery In The Event Of A Bioattack  
**Date:** December 21, 2009  
**Source:** [Bio Prep Watch](#)

**Abstract:** Following an executive order released Wednesday, the U.S. Postal Service will be put in charge of delivering drugs and other medical aid to Americans in the event of a large-scale biological weapon attack.

President Obama's order states that the postal service will be in charge of dispensing "medical countermeasures" for biological weapons in the event of an attack because of its ability to deliver to U.S. citizens rapidly.

Federal agencies are required to develop a response plan within 180 days including possible law enforcement escorts for postal service workers under the order, which cites anthrax as a primary threat consideration. The order would see local law enforcement supplemented by local federal law enforcement officers.

The Secretaries of Homeland Security and Health and Human Services, acting in coordination with the Secretary of Defense, must develop a concept for operations and establish requirements for dispensing medical countermeasures to an affected population through a federal rapid response program.

The order, President Obama says, does not supersede the authorities of other agencies and seeks to "mitigate illness and prevent death; sustain critical infrastructure; and complement and supplement state, local, territorial, and tribal government medical countermeasure distribution capacity."

The plan is to be developed by the Secretaries of Homeland Security, Health and Human Services, and Defense, and the Attorney General working in coordination with the U.S. Postal Service in

consultation with state and local public health, emergency management and law enforcement officials ([Bio Prep Watch, 2009](#)).

**Title:** In Bio Attack, US Post Office Could Distribute Aid

**Date:** December 30, 2009

**Source:** [AFP](#)

**Abstract:** The US Post Office could play a key role in distributing medical aid in the event of a biological attack, according to an executive order released by the White House.

The order signed by President Barack Obama directs government agencies, local law enforcement and the US Post Office to work on a model for distribution of medical countermeasures in the wake of a biological attack.

"This policy would seek to: (1) mitigate illness and prevent death; (2) sustain critical infrastructure; and (3) complement and supplement State, local, territorial, and tribal government medical countermeasure distribution capacity," the order said.

"The US Postal Service has the capacity for rapid residential delivery of medical countermeasures for self administration across all communities in the United States," the order added.

The US Health and Human Services Secretary Kathleen Sebelius and Homeland Security Secretary Janet Napolitano were instructed to work with the post office to develop a "dispensing model for US cities to respond to a large-scale biological attack, with anthrax as the primary threat consideration."

The order calls for the model to be drawn up within 180 days, but gives no details as to whether the idea of using the US postal system to assist Americans in the wake of a biological attack is a new one.

The United States has sought to bolster its capacity to respond to biological attacks since 2001, when anthrax-laced letters mailed to people across the United States led to five deaths ([AFP, 2009](#)).

**Title:** Obama Spurs Plans To Deliver Drugs By Mail After Bio Attack

**Date:** December 31, 2009

**Source:** [CIDRAP](#)

**Abstract:** President Barack Obama, giving a push to a proposal that has been in the works for years, yesterday ordered federal agencies to develop a plan for the US Postal Service (USPS) to deliver medical countermeasures to households in the wake of a biological attack.

In an executive order, Obama said the federal government "shall pursue a national U.S. Postal Service medical countermeasures dispensing model to respond to a large-scale biological attack."

The president ordered the departments of Health and Human Services (HHS) and Homeland Security (DHS) to work with the USPS to develop a countermeasures delivery plan within 6 months, focused on anthrax as the primary threat. An attacker who sent anthrax spores by mail was blamed for killing five people and sickening 17 more in the fall of 2001.

The White House order also calls on federal agencies to plan for the use of federal law enforcement officers, if needed, to help local law officers escort mail carriers delivering the medical supplies, most likely antibiotics.

Obama further ordered HHS, DHS, and the Department of Defense to develop a plan for helping state and local governments distribute medical countermeasures if necessary. The agencies are also ordered to plan for providing countermeasures to essential federal personnel so the government could keep functioning after an attack.

Assigning the USPS to deliver antibiotics after a bioterrorist attack is not a new idea. "The Postal Service has been working on this project for years," USPS spokeswoman Sue Brennan commented to CIDRAP News today.

Brennan noted that the agency conducted three proof-of-concept drills in 2006 and 2007—one each in Seattle, Philadelphia, and Boston. In those exercises, a total of 119 mail carriers delivered dummy boxes of antibiotics and explanatory fliers to 114,000 households, she said.

Another exercise is scheduled to take place in the Minneapolis–St. Paul area sometime in 2010, with mail carriers delivering packages to 205,000 homes, about 25% of the metro area. That drill will have a new dimension, she said, in that the mail carriers will be screened for special measures to protect themselves from anthrax. Plans for the exercise were first announced in October 2008.

"We have solicited volunteer letter carriers who had to be fit tested for masks and had to undergo physicals to ensure they could take [the antibiotic] doxycycline," Brennan said. "They and their families will be given antibiotics for the test period. They obviously won't need to take them since it's a test."

The first announcement of a proposal to have the USPS deliver antibiotics after a bioterrorist attack came in February 2004. USPS officials said then that the idea was to use mail carriers to deliver antibiotics from the Strategic National Stockpile as a way to supplement local public health efforts in response to a major incident.

Obama's order yesterday came less than a week after a man with alleged ties to al-Qaida tried to bring down an airliner bound for Detroit by setting off an explosive mixture in his clothing. As an Associated Press report noted, since that failed attack, the president has sought to assure the public that his administration is striving to protect the country from terrorists ([CIDRAP, 2009](#)).

**Title:** Drive-Through Clinics Could Stem Effects Of Bioattack

**Date:** January 15, 2010

**Source:** [Bio Prep Watch](#)

**Abstract:** A study by physicians at Stanford Hospital & Clinics has concluded that, in the event of a pandemic or biological attack, patients' own cars can be effectively utilized as a drive-through emergency department.

The study, published Jan. 13 in the online *Annals of Emergency Medicine*, noted that the drive-through method could prevent the spread of infectious diseases from patient to patient and from patient to caregiver.

"The most important message is that a drive-through medical clinic is not only a feasible model, but may be a preferred type of alternative care center," Eric A. Weiss, first author of the study and associate professor of emergency medicine at the Stanford University School of Medicine, told *HealthNewsDigest.com*. "It can expedite and facilitate seeing large numbers of patients while mitigating the spread of infectious diseases by providing a social distancing mechanism.

"And it not only can be used during a pandemic, but also would be an excellent strategy for bioterrorism, or for other emerging infectious disease events."

A full-scale exercise was conducted by Weiss and three of his colleagues last September, with results showing that moderately ill patients could be both evaluated and treated in the drive-through scenario in an average of 26 minutes.

The exercises also revealed that the diagnoses and treatments given during the drive-through matched those of real-life patients who visited the Stanford emergency room ([Bio Prep Watch, 2010](#)).



**Title:** Postal Workers May Become Part Of Plan To Fight Anthrax Attacks

**Date:** May 24, 2010

**Source:** [Bio Prep Watch](#)

**Abstract:** Mail carriers in Minnesota may soon play a part in the war on terror, according to a news report by kstp.com.

The plan, which will be funded by a \$6 million grant through the federal government for anthrax emergency preparedness, will coordinate efforts of the state's mail carriers, lab technicians and law enforcement officers.

The state's Department of Health will be responsible for testing material for anthrax. Another part of the plan, according to the news report, could involve the distribution of antibiotic pill packs that would be supplied by the federal government.

Those pill packs would be sent to the state's Office of Emergency Preparedness within 12 hours of possible exposure and then distributed by mail carriers with state trooper escorts, according to the report.

Pam Donate is a Minnesota mail carrier who was one of 400 volunteers to be trained to deliver medications via mail during an anthrax attack.

"Letter carriers are very attached to the people they serve in the neighborhoods," Donate told kstp.com.

The report noted that approximately 50 state troopers would escort postal workers, offering protection, specifically in densely populated areas around the Twin Cities.

"We don't know when something will happen, if it will happen or what it'll be, but the last thing we want to do is get flat-footed," Minnesota State Patrol Captain Matt Langer told kstp.com ([Bio Prep Watch, 2010](#)).

**Title:** U.S. Postal Service Tests Bioterror Response

**Date:** August 20, 2010

**Source:** [Bio Prep Watch](#)

**Abstract:** Postal employees in Lansing, Michigan, conducted decontamination drills on August 18, simulating their response to a bioterror attack using anthrax.

Anthrax, caused by inhaling, digesting or breathing the bacteria or spores of *Bacillus anthracis*, killed five people in a 2001 mail attack in Washington, D.C. Among the dead were two postal workers. Since then, the U.S. Postal Service has taken better measures to protect its employees, including holding such drills, according to the Lansing State Journal.

The exercise, the first since 2007, was held at the Lansing post office and processing center, and included training in the use of an inflatable decontamination station and hazardous materials suits.

The Lansing police and fire departments and members of the Ingham County Health Department also played an active role in the drills, the Lansing State Journal reports. Marcus Cheatum, the assistant deputy health officer at the health department, told the Lansing State Journal that the training helps officials find and fix problems in their responses and teaches the different organizations to work together.

"Before 9/11 and before we started doing these drills, we never partnered with the post office or the Fire Department or the sheriff on things like this, and now we're doing stuff jointly all the time," Cheatum told the Lansing State Journal.

"It just gives us all an opportunity to get together, look at our processes ... and make sure everything works in an orderly fashion," Postal Service spokeswoman Sabrina Todd told the Lansing State Journal ([Bio Prep Watch, 2010](#)).

**Title:** Postal Service Preparing Bioterror Response

**Date:** November 17, 2010

**Source:** [Bio Prep Watch](#)

**Abstract:** The United States Postal Service has teamed up with state and local health departments to prepare for a mass distribution system by testing delivery of Centers for Disease Control and Prevention medication in case of anthrax attack.

In December 2009, President Barack Obama signed an executive order for the U.S. Department of Health and Human Services and the USPS to create a national dispensing model within 180 days that would allow U.S. cities to respond to a large anthrax attack, [Emergencygmt.com](#) reports.

**The program, known as the postal plan, uses letter carriers around the country to deliver medical countermeasures and information about how to take the medication. Since medication must be administered within 48 hours of infection, regular mail delivery would be halted and replaced with this important package.**

**The postal plan is currently being tested in the St. Paul/Minneapolis area within the 551 and 554 zip codes. Before the executive order, similar exercises had been performed in Philadelphia, Seattle and Boston to great success.**

"The process went well, and it only took about six to nine hours for them to cover their route and make sure all those folks – the 20, 40 and 50 thousand – received their mock antibiotics in a timely fashion," John Koerner, chief of the CBRN branch of the HHS, said, according to [Emergencygmt.com](#). "The proof of concept showed that it can work."

While most residents during an anthrax attack would receive antibiotics in a mass dispensing site, the postal plan might have to be enacted in high density zip codes to take pressure off the distribution sites.

According to the Military Vaccine Agency, an untreated inhalation of anthrax would lead to a higher than 99 percent death rate. After the antibiotics treatment is started for anthrax, it must be continued for approximately 60 days ([Bio Prep Watch, 2010](#)).

**Title:** Georgia Tests Drive Through Anthrax Vaccine Dispensing

**Date:** January 6, 2011

**Source:** [Bio Prep Watch](#)

**Abstract:** The Columbia County Emergency and Operations Division and other health workers in Columbia County, Georgia, plan to test a method of dispensing life-saving vaccines and other medicines that allows people to stay within their vehicles.

The exercise is scheduled to begin at 8 a.m. on January 22 at Groveton High School, and will test the medical workers to see if they are capable of vaccinating 900 people against anthrax, according to [NewsTimes.Augusta.com](#).

The event will utilize large tents that were bought last year with Georgia Department of Health grant money. Drive through stations will be set up at the school on William Few Parkway.

County Health Department Nurse Manager Linda Graves sees a scenario where motorists and their passengers arrive at one station to collect and then fill out paperwork to be dropped off at another station, before driving to a final station to receive the inoculation or other critical medicine.

"The purpose is to get people in and out very quickly, like a drive-through at a restaurant," Graves said, NewsTimes.Augusta.com reports. "We would hope to get them in and out in a few minutes."

With 20 volunteers, Graves expects that around 1,00 people could pass through the stations in a single day.

"Although this exercise focuses on anthrax, these same procedures may be used for numerous types of public health emergencies, including, but not limited to, mass vaccinations during flu pandemics," Emergency and Operations Director Pam Tucker said, according to NewsTimes.Augusta.com ([Bio Prep Watch, 2011](#)).

**Title:** Five Metro [U.S. Postal] Areas To Receive Grants To Fight Anthrax

**Date:** August 3, 2011

**Source:** [Bio Prep Watch](#)

**Abstract:** Five metropolitan areas that have demonstrated the ability to deliver anthrax antibiotics through the National Postal Model will receive a total of \$400,000 in grants from the U.S. Department of Health and Human Services.

The grants fund planning and exercises incorporating U.S. Postal Service workers into community plans to deliver medication after an anthrax bioterrorism attack, the News Eagle reports.

**The Boston Public Health Commission, the Philadelphia Department of Health, the Louisville/Jefferson County Metropolitan Board in Kentucky and the San Diego Health and Human Services Agency will each receive \$50,000 grants for initial planning and exercises. The Minneapolis Department of Health, will receive a \$200,000 grant to conduct a full-scale exercise simulating an anthrax attack in the metropolitan area.**

If a full-scale anthrax attack were to occur, everyone potentially exposed to anthrax would need to receive an initial supply of antibiotics within 48 hours. Under the NPM, volunteers from the USPS would pick up antibiotic packages at an established location and, protected by law enforcement officers, would deliver the antibiotics to homes in predetermined ZIP codes.

"The fatality rate for people whose lungs are infected with anthrax is extremely high if they do not receive antibiotic treatment, which means the quicker health professionals can get antibiotics into people's hands, the quicker we can protect health and save lives," Dr. Nicole Lurie, the assistant secretary for Preparedness and Response, said, according to the News Eagle. "The postal model offers an additional tool for local health departments to begin treating people potentially exposed to anthrax."

This method would augment existing dispensing plans that ask residents and visitors to go to special medication dispensing sites ([Bio Prep Watch, 2011](#)).

**Title:** San Diego To Train Postal Works On Bioterror Antibiotic Deliveries

**Date:** August 24, 2011

**Source:** [Bio Prep Watch](#)

**Abstract:** Postal workers in San Diego will soon be trained to deliver emergency antibiotics to all 3.2 million county residents in the event of a bioterrorist attack.

Jack Walsh, a coordinator for the county's Counterbioterrorism and Preparedness Task Force, said that during a full-scale anthrax attack, antibiotics would need to be delivered to residents within 48 hours from the federal Strategic National Stockpile, KPBS said. During an anthrax attack, the county would get doxycycline and ciprofloxacin antibiotics.

"Signs and symptoms for anthrax can show as early as 48 hours," Walsh said, according to KPBS. "So the survival rate for anthrax once signs and symptoms have popped up is not very good. If we can get meds delivered, then we can save 98 percent of the people. (Medication) would come to the

county's warehouse where the Postal Service would come and pick it up and take it to their delivery units, load it up into their trucks and deliver it to everybody's address."

Each of the postal workers who volunteers for the training would have a security or police escort and be equipped with gloves and a mask. They would be given a supply of emergency medications for their families in advance.

San Diego is one of five U.S. cities that has been selected for a grant to pay for initial distribution training and exercises.

"There's a low probability of a bioterror attack, but a high likelihood of mass fatalities if we're not prepared," Walsh said, according to KPBS.

In 2001, anthrax-laced letters that were sent to media companies and congressional offices killed five people ([Bio Prep Watch](#)).

**Title:** Iowa Postal Employees Practice Anthrax Response

**Date:** September 1, 2011

**Source:** [Bio Prep Watch](#)

**Abstract:** Postal employees, first responders and local emergency officials in Waterloo, Iowa, recently conducted a biological attack drill that simulated an anthrax mail attack similar to the ones carried out in 2001.

During the scenario, authorities sealed off the post office and a group of student volunteers simulated potential anthrax victims. The exercise provided officials with new insights as to how to operate during an emergency, as well as new tools to use during a response, according to WCFCourier.com.

"It's as real as we can make it and still get it done," Sgt. Aaron McClelland of the Waterloo Police Department said, WCFCourier.com reports.

Though a real event would be most likely to unfold over a series of days, the recent exercise was compressed into a matter of hours.

Firefighters donned hazmat suits in order to rescue those inside the post office while members of the U.S. Postal Inspection Service began a more thorough investigation. Officials from the Iowa State Patrol, Black Hawk County Health Department and the Iowa National Guard also took part.

"There was a number of different agencies involved. We had federal, state and county and city resources," Jewell said, according to WCFCourier.com.

The National Guard provided a unique communications system for the event that tied together the radios from the different participants ([Bio Prep Watch, 2011](#)).

**Title:** Kansas Holds Bioattack Drill

**Date:** January 11, 2012

**Source:** [Bio Prep Watch](#)

**Abstract:** Johnson County, Kansas, recently held a drill designed to test its ability to dispense medical countermeasures in the event of biological emergency.

The public health emergency preparedness plan is in place to organize the handing out of medicines if there is ever an outbreak of anthrax, plague or tularemia, whether it is a naturally occurring event or an intentional release, according to Fox4KC.com.

Public health officials said that the most difficult role the public has to play is filling out the proper form. The rest of the procedure takes only 45 seconds.

"If they go online, fill out their form and bring it in, it'll decrease the time it's going to take for them to go through the whole dispensing process and speed it up," Nancy Tausz of Johnson County Public Health said, Fox4KC.com reports.

Johnson County Health said that it is prepared to dispense countermeasures to the entire population of the county within 48 hours.

During an event, the head of a household can pick up prophylactic medications for their entire family at open dispensing sites or neighborhood dispensing centers.

Additional sites may be set up depending on the nature of the emergency and the target population. Only asymptomatic persons are to receive the medication. Those showing symptoms are to be taken to treatment centers ([Bio Prep Watch, 2012](#)).

**Title:** U.S. Testing New Rapid Response Vaccine-Delivery Platform

**Date:** February 16, 2012

**Source:** [Bio Prep Watch](#)

**Abstract:** Health officials in the United States are currently testing a new vaccine-delivery platform developed by the Halifax, Nova Scotia-based Immunovaccine, Inc.

The DepoVax vaccine-delivery platform is intended for use in rapid response to a bioterrorist event involving either civilians or the military, according to [TheChronicleHerald.ca](#).

"Our platform seems to enhance the effectiveness of some vaccines that could be used to counter bioterrorism events," Marc Mansour, Immunovaccine's chief science officer, said, [TheChronicleHerald.ca](#) reports. "The challenge for military or civil authorities is to have a particular vaccine take effect as quickly as possible."

Mansour said that DepoVax has the ability to generate an immune response rapidly.

The U.S. National Institute of Allergy and Infectious Diseases plans to include the vaccine-delivery platform in additional testing slated to begin this spring. DepoVax will be one of several vaccines and vaccine boosters to be included in the round of non-human primate tests.

Immunovaccine recently announced that DepoVax could serve to advance the development of next generation vaccines that could be used against the deadliest of biological agents, including anthrax and Marburg virus.

"This collaboration is consistent with Immunovaccine's strategy for leveraging DepoVax to enhance the immunogenicity of even the best vaccine antigen candidates in as little as a single dose," John Trizzino, the chief executive officer at Immunovaccine, said, [TheChronicleHerald.ca](#) reports ([Bio Prep Watch, 2012](#)).

**Title:** Louisville Postal Carrier To Carry Antibiotics In The Event Of Bioattack

**Date:** March 21, 2012

**Source:** [Bio Prep Watch](#)

**Abstract:** More than 300 postal carriers in Louisville, Kentucky, have volunteered to carry antibiotics to nearby residents in the case of an attack using an airborne biological agent.

Louisville and Minneapolis-St. Paul were chosen to take the lead in a demonstration project program aimed at using postal workers to deliver supplies of the antibiotic doxycycline to residential addresses within 48 hours of an emergency, according to [Courier-Journal.com](#).

Edward Gabriel, the principal deputy assistant secretary for preparedness and response at the U.S. Department of Health and Human Services, said that the Louisville project could serve as example to other cities seeking to be better prepared for a biological attack.

“Other cities across the country will be watching closely to learn how to apply this model in their own communities,” Gabriel said, [Courier-Journal.com](#) reports.

Louisville Mayor Greg Fischer, the U.S. Postal Service and HHS are expected to officially announce the program soon.

“Creating a safer city and a healthier city are two top priorities, and this agreement puts us at the cutting edge of national efforts to protect our citizens,” Fischer said, [Courier-Journal.com](#) reports. “Louisville will become the national model in that our plan includes door-to-door delivery to citizens in both urban and rural ZIP codes.”

Louisville was chosen because of its experience as a testing site for other disaster drills. So far, nearly 70 percent of available couriers have volunteered for the program ([Bio Prep Watch, 2012](#)).

**Title:** Minnesota Mail Carrier To Test Anthrax Antibiotic Delivery Program

**Date:** March 22, 2012

**Source:** [Bio Prep Watch](#)

**Abstract:** Mail carriers in St. Paul and Minneapolis, Minnesota, will deliver empty pill bottles to approximately 35,000 homes on May 6 to test a program that would deliver antibiotics in the event of an anthrax attack.

U.S. Postal Service carriers will make the Sunday deliveries to four zip codes, one in the Minneapolis suburbs, one in Minneapolis and two in St. Paul. Operation Medicine Delivery will see how fast postal teams can deliver medicine to homes in case of an emergency, [CIDRAP News](#) reports.

“People will get an empty bottle, similar to what would be used in the real thing,” Peter Nowacki, a Minneapolis USPS spokesman, said, according to [CIDRAP News](#). “There’ll be an information sheet explaining what it’s all about, that it’s just a test to see how well it works. It’ll have links and phone numbers for more information.”

The Twin Cities area is one of at least five large cities in the U.S. planning federally funded programs to use the USPS to respond to bioterrorist attacks. The other areas include Seattle, Philadelphia, Boston and Louisville, Kentucky. While Boston, Philadelphia and Seattle have run limited exercises, the Minnesota test will use a fully developed team of trained volunteers.

“This is the first metro area in the country to recruit a full complement of postal volunteers for this program, and set up a fully developed postal delivery system,” the Minnesota Department of Health, said, according to [CIDRAP News](#).

If a real emergency were to occur, postal delivery would not be used for all residents of the Twin Cities, but as a way to relieve pressure from the medication centers in densely populated parts of the area ([Bio Prep Watch, 2012](#)).



# Bio Terror Bible

## EXPOSING THE COMING BIO-TERROR PANDEMIC

**BIOTERRORBIBLE.COM:** Despite the fact that the United States and its European Union allies have been researching, planning and drilling for a major bio-terror attack and the subsequent pandemic, the nations of [Egypt](#), [Iran](#), [Iraq](#), [Libya](#), [North Korea](#) and [Syria](#) have been quietly set up over the last decade as potential bio-terror scapegoats. Based on the evidence available, it appears that the U.S., [Israel](#) and [South Korea](#) may be the future victims of major false-flag bio-terror attacks.

While the world is distracted by the Arab Spring in Egypt, the country has been quietly set up as a bio-terror state that will likely be scapegoated in the upcoming war of bio-terror and its subsequent worldwide pandemic. Based on recent news and events, Egypt will likely be scapegoated in a future false-flag bio-terror attack on the state of Israel.

**Title:** Official: U.S. Has Bioterrorism Holes

**Date:** January 8, 2003

**Source:** [UCLA](#)

**Abstract:** The United States has some serious holes in its defenses against the kind of biological weapons the military assumes Iraq has, the Army's top biological defense expert said Wednesday.

The Pentagon has few or no vaccines or treatments for several biological weapons Iraq has acknowledged producing, such as botulinum toxin, said Col. Erik Henschal, head of the Army's biological defense laboratory. Other holes in the military's biological defenses include the lack of good vaccines or treatments for plague, various viruses which cause the brain inflammation called encephalitis and bacterial poisons called staphylococcal enterotoxins, Henschal said.

"We're trying to fill those holes as best we can," said Henschal, who directs the Army's Medical Research Institute of Infectious Diseases, or USAMRIID.

For example, the Army lab has developed vaccine-like preventative treatments for the seven forms of deadly botulinum poison but hasn't had the money to get them into full-scale production, he said.

"We've been fairly helpless, except to say we hope someone's paying attention," Henschal told a group of reporters.

"Until 9-11, it was difficult to get the pharmaceutical industry interested in our products. We have 20 medical products on the goal line, waiting to go."

**Military officials assume Iraq has biological weapons including the smallpox virus, and Iraq can produce novel germ weapons such as antibiotic-resistant bacteria, Henschal said.**

He said the Army is sending its only mobile biological testing unit to the Persian Gulf this week. The Maryland-based unit does rapid testing to help confirm an attack with germ weapons.

U.S. military intelligence officials say biological weapons are one of Iraq's few major threats to American forces should President Bush decide to go to war. The Pentagon assumes Saddam has the missiles,

aircraft and other gear needed to launch a biological attack against either military or civilian targets in the region.

Anthrax is the military's top biological weapon worry, since it's a common, hardy bacterium that's relatively easy to make into a deadly weapon, Henchal said. But countries like Iraq might be reluctant to use anthrax against U.S. troops because American soldiers are immunized against anthrax and have the antibiotics needed to treat anthrax illness, he said.

That makes botulinum toxins a big worry.

The U.S. military has some botulinum toxoids, which are inactivated forms of the poisons which work like vaccines to prevent the poisons' deadly effects. But those toxoids are losing potency, Henchal said. USAMRIID hopes to have vaccines against two botulinum toxins in production by the end of the year, he said.

**The U.S. military assumes that North Korea, as well as Iraq, has samples of the smallpox virus, and it's possible the two countries have exchanged information on that and other biological weapons, Henchal said. He said "it's a bit of a fantasy" to assume that the only smallpox samples in the world are the two publicly declared samples in the United States and Russia.**

**"It's clear from intelligence that the genie is out of the bottle," Henchal said of smallpox [\(UCLA, 2003\)](#).**

**Title:** South Korea Begins Anti-Chemical Weapons Training

**Date:** May 13, 2010

**Source:** [Bio Prep Watch](#)

**Abstract:** The Yonhap News has reported that South Korea this week began its annual anti-chemical weapons training program event in conjunction with several other Asian nations.

The program, which is the only one of its kind in Asia according to South Korea's Ministry of Defense, will train officials from 18 Asian countries in methods for dealing with certain terrorism scenarios, including CBRN attacks, according to Yonhap News.

South Korea began first began offering the course to officials annually in 2005. The courses are jointly conducted by South Korean officials and the Organization for the Prohibition of Chemical Weapons, Yonhap News reports.

Twenty-three officials from 18 countries will attend the training program. Yonhap News says that the nations of Jordan, Malaysia and Uzbekistan will be represented as well as others.

The training program will offer courses in dealing with attacks involving chemical weapons, methods for detecting chemical warfare agents and decontaminating chemical warfare agents, Yonhap News reports.

South Korea has become all too familiar with dealing with chemical weapons threats in recent times. Neighboring North Korea is believed to have a stockpile of chemical and biological weapons, and has pursued nuclear weaponry, Yonhap News reports. North Korea has not yet signed an anti-chemical weapons pact either [\(Bio Prep Watch, 2010\)](#).

**Title:** South Korea Prepares For Bioattack

**Date:** June 16, 2010

**Source:** [Bio Prep Watch](#)

**Abstract:** Tensions continued to mount Tuesday between North and South Korea when a nationwide civil defense drill was held in South Korea.

The defense drill was the first nationwide drill since 1989 aimed at handling possible chemical, biological and radiological attacks, officials with the National Emergency Management Agency told the Associated Press.

Both North and South Korea have exchanged hostile words since the recent sinking of a South Korean warship. However, Seoul officials told the AP they do not believe the renewed hostilities will lead to all-out war.

"Now, North Korea is maintaining a considerably strengthened vigilance posture and as you know it's been issuing many threats and statements through various channels," South Korean Defense Minister Kim Tae-young told the National Assembly on Tuesday, the AP reports. "But there have been no serious military activities at the border and in rear areas."

Meanwhile, the U.N. Security Council on Monday that it was "gravely concerned" about further hostilities and encouraged both sides not to engage in any hostile acts.

South Korea has taken punitive measures against North Korea, including trade restrictions, since the warship Cheonan was sunk in March, killing 46 sailors.

North Korea has denied sinking the warship and has warned that retaliation would trigger war, the AP reports.

"We are just a victim," Pak Tok Hun, North Korea's deputy U.N. ambassador, told reporters "So we'd like to make our position clear."

North and South Korea are still technically at war because the 1950-53 Korean War ended in an armistice, not a peace treaty, according to the AP report ([Bio Prep Watch, 2010](#)).

**Title:** South Korea Discusses Bioterror Response Plan

**Date:** October 13, 2010

**Source:** [Bio Prep Watch](#)

**Abstract:** While meeting with the U.S. Secretary of Defense Robert Gates, South Korea's defense minister, Kim Tae-Young, discussed the country's reaction to a potential North Korean attack using biological weapons.

Kim addressed the issue of weapons of mass destruction to reporters covering the two-day 42nd annual security meeting of the U.S. and South Korea's defense officials, GovExec.com reported.

"We are currently in the process of coordinating the details of immediate response in the case of a biological threat from North Korea," Kim said, according to GovExec.com. "We cannot eliminate the possibility of a situation of instability in North Korea that would influence the security of both [U.S and South Korean] governments. It is the responsibility of both governments to prepare for all possible contingencies."

Gates was adamant about the U.S. response.

"North Korea's provocations and aggressions will not be tolerated," Gates said, according to the GovExec.com report.

The bilateral meeting took place shortly after reports from North Korea on Friday confirmed that Kim Jong-Il will be succeeded by one of his three sons, Kim Jong-Un.

"We cannot eliminate the possibility of a situation of instability in North Korea that would influence the security of both [U.S and South Korean] governments," Kim said, GovExec.com reports. "It is the responsibility of both governments to prepare for all possible contingencies ([Bio Prep Watch, 2010](#)).

**Title:** South Korea Runs CBRN Drills

**Date:** December 17, 2010

**Source:** [Bio Prep Watch](#)

**Abstract:** In Paju, South Korea, dozens of residents recently evacuated to underground parking lots and wore gas masks as part of a mass evacuation drill against chemical, biological and radiological attacks from nearby North Korea.

Rescue workers in Paju also conducted casualty simulation drills, bringing wounded residents pretending to be infected with chemical agents to local hospitals, according to WXYZ.com.

The drills came alongside new diplomatic pressure from the United States and regional powers towards North Korea. New Mexico's Gov. Bill Richardson was scheduled to stop in China on his way to North Korea this week. He has acted as a diplomatic troubleshooter with the rogue nation and has made several visits in the past.

Chinese State Councilor Dai Bingguo, China's lead foreign policy official, recently returned from North Korea and is scheduled to hold talks with U.S. Deputy Secretary of State James Steinberg in Beijing, WXYZ.com reports. China is being pressured by the United States to try to get North Korea to abandon its dangerous behavior.

Meanwhile, evacuation drills are being held across South Korea in the wake of the North Korean shelling of Yeonpyeong Island, a disputed island near the border. In the artillery duel that followed, four South Koreans were killed. Casualties in the north are unknown.

In Seoul, residents stopped their cars and ran to underground shelters in the country's largest ever evacuation drill, ending any previous indifference South Koreans may have had about a potential attack by Pyongyang.

"We will need these evacuation plans and skills sooner or later in case war breaks out, and I think war can happen any time," Han Yoo-jin said, according to WXYZ.com ([Bio Prep Watch, 2010](#)).

**Title:** South Korea Claims North Korea Possesses Mass Chemical, Biological Weapons

**Date:** December 31, 2010

**Source:** [Bio Prep Watch](#)

**Abstract:** In a recently published defense white paper, South Korea claimed that North Korea is in possession of and continues to develop chemical, biological and nuclear weapons.

According to the white paper, North Korea has 2,500 to 5,000 tons of various chemical weapons and has extracted approximately 40 kilograms of plutonium by reprocessing spent fuel rods from a 5 MW nuclear reactor it has run since the 1980s.

Additionally, according to the paper's details as reported by English.Chosun.com, the North has increased the number of its special forces troops by 20,000 over the past two years, reaching a total of approximately 200,000, mostly deployed in a light infantry division under an Army Corps that is stationed near the frontline. A light infantry regiment has also been added to an Army division nearby.

The force of 200,000 is reportedly ready to carry out combined operations aimed at attacking major South Korean facilities, assassinating important people and infiltrating the South by using a network of underground tunnels.

A 2006 defense white paper estimated the North's special forces to number approximately 120,000. By 2008, that number had increased to 160,000, English.Chosun.com reports. Currently, they account for 17 percent of the total number of North Korea's 1.19 million soldiers ([Bio Prep Watch, 2010](#)).

**Title:** South Korea, U.S. Armies Demonstrate Bioweapons Response

**Date:** March 3, 2011

**Source:** [Bio Prep Watch](#)

**Abstract:** South Korean and U.S. soldiers participated in a training exercise this week that simulated the detection and disposal of North Korean chemical, biological, radiological and nuclear weapons as part of military exercises between the two countries.

North Korea has described these exercises as a rehearsal for invasion while Seoul and Washington say that the simulations are purely for defensive reasons, the AFP reports. The U.S. has had a military alliance with South Korea dating back to the Korean War.

"North Koreans have threatened to use weapons of mass destruction," Brigadier-General Chuck Taylor said, according to AFP. "This exercise helps us to deter based upon our readiness, and if deterrence fails, to help prevail in any kind of threats and environment."

An expert estimation believes that Pyongyang, North Korea, may have enough plutonium to build six to eight small atomic weapons, though they are unsure if it is capable of mounting these atomic warheads on missiles, according to the AFP.

According to estimates by South Korea's defense ministry, North Korea has an estimated 2,500 to 5,000 tons of chemical weapons, which might consist of mustard gas, blood agents, nerve agents and phosgene, among others. They are also suspected to have biological weapons capability.

The annual drills, known as the Key Resolve/Foal Eagle drills, started on Monday and involve 12,300 U.S. troops and close to 200,000 South Korean service members, including reserves ([Bio Prep Watch, 2011](#)).

**Title:** U.S. And South Korea Begin Discussing Bioterrorism Exercise

**Date:** May 31, 2011

**Source:** [Bio Prep Watch](#)

**Abstract:** Military officers from the United States and South Korea recently held discussions regarding participation in the first-ever joint exercise aimed at testing their ability to cope with bioterrorist activities.

Despite holding annual exercises aimed against a possible invasion by North Korean forces, the two countries have never conducted a joint exercise solely for the purposes of dealing with the threat of bioterrorism, according to YonhapNews.co.kr.

The three day discussions, called Able Response 2011, began last week among senior defense officials from the two nations, including Andrew Weber, the U.S. assistant to the secretary of defense for nuclear, chemical and biological defense programs.

"In the wake of this week's discussions, South Korea and the U.S. plan to develop ways to hold a joint exercise against bioterrorism," Yang Young-mo, a senior official at Seoul's defense ministry, said, according to YonhapNews.co.kr.

The move, according to Yang, does not indicate that the United States and South Korea believe the bioterrorism threat posed by North Korea is growing. The two nations agreed to hold the discussions last year.

Tensions on the Korean peninsula remain high following two North Korean attacks against South Korea last year, when a total of 50 South Koreans were killed, including two civilians ([Bio Prep Watch, 2011](#)).

**Title:** U.S., South Korea To Practice Detection Of Bioweapons

**Date:** August 8, 2011

**Source:** [Bio Prep Watch](#)

**Abstract:** The United States and South Korea will form a joint taskforce to practice the detection and elimination of North Korea's weapons of mass destruction during an annual joint military exercise later this month.

The allied forces will use computer simulations to find the hidden locations of WMDs, including missiles, nuclear warheads, and biological and chemical weapons, and then dispose of them, the Korea Herald reports. The taskforce would then be sent to a certain area where they would participate in a WMD elimination exercise.

"The allies will form the joint taskforce and conduct virtual and actual drills during the Ulchi Freedom Guardian scheduled to take place from Aug. 16-29," a South Korean official told local media, according to the Korea Herald.

The U.S. Army will send the 20th Support Command while the South Korean Army will dispatch troops that specialize in handling WMDs.

Since it was established in October 2004, the 20th Support Command, based out of Maryland, has been involved in a series of WMD removal operations in conflict zones like Iraq.

Some military observers have claimed that South Korea should prepare itself to conduct WMD elimination operations as it attempts to take steps to retake wartime operational control from the U.S. in December 2015.

"In case of an emergency on the peninsula, the troops from the U.S. 20th Support Command could come late or could not be deployed here for some unexpected reason," a military official said, according to the Korea Herald. "So, there appears to be the need for us to establish our own unit, possibly a brigade-level one."

According to a South Korean defense white paper published in December, North Korea has 2,500 to 5,000 tons of chemical weapons. North Korea is also presumed to have obtained around 40 kilograms of plutonium after reprocessing spent fuel rods four times ([Bio Prep Watch, 2011](#)).



**Title:** South Korea's Smallpox Vaccine Stockpile Spoils

**Date:** September 8, 2011

**Source:** [Bio Prep Watch](#)

**Abstract:** Approximately one million doses of smallpox vaccine out of South Korea's stockpile of seven million have reportedly spoiled.

The doses, for use in case of a biological attack from North Korea, were recently found unfit for use and will have to be destroyed, according to Chosun.com.

The spoiled doses were produced by South Korean domestic pharmaceutical companies in 2009 and have yet to reach their expiration date. Another 4.59 million doses purchased from 2003 and 2008 have reached their expiration date but are currently not being eliminated from the stockpile.

According to data from the Korea Food and Drug Administration that was recently released by Lee Jae-Sun, a lawmaker from the Liberty Forward Party, a series of animal tests conducted on the doses produced in 2009 failed.

All of the guinea pigs used in the toxicity tests died after being injected with doses from the batch, Chosun.com reports. The KFDA said the high toxicity of the batch has made the doses unfit for human use and they have asked the Korean Centers for Disease Control and Prevention to destroy them.

Seoul acquired 980,000 doses of antibiotics to treat bubonic plague in 2001. They were destroyed after passing their expiration date and have yet to be replaced, according to KoreaHerald.com ([Bio Prep Watch, 2011](#)).

**Title:** Expert Details Joint U.S.-South Korea Bioattack Exercise

**Date:** September 19, 2011

**Source:** [Bio Prep Watch](#)

**Abstract:** The United States and South Korea held a joint exercise in May to counter potential biological attacks by North Korea, according to a ruling party member.

Kim Hak-song of the Grand National Party said that the anti-biological war drill was held at the South Korea-U.S. Combined Forces Command and the Korea Institute for Defense Analyses on May 17 through May 27 and was attended by senior officials from both countries' related agencies, the Korea Herald reports.

The exercise was presided over by the U.S., which tried to warn Seoul of Pyongyang's biological weapons, which pose threats to peace in Northeast Asia, Kim said. According to Kim, Seoul opposed the exercise, citing public anxiety and negative economic impact.

The drill was aimed at coping with North Korea's asymmetrical attacks with radiation leakage and biological weapons. North Korea is believed to have 13 types of weaponized stocks of biochemicals, including cholera, typhoid and anthrax.

Military and political heavyweights from both countries, including Gen. Walter Sharp, who was the then-commander of U.S. forces in Korea, participated in a seminar held at KIDA on the last day of the drill.

"South Korea found that it has been hardly prepared to counter North Korea's biological attacks," Kim said, according to the Korea Herald. "The defense ministry should come up with measures against biological warfare."

According to a study, a bomb containing one kilogram of anthrax could kill up to 11,000 people in a city

that has a population density of 14,500 per square kilometer. Seoul's density rose to 17,240 per square kilometer in 2010 ([Bio Prep Watch, 2011](#)).

**Title:** S. Korean Military Vulnerable To N. Korea's Biological Attacks

**Date:** September 25, 2011

**Source:** [Korean Times](#)

**Abstract:** The military is vulnerable to North Korea's biological attacks, due to lack of adequate equipment, an opposition lawmaker insisted on Sunday.

Rep. Shin Hak-yong of the main opposition Democratic Party said that the military currently owns scores of anti-biological vehicles capable of detecting only four kinds of biological agents, though the North has 13 kinds of biological agents, including anthrax bacterium, smallpox virus and cholera.

The anti-biological military vehicles are antiquated, as they were introduced here ahead of the 2002 World Cup finals co-hosted with Japan, the lawmaker claimed.

He noted that the military has commissioned a local private firm to develop an advanced biological toxin detector capable of monitoring 10 kinds of biological agents in two minutes, but its deployment is scheduled for 2013 at the earliest.

Shin said the military is planning to deploy the new anti-biological detector at the nation's major airports, ports and military facilities.

"Our military's defense has been excessively focused on preparedness for North Korea's chemical attacks, rather than for its biological attacks," said Shin, calling for greater efforts to expand defense against biological warfare ([Korean Times, 2011](#)).

**Title:** South Korea Vulnerable To North Korean Bioattack

**Date:** September 27, 2011

**Source:** [Bio Prep Watch](#)

**Abstract:** South Korea remains particularly vulnerable to an attack by North Korea using biological weapons because of it lacks proper equipment, a South Korean opposition lawmaker recently declared.

Democratic Party Rep. Shin Hak-yong said that the South's military currently uses vehicle-based biological weapons sensors that are only capable of detecting four kinds of biological agents, despite the fact that North Korea possesses at least 13 types of agents, according to YonhapNews.co.kr.

"We have particular concerns with the activities of North Korea...in the biological weapons context, but also because of their...support for terrorism and their lack of compliance with international obligations," Assistant Secretary of State John C. Rood said in 2009, PopularMechanics.com reports.

The lawmaker said that the vehicles are antiquated. They were originally introduced into service in 2002, ahead of the 2002 World Cup finals South Korea co-hosted with Japan.

Shin said that South Korean military planners have commissioned a local firm to produce a new type of biological weapons detector capable of identifying 10 types of agents in a span of two minutes, but it is not scheduled for deployment until 2013 at the earliest.

The military has plans to place the new sensors at major airports, ports and military facilities.

"Our military's defense has been excessively focused on preparedness for North Korea's chemical attacks, rather than for its biological attacks," Shin said, YonhapNews.co.kr reports ([Bio Prep Watch, 2011](#)).

**Title:** South Korea Developing Bioweapon Defenses

**Date:** October 10, 2011

**Source:** [Bio Prep Watch](#)

**Abstract:** According to South Korea's defense minister, the country is researching and developing defensive measures against possible biological and chemical attacks from North Korea.

During an annual parliamentary audit, Kim Kwan-jin, the country's defense minister, said that while South Korea does not yet have vaccines against those types of offenses, they will be put in place soon, Yonhap News Agency reports.

"Since the project costs a lot of money, we haven't settled on the exact date on when we can develop vaccines," Kim said, according to Yonhap News Agency. "But once they're developed, there should be no major problem."

Kim said that U.S. forces in Korea have vaccines against anthrax and that South Korean health authorities have similar vaccines and the capability of developing their own vaccines.

Han Min-koo, the chairman of the joint chiefs of staff, said that U.S. troops and South Korea have engaged in joint identification and detection exercises and will cooperate with each other during contingencies. The defense ministry estimates that North Korea has up to 5,000 tons of chemical weapons and is capable of growing cholera, smallpox and anthrax.

Han addressed concerns that South Korea's Guided Weapons Defense Command may be vulnerable to missiles from North Korea, saying that the unit's armory and ammunition chamber will be well protected.

"Developments of mid-range surface-to-air missiles (M-SAM) and long-range surface-to-air missiles (L-SAM), which will be used in missile defense, have been included in the mid-term defense plans," Han said, according to Yonhap News Agency. "I think they may take five to 10 years to develop" ([Bio Prep Watch](#)).

**Title:** U.S., South Korea Examine North Korean Bioterror Threat

**Date:** November 15, 2011

**Source:** [Bio Prep Watch](#)

**Abstract:** Military officials from the U.S. and South Korea met in operations centers over the past two weeks to examine in great detail how they would respond to a biological or chemical attack from North Korea.

Many details of the computer-based Warpath III exercise are classified. The exercise gave 1,000 service members from eight South Korean and American brigades experience in how the alliance would react with the "full spectrum" of its equipment and manpower in the event the North made good on threats it has made over the years, Stars and Stripes reports.

"I think it would be irresponsible not to take that threat seriously," Lt. Col. Joe Scrocca, a 2ID spokesman said, according to Stars and Stripes. "If we don't practice, we will not be ready if they use those weapons. We're practicing for a real-world threat on the peninsula."

While North Korea's developing nuclear weapons program has made more headlines in recent years, those familiar with the North say its biological and chemical capabilities would be major elements of any all-out attack on the South. A 2007 Popular Mechanics investigative report stated that, according to South

Korean intelligence agencies, defectors and other sources, North Korea has built “one of the world’s most extensive biochemical warfare programs,” according to Stars and Stripes.

In September, Shin Hak-yong, a South Korean lawmaker, called for greater efforts to expand the South's defense against potential biological warfare, according to the Yonhap News Agency.

“Our job is to be ready for whatever comes,” Scrocca said, Stars and Stripes reports. “We’re just about the only ones in the Army doing this full-spectrum-type stuff against all possible type threats. This is all computer-based ... but we’re working on the strategies that would be used in a full spectrum of operations. We’re practicing the identification, detection and defense against chemical-biological weapons — How would we be able to detect (chemical-biological weapons)? What would happen once they are detected? How would we decontaminate soldiers and equipment if that happened?” ([Bio Prep Watch, 2011](#)).

**Title:** South Korea Seeks To Increase Bioweapon, WMD Defense

**Date:** February 13, 2012

**Source:** [Bio Prep Watch](#)

**Abstract:** Military officials for the defense ministry of South Korea said on Thursday that the country plans to undergo restructuring in an effort to strengthen the military’s defense against cyber warfare and weapons of mass destruction.

Under the proposed changes, the ministry’s department of non-proliferation would be renamed the department of WMD response. Officials working in that department would form the country’s defense policy against potential WMD attacks from North Korea, providing the necessary guidelines for successful defense, [Yonhap News Agency](#) reports.

This newly-named department would also oversee nuclear policies, missile defense, response to chemical and biological weapons, and non-proliferation. Another change would see the information protection team renamed to the cyber protection policy team. This team would come up with a South Korean response to the cyber warfare threats of North Korea.

“North Korea has continuously developed missiles, nuclear weapons and chemical and biological weapons,” an official for the defense ministry said, according to [Yonhap News Agency](#). “We’re also aware of actual cyber attacks by North Korea. We need to develop policies to actively respond to such instances, and to strengthen roles and functions for relevant departments, accordingly.”

Under the proposed change, the ministry would increase the number of civil servants employed there from 621 to 634 ([Bio Prep Watch, 2012](#)).

**Title:** South Korea Begins Military Drills Despite Threat From North Korea

**Date:** February 20, 2012

**Source:** [Fox News](#)

**Abstract:** South Korea conducted live-fire military drills near its disputed sea boundary with North Korea on Monday despite Pyongyang's threat to respond with a "merciless" attack -- a threat it did not immediately make good on.

Analysts said North Korea was unlikely to respond with more than words because it is focusing on internal stability two months after the death of leader Kim Jong Il. North Korea is also days away from its first nuclear disarmament talks with the U.S. since Kim's death.

Washington and North Korea's neighbors are closely watching how Kim Jong Un, Kim Jong Il's son and successor, navigates strained ties with rival South Korea and a long-running standoff over the country's

nuclear weapons programs. In another potential point of tension, U.S. forces will be conducting annual military exercises with South Korea over the next few months.

South Korea's drills took place Monday in an area of the Yellow Sea that was the target of a North Korean artillery attack in 2010 that killed four South Koreans and raised fears of a wider conflict. North Korea didn't threaten similar South Korean firing drills in the area in January, but it called the latest exercise a "premeditated military provocation" and warned it would retaliate for an attack on its territory.

A North Korean officer said in an interview Sunday with an Associated Press staffer in Pyongyang that North Koreans would respond to any provocation with "merciless retaliatory strikes."

North Korea is fully prepared for a "total war," and the drills will lead to a "complete collapse" of ties between the Koreas, the North's Committee for the Peaceful Reunification of Korea said in a statement carried Monday by the official Korean Central News Agency.

Such rhetoric has been typical of North Korean officials in the past.

Later Monday, South Korean troops on five islands near the disputed sea boundary fired artillery into waters southward, away from nearby North Korea, a Defense Ministry official said on condition of anonymity, citing department rules. South Korea reported no action by North Korea following the drills, which ended after about two hours.

North Korea's military maintained increased vigilance during Monday's drills, though Seoul saw nothing suspicious, a South Korean Joint Chiefs of Staff officer said on condition of anonymity, citing department rules.

South Korean military officials said they were ready to repel any attack. Residents on the front-line islands were asked to go to underground shelters before the drills started, according to South Korea's Defense Ministry and Joint Chiefs of Staff.

Analysts said the threats allow Pyongyang to show its anger over what it sees as a violation of its territory, but that an immediate attack was unlikely during what is a delicate time for inter-Korean and U.S.-North Korean relations, and for internal North Korean politics.

"South Korea's military would have immediately responded this time, and that's something that North Korea can't afford" during its transfer of power to Kim Jong Un, said Yoo Ho-yeol, a professor at Korea University in South Korea.

The North's threat appeared aimed at mustering internal support or could be the result of top military officers showing their loyalty to Kim Jong Un, Yoo said.

The North knows that raising tensions ahead of nuclear talks with the United States won't be advantageous, said Cheong Seong-chang, an analyst at the private Sejong Institute in South Korea.

The Korean Peninsula has been technically at war for about 60 years. The maritime line separating the countries was drawn by the U.S.-led U.N. Command without Pyongyang's consent at the close of the 1950-53 Korean War, which ended with a truce, not a peace treaty. North Korea routinely argues that the line should run farther south.

Relations between the Koreas plummeted following the 2010 shelling of front-line Yeonpyeong Island, seven miles (11 kilometers) from North Korean shores, and a deadly warship sinking blamed on Pyongyang. North Korea has flatly denied its involvement in the sinking, which killed 46 South Korean sailors.

Kim Jong Un's handling of North Korea's military and diplomacy will come into sharper focus in the next several weeks.

The United States and North Korea will have important nuclear disarmament talks Thursday -- the third round of bilateral talks since last summer and the first since Kim Jong Il's Dec. 17 death. They are aimed at restarting six-nation aid-for-disarmament negotiations on North Korea's nuclear program.

The North pulled out of those negotiations in early 2009 but has said it is willing to restart the six-party talks, which also include China, Japan, Russia and South Korea. But the U.S. and its allies are demanding that the North first demonstrate its sincerity in ending its nuclear weapons program.

Additionally, a series of military exercises between the United States and its ally Seoul will extend over more than two months. Seoul and Washington say their long-planned annual drills are defensive in nature, but North Korea calls them preparation for an invasion.

South Korea began joint anti-submarine drills Monday with the United States, but the training site is farther south from the disputed sea boundary, South Korean military officials said. About 28,500 U.S. troops are stationed in South Korea as what U.S. and South Korean officials call deterrence against North Korean aggression.

South Korean and U.S. troops will start 12 days of largely computer-simulated war games next week, and two months of field training drills in early March.

Early Monday, the powerful Political Bureau of the Central Committee of North Korea's ruling Workers' Party announced it would convene a special political conference in mid-April to "glorify" the late leader and to rally around his son.

The last time such a conference was held was in September 2010, when Kim Jong Un was named to a high-ranking party military post in the first public confirmation that he was being groomed to succeed his father.

The conference could wrap up the North's power succession process, analysts said, with Kim Jong Un possibly promoted to general secretary of the Workers' Party, the ruling party's top job and one of the country's highest positions ([Fox News, 2012](#)).

**Title:** South Korea Releases Bioterrorism Response Guidelines

**Date:** March 5, 2012

**Source:** [Bio Prep Watch](#)

**Abstract:** According to a ruling party lawmaker, the defense ministry of South Korea has dispensed guidelines for responding to alleged bioterrorism threats posed by the Democratic People's Republic of Korea.

The defense ministry sent out the 130 page guidelines on the recommended responses to bioterrorism and the successive medical support to all military units. The guidelines are the first of their kind to be created by South Korea's defense ministry, [Xinhua](#) reports.

The guidelines offer detailed explanation on 13 bioterrorism agents that the DPRK is believed to have large amounts of, including smallpox, plague and anthrax.

"There is an urgent need to develop additional vaccines against bioterrorism," Song Young-sun, a lawmaker of the ruling Saenuri Party, said, according to [Xinhua](#).



The U.S. and South Korea have conducted joint drills since 2010 aimed at identifying, detecting and neutralizing biological and chemical weapons that the DPRK allegedly possesses.

“North Korea’s biological agents are asymmetrical weapons that can cause overwhelming chaos and damage, and we need to quickly develop additional vaccines,” Song Young-sun said, according to [Yonhap News](#). “Under the new North Korean leadership of Kim Jong-un, things could change suddenly on the peninsula. We have to be fully prepared for bioterrorism and other sorts of threats” ([Bio Prep Watch, 2012](#)).

**Title:** South Korea Not Prepared For North Korea’s Bioweapons Capability

**Date:** March 13, 2012

**Source:** [Bio Prep Watch](#)

**Abstract:** When compared with the biological warfare defenses of the United States, South Korea’s capabilities to deal with the smallpox virus fall well short despite North Korea’s biological weapons capacity.

In a defense white paper, the Ministry of National Defense said that North Korea has biological capabilities, including the ability to synthesize the smallpox virus. The United States sees South Korea as one of the most likely places to see a return of the deadly virus, the [Korea Herald](#) reports.

Smallpox is estimated to have killed more than 300 million people during the 20th century. The only treatment is to receive a vaccination within 72 hours of being infected.

While South Korea began stockpiling smallpox vaccines in 2002, tests showed that of the seven million doses, 1.06 million were unfit for use and 4.59 million doses had exceeded the recommended storage duration. The country has no other project for smallpox vaccine stockpiling in the future. In comparison, the U.S. smallpox vaccination program covers its entire population.

“As the Korean military’s bio-chemical defense capabilities have been focused on chemical warfare, preparations for biological warfare have been neglected,” Shin Hak-yong, a representative with the Democratic Unity Party, said, according to the [Korea Herald \(Bio Prep Watch, 2012\)](#).

# Bio Terror Bible

## EXPOSING THE COMING BIO-TERROR PANDEMIC

**BIOTERRORBIBLE.COM:** Despite the fact that the United States and its European Union allies have been researching, planning and drilling for a major bio-terror attack and the subsequent pandemic, the nations of [Egypt](#), [Iran](#), [Iraq](#), [Libya](#), [North Korea](#) and [Syria](#) have been quietly set up over the last decade as potential bio-terror scapegoats. Based on the evidence available, it appears that the U.S., [Israel](#) and [South Korea](#) may be the future victims of major false-flag bio-terror attacks.

While the world is distracted by the rhetoric and propaganda of a nuclear Iran, the bio-terror aspect of Iran has largely flown under the radar. It is possible that Iran will scapegoated in the upcoming war of bio-terror and its subsequent worldwide pandemic.

**Title:** Iran And Weapons Of Mass Destruction

**Date:** 2012

**Source:** Wikipedia

### Biological Weapons

Iran has advanced biology and genetic engineering research programs supporting an industry that produces world-class vaccines for both domestic use and export. The dual-use nature of these facilities means that Iran, like any country with advanced biological research programs, could easily produce biological warfare agents.

A 2005 report from the [United States Department of State](#) claimed that Iran began work on offensive biological weapons during the [Iran–Iraq War](#), and that their large legitimate bio-technological and bio-medical industry "could easily hide pilot to industrial-scale production capabilities for a potential BW program, and could mask procurement of BW-related process equipment". The report further said that "available information about Iranian activities indicates a maturing offensive program with a rapidly evolving capability that may soon include the ability to deliver these weapons by a variety of means".

According to the [Nuclear Threat Initiative](#), Iran is known to possess cultures of the many [biological agents](#) for legitimate scientific purposes which have been weaponised by other nations in the past, or could theoretically be weaponised. Although they do not allege that Iran has attempted to weaponise them, Iran possesses sufficient biological facilities to potentially do so.

Iran ratified the [Biological Weapons Convention](#) on 22 August 1973.

### Chemical Weapons

Iran has experienced attack by chemical warfare (CW) on the battlefield and suffered hundreds of thousands of casualties, both civilian and military, in such attacks during the 1980–88 [Iran–Iraq War](#). As a result, Iran has promulgated a very public stance against the use of chemical weapons, making numerous vitriolic comments against Iraq's use of such weapons in international forums. Iran is not known to have resorted to using chemical weapons in retaliation for Iraqi chemical weapons attacks during the Iran–Iraq War, though it would have been legally entitled to do so under the then-existing international treaties on the use of chemical weapons which only prohibited the first use of such weapons. Following its

experiences during the Iran–Iraq War, Iran signed the [Chemical Weapons Convention](#) on 13 January 1993 and ratified it on 3 November 1997. In the official declaration submitted to OPCW Iranian government admitted that it had produced mustard gas in 1980s but that ceased the offensive program and destroyed the stockpiles of operational weapons after the end of war with Iraq.

A U.S. [Central Intelligence Agency](#) report dated January 2001 speculated that Iran had manufactured and stockpiled chemical weapons – including [blister](#), [blood](#), [choking](#), and probably [nerve agents](#), and the bombs and artillery shells to deliver them. It further claimed that during the first half of 2001, Iran continued to seek production technology, training, expertise, equipment, and chemicals from entities in Russia and China that could be used to help Iran reach its goal of having indigenous nerve agent production capability. However the certainty of this assessment declined and in 2007 the U.S. [Defense Intelligence Agency](#) limited its public assessment to just noting that "Iran has a large and growing commercial chemical industry that could be used to support a chemical agent mobilization capability."

Iran is a signatory of the Chemical Weapons Convention, which bans chemical weapons, delivery systems, and production facilities. Iran has reiterated its commitment to the CWC and its full support for the work of the OPCW, in particular in view of the considerable suffering these weapons have caused to the Iranian people. Iran has not made any declaration of a weapons stockpile under the treaty ([Wikipedia, 2012](#)).

**Title:** Iran Said To Be Producing Bioweapons

**Date:** May 15, 2003

**Source:** [Washington Post](#)

**Abstract:** Iran has begun production of weaponized anthrax and is actively working with at least five other pathogens, including smallpox, in a drive to build an arsenal of biological weapons, according to an opposition group that previously exposed a secret nuclear enrichment program in the country.

The group, Mujaheddin-e Khalq, citing informants inside the Iranian government, says the anthrax weapons are the first fruits of a program begun secretly in 2001 to triple the size of Iran's biowarfare program. The push for new biological weapons was launched in parallel with a more ambitious campaign to build massive nuclear facilities capable of producing components for nuclear bombs, said officials of the National Council of Resistance of Iran, the political arm of the Mujaheddin, which seeks the overthrow of the Iranian government.

"We can say with certainty that the Iranian regime now has the capability of mass production of biological material for weapons use," Alireza Jafarzadeh, the council's U.S. representative, said in an interview. The group has scheduled a news conference today in Washington to release more details.

Although many weapons experts believe Iran maintains at least a rudimentary biological weapons program, few details are known. The CIA, in an unclassified report released this year, said Iran "probably" maintains an offensive biological weapons program and likely "has capabilities to produce small quantities" of biological agents.

The opposition group's claims, if true, would suggest that Iran's pursuit of biological weapons is more aggressive than previously believed.

The Mujaheddin-e Khalq, also known as the People's Mujaheddin, is listed by the State Department as a terrorist group, though weapons experts and intelligence officials say many of the group's past claims about Iranian weapons programs have been largely reliable. The group first exposed a massive nuclear facility built near the town of Natanz to make enriched uranium, which can be used for commercial nuclear power plants or to make nuclear weapons.

In recent weeks, the Mujaheddin has been fighting for survival after some of its Iraq-based military camps came under attack by U.S. forces during the war. Although the Mujaheddin claimed neutrality in the U.S.-led campaign against Iraq, the Bush administration decided to bomb Mujaheddin bases in an apparent attempt to thaw relations with Iran. Later, the U.S. Central Command arranged a cease-fire that allowed the group to keep many of its weapons and maintain its camps. But then the Bush administration decided to actively seek its surrender.

Mujaheddin officials said the timing of the release of their report on Iran's biowarfare program was unrelated to their problems with the U.S. government. Jafarzadeh, the spokesman, said the Mujaheddin had been gathering information about the program for months and had received critical new details from inside the Iranian government within the past few days.

The expansion of Iran's biological weapons program was spelled out in a four-page document called the "Comprehensive National Microbial Defense Plan," which was approved by Iran's Supreme National Security Council in 2001, Jafarzadeh said. The plan called for a tripling of the country's bioweapons production capacity by 2003, and divided responsibilities across a network of research facilities linked to Iran's armed forces or Revolutionary Guard.

A single director coordinates the activities of five government agencies involved in the program and reports directly to Iranian President Mohammad Khatami, the officials said. Among the key facilities are the Center for Genetic Biotechnology and Engineering Research, located at Malek Ashtar University in northern Tehran, and new bioresearch facilities attached to Tehran's Imam Hussein University and the Shaheed Maysami complex west of the capital, the officials said.

While Iran in the past has relied on foreign suppliers for advanced equipment such as industrial fermenters for growing pathogens, the country now can produce nearly all the critical parts, the officials said. Jafarzadeh said Iran's biological, chemical and nuclear programs have all progressed rapidly under the leadership of Khatami, a man regarded in the West as a moderate and reformer.

Among the pathogens being weaponized under the plan are anthrax, aflatoxin, typhus, smallpox, plague and cholera, Jafarzadeh said. Mujaheddin officials were unable to produce hard evidence to support the claim, but they described specific research facilities and named individual scientists who were placed in charge of the effort. Jafarzadeh said experts were recruited from several countries, including North Korea, Russia, China and India, to assist the effort.

"The report about smallpox was very carefully assessed and verified," Jafarzadeh said.

No nation is known to have produced smallpox weapons other than the Soviet Union, which destroyed its stocks in the early 1990s. Although various reports have suggested that other nations experimented with smallpox -- most notably North Korea and Iraq -- the claims have never been verified.

Weapons experts reacted cautiously to the group's claims, especially the report about smallpox. But several said the group's description of Iran's bioweapons program seemed plausible.

"It can't be dismissed out of hand," said William Potter, director of the Center for Nonproliferation Studies at the Monterey Institute of International Studies. "There is no doubt the Iranians have been very interested in such weapons. We know they left their calling cards at various institutes in the former Soviet Union seeking to recruit experts in the field."

David Albright, a nuclear weapons expert and former member of a U.N. nuclear weapons inspection team in Iraq, said he could not verify the claims but said the group provided solid leads in the past. "Often their information is correct, in part because they have reliable human sources well placed in the Iranian government," Albright said. "And they release information that you can check -- information that is actionable" ([Washington Post, 2003](#)).

**Title:** Iran Making Bioweapons, Exiles Say

**Date:** May 15, 2003

**Source:** [Sun Sentinel](#)

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**Title:** Iran's Bioweapons Are Fiercer, Tehran Opposition Group Says

**Date:** May 16, 2003

**Source:** [UCLA](#)

**Abstract:** Iran has aggressively expanded its biological-arms program and can now deliver deadly agents through weapons systems, according to a group opposed to the nation's fundamentalist government.

Iran's program is focused on the production of weapons-grade anthrax , typhus, smallpox, plague and cholera, said Alireza Jafarzadeh, the U.S. representative of the National Council of Resistance of Iran, an arm of the Mujahedin-e Khalq, or MEK.

"Our sources have confirmed that the Iran regime is capable of delivering biological weapons and inflicting massive casualties," Mr. Jafarzadeh told a news conference here on what he described as a growing danger posed by Tehran's weapons of mass destruction.

"We need to get the attention of the policy makers about the threats of the Iran regime," he said.

The MEK gained credibility this year when it disclosed an Iranian nuclear enrichment program and other weapons production information that was later verified by U.S. officials. The State Department lists the MEK as a terrorist group, while MEK officials say the designation was made to appease Iran's government. The MEK, which has military bases in Iraq, has come under attack by U.S. forces and recently agreed to disarm.

MEK officials said the evidence of Iran's bioweapons activities was gathered in the past several months from informants in Iran, although the group didn't produce documents to support the allegations. The disclosures, if true, could strain diplomatic relations further between the Bush administration and Iran, which Mr. Bush has placed, with Iraq and North Korea, on his "axis of evil."

Secretary of Defense Donald Rumsfeld said Thursday that the U.S. has reason to believe senior leaders of al Qaeda, the global terrorist organization, are hiding in Iran and strongly suggested that the Iranian government knows of their presence. Secretary of State Colin Powell has referred recently to findings by the International Atomic Energy Agency that Iran has a vigorous nuclear weapons program.

Iran has said its technical programs are used for peaceful purposes to benefit its citizens.

In an attempt to ease relations with the U.S., Iranian President Mohammad Khatami this week in Lebanon condemned Monday's terrorist attack in Saudi Arabia that claimed more than 30 lives, including eight Americans. But Mr. Khatami expressed support for Hezbollah, the Lebanese militant group that the U.S. regards as a terrorist organization.

In a recent unclassified report, the Central Intelligence Agency said Iran "already has stockpiled blister, blood and choking agents -- and the bombs and artillery shells to deliver them -- which it previously has manufactured." The report also concluded that Iran is "vigorously pursuing programs to produce indigenous weapons of mass destruction -- nuclear, chemical and biological -- and their delivery systems."

Soona Samsani, president of the National Council of Resistance of Iran, said that the MEK had received information that the Iranian government is carrying out a plan to consolidate several university biological weapons research and military production programs. The programs were initiated in 1985, during the war with Iraq, when Baghdad used biological and chemical weapons.

Ms. Samsani named the chief scientists and locations of weapons facilities throughout the country and said that Iran plans to increase the number of researchers to 11,000 within a few years, from about 3,000 now. She also claimed that Iran was receiving technical assistance and equipment from China, India, North Korea and Russia ([UCLA, 2003](#)).



**Title:** Iran Denies Has Banned Weapons Or Shelters Al Qaeda

**Date:** May 16, 2003

**Source:** [UCLA](#)

**Abstract:** Iranian government officials strongly denied on Friday that Iran was producing weapons of mass destruction or was sheltering members of Osama bin Laden's al Qaeda network.

A senior government official denied allegations by an exile opposition group, the National Council of Resistance of Iran, that Tehran had biological weapons armed with anthrax, smallpox and typhoid.

"I strongly deny that we have biological weapons because we do not need any banned weapons," the official, who asked not to be identified, told Reuters.

President Bush has dubbed Iran part of an "axis of evil" and accused the Tehran government of sponsoring terrorism and developing nuclear arms.

Bush's national security adviser, Condoleezza Rice, reiterated U.S. criticism of Iran on Wednesday, accusing it of being one of the world's leading "sponsors of terror."

She said the United States had raised alarms about Iran's nuclear weapons programs and also believed it allowed al Qaeda to operate from its territory.

Iran's Foreign Ministry spokesman Hamid Reza Asefi rejected those accusations on Friday as "baseless."

"The Islamic Republic of Iran, based on its own principles, is very serious and resolved to combat terrorism and its nuclear programs are very transparent and peaceful," Asefi was quoted by the official IRNA news agency as saying.

The agency also said Asefi rejected U.S. accusations that leaders of al Qaeda were living in Iran. The United States blames the group for the September 11, 2001 attacks in New York and Washington.

The National Council of Resistance of Iran, the political wing of the People's Mujahideen Organisation, provided a list of names and places at a Washington news conference on Thursday where it said biological weapons were being produced.

The group, which previously exposed the existence of Iran's Natanz uranium enrichment facility the United States says is part of a nuclear weapons program, did not provide any evidence to back up its new claims on biological weapons, but said its information came from Iranian government sources.

The Iraq-based Iranian rebel group started surrendering to the U.S. military last week under a deal that effectively ends its operations as a fighting force.

"The Mujahideen are making these accusations against Iran because of the recent U.S. pressure on them," the Iranian official who declined to be identified said on Friday.

Iran insists its ambitious nuclear program is purely for the peaceful generation of electricity.

A U.S.-led war launched in March against Iran's western neighbor, Iraq, toppled the government of Saddam Hussein. Washington had accused Baghdad of developing banned weapons of mass destruction ([UCLA, 2003](#)).

**Title:** U.S. Report Finds Active Biological Weapons Programs In Iran, North Korea, Russia And Syria

**Date:** September 7, 2005

**Source:** [NTI](#)

**Abstract:** The U.S. State Department has found that Iran, North Korea, Russia and Syria are maintaining biological weapons programs, the Associated Press reported last week (see [GSN](#), March 29).

The State Department also found that China still has “some elements” of a biological weapons program, while experts failed to agree on Cuba’s bioweapons production capacity, AP reported.

The findings were outlined in the State Department’s “Adherence to and Compliance with Arms Control, Nonproliferation, and Disarmament Agreements and Commitments” report. The congressionally mandated report, covering the two-year period ending in December 2004, details individual country’s WMD capabilities and missile proliferation efforts, according to AP.

According to the report: Based on available intelligence, Iran is believed to have an offensive biological weapons program; North Korea has a “dedicated, national-level effort to develop a BW capability; Russia “continues to maintain” a weapons program; and Syria would be in violation of the Biological Weapons Convention if it was a member.

China “maintains some elements of an offensive BW capability,” while Cuba has at least a “limited offensive BW research and development effort,” the report found (George Gedda, Associated Press/[Baltimore Sun](#), Aug. 30).

China rejected the report’s findings, according to *Voice of America*.

“These statements are far from the truth, and are irresponsible,” said Zhang Yan, director general of the Chinese Foreign Ministry’s arms control department. “We hope that the U.S. side will stop such erroneous practices, and we also express our strong dissatisfaction” (Luis Ramirez, [Voice of America](#), Sept. 1).

Russia has also challenged statements made in the report regarding its weapons programs, RIA Novosti reported last week.

“Those are not new accusations,” the Russian Foreign Ministry said in a statement. “The Russian Foreign Ministry has had to comment on similar points in other ‘research papers’ that put Russia in a group of countries violating nonproliferation agreements without providing any evidence many times before.”

The Foreign Ministry said the report presents “a one-sided and distorted picture of the implementation of the Strategic Arms Reduction Treaty.”

Russia said the State Department offered no evidence that it has failed to honor its Chemical Weapons Convention and Biological Weapons Convention commitments ([NTI, 2005](#)).

**Title:** Iranian Weapons Of Mass Destruction: Biological Weapons Program

**Date:** October 28, 2008

**Source:** [CSIS](#) (37 Page PDF)

**Abstract:** Any analysis of Iran’s biological weapons effort must be even more speculative than an analysis of its chemical and nuclear weapons efforts, and the details of its missile programs. Many claims can be traced back to hard-line opponents of the regime that have uncertain to dubious credibility. Others provide important insights into Iran’s potential capability, but do not prove Iran has an active program, or that it has ever produced such weapons. As is the case with Iran’s other potential efforts to develop weapons of mass destruction, Iran denies that it currently has such programs, although – as is the case

with chemical weapons – some statements imply it may have had such programs in the past. Similarly, the statements of the US government have the same internal problems and contradictions as those relating to chemical weapons, while too little data is available from other governments to get a picture of their official position or the judgments of their intelligence communities. Another problem in trying to gain insight into Iran's biological weapons programs is that these types of programs are easy to conceal due to the small-scale equipment and dual-use raw materials needed in the production process. Biological agents are easier and cheaper to produce than either nuclear materials or chemical warfare agents, and the necessary technology is widely available and relatively easy to acquire. The fact of the matter is that any nation with even modestly sophisticated biopharmaceutical industrial capabilities is capable of producing biological agents. But weaponizing and storing weaponized biological agents is a much more complex process. A number of NGOs have made considerable contribution to the analysis of Iran's programs, but they are forced to rely on uncertain reports and unreliable sources. Biological weapons also present the problem that there is no meaningful separation between defensive and offensive efforts. Effective defense requires access to effective biological agents. The facilities necessary to develop, and produce, such weapons can be very small compared to those for chemical and nuclear weapons. Biological weapons activities can easily be concealed in organizations, facilities, and even universities; which serve medical, biological manufacturing, and research purposes – although sometimes at the cost of a significant risk in safety. Moreover, the steady expansion of civil biotechnology, food processing, and pharmaceutical activities makes dual-use equipment commercially available that can be used to produce even the most advanced biological agents and a combination of Iran's use of covert purchasing networks and steadily weakening controls – particularly over used and surplus equipment – have further weakened already weak export control efforts.

### **A History of Uncertain Judgments and Indicators**

There have been reports that Iran has had biological weapons programs ever since the first years of the Iran-Iraq War. For example, US officials began to provide background briefings 1982 that Iran had imported suitable type cultures from Europe and was working on the production of mycotoxins -- a relatively simple family of biological agents that require only limited laboratory facilities for small-scale production. One of the first research facilities was established in 1986 under the Iranian Pasteur Institute, and around the same time a similar research program on producing myotoxins began at Vira Laboratory.

Many experts believed that an Iranian biological weapons effort had been placed under the control of the Islamic Revolutionary Guards Corps (IRGC), which had elements and subsidiaries known to have tried to purchase some equipment that could be used for the development and production of such weapons.

### **Actual Programs or Potential Capability**

A long chronology of reports surfaced from 1982 onwards, many in the form of official, unofficial, and opposition group background briefings. For example, U.S. and British intelligence sources reported in August 1989 that Iran was trying to buy two new strains of fungus from Canada and the Netherlands that can be used to produce mycotoxins. German sources indicated that Iran had successfully purchased such cultures several years earlier.

Some universities and research centers were linked to the biological weapons program. The Imam Reza Medical Center at Mashhad University of Medical Sciences and the Iranian Research Organization for Science and Technology were identified as the end users for this purchasing effort, but it is likely that the true end user was an Iranian government agency specializing in biological warfare. These reports intensified in the early 1990s, after the post-Gulf War discovery of Iraq's massive BW program. It is not clear, however, whether these reports describe real or potential activities, and whether the increase in reports since the early 1990s was the result of increases in Iranian activity or the assumption that Iran either had paralleled Iraq's efforts or was reacting to their disclosure.

Reports surfaced in the spring of 1993 that Iran had succeeded in obtaining advanced biological weapons technology in Switzerland and containment equipment and technology from Germany. According to these reports, this led to serious damage to computer facilities in a Swiss biological research facility by unidentified agents. Similar reports indicated that agents had destroyed German biocontainment equipment destined for Iran. More credible reports by U.S. experts indicate that Iran might have begun to stockpile anthrax and botulinum in a facility near Tabriz, can now mass manufacture such agents, and has them in an aerosol form. None of these reports, however, can be verified. As is the case with chemical weapons, the fact some reports were relatively specific did not mean that they proved accurate. But Iran does have increasingly sophisticated industries, and there sophisticated research facilities and universities could easily serve as a front for illicit BW-activities, and offer legitimate excuses for dual-use imports, as was the case in Iraq prior to 1990. It can also be reasonably assessed that except for Pakistan, Iran is the most advanced nation in the Muslim world in the production and use of industrial chemicals and biotechnology. All of this information compounds the uncertainties and ambiguities associated with Tehran's biological warfare intentions and capabilities ([CSIS, 2008](#)).

**Title:** Missile Test-Fired By Iran Has Potential Bioweapon Capabilities

**Date:** February 4, 2010

**Source:** [Bio Prep Watch](#)

**Abstract:** Iran has announced the successful test firing of a new satellite-carrying rocket containing an "experimental capsule" with live species inside that has raised the spectre of potential biological or chemical attacks.

The launch of the Kavoshgar 3 rocket has been condemned by the United States as a "provocative act," and comes at a time when the U.S. has openly said that it was upgrading its missile defense systems in countries neighboring Iran.

Suspensions currently center on the test firing representing a potential test for a long-range nuclear, biological or chemical weapon. The Islamic regime in Iran denies that there is a link between its missile and nuclear programs.

The test launch also has raised fears as it comes only days before February 11, a date on which Iranian President Ahmadinejad said the Islamic Republican would deliver a blow to "global arrogance."

The rocket's experimental capsule, which allows animals to survive a space journey, can also carry a weaponized virus or chemical weapon, experts fear. The Iranian regime is presumed to possess such weapons and, with this new rocket, would be able to deliver them to the other side of the world.

Before such an event is possible, however, Iran would need to fine tune the rocket's accuracy and munitions dispersal ([Bio Prep Watch, 2010](#)).

**Title:** Iran Capable Of Biological Warhead Attack On Europe

**Date:** July 1, 2010

**Source:** [Bio Prep Watch](#)

**Abstract:** U.S intelligence officials believe Iran may be poised to launch a major missile attack on Europe with missiles that could be tipped with biological or chemical warheads.

Defense Secretary Robert Gates, thebulletin.us reports, recently told the Senate Armed Services Committee that Iran's missile arsenal contains both liquid and solid-fuel intermediate-range ballistic missiles and that the threat was the basis of a new U.S. missile defense plan, called "Phased Adaptive Approach," for NATO allies.

"It would more likely be a salvo kind of attack, where you would be dealing potentially with scores or even hundreds of missiles," Gates told the committee, thebulletin.us reports. "One of the elements of the intelligence that contributed to the decision on the phased adaptive array was the realization that if Iran were actually to launch a missile attack on Europe, it wouldn't be just one or two missiles or a handful."

The plan, set for completion by 2020 and already approved by NATO, calls for deployment of SM-3 sea-based missile defenses aboard Aegis-class cruisers in the Mediterranean Sea.

"This would give us the ability to protect our troops, our bases, our facilities and our allies in Europe," Gates told thebulletin.us.

Gates noted that North Korea also posed a major threat to Europe.

"I think by 2020 we may well see it from other states, especially if we're unsuccessful in stopping Iran from building nuclear weapons," Gates said ([Bio Prep Watch, 2010](#)).

**Title:** Iran May Have Carried Out Bioweapons Activities

**Date:** February 7, 2011

**Source:** [Bio Prep Watch](#)

**Abstract:** Iran may or may not have carried out prohibited chemical or biological weapons activities, according to a United Kingdom-based think tank.

The International Institute for Strategic Studies said in a 128 page report on Iran's nuclear, chemical and biological capabilities that it cannot be determined from public information what exactly their activities have been. It also noted that claims against Iran may have been exaggerated, according to Reuters.

The influential think tank also noted that Iran could probably make a nuclear weapon in as little as one to two years, though industrial sabotage and the Stuxnet worm have probably slowed its development plans.

Iran and the United States are in an extended standoff over Iran's nuclear program, which Tehran says is peaceful, but the United States believes exists to make nuclear weapons, Reuters reports.

The IISS says that the program was dented by the Stuxnet computer worm, which many believe was created by the United States or Israel to cripple the program, Reuters reports. Iran says the worm affected computers at its primary nuclear plant, but did not affect its regular operations.

Western and other intelligence agencies have tried to slow international smuggling to make it more difficult for Iran to obtain necessary equipment.

"I think the world has been pleasantly surprised by the limitations that have been imposed on the program through industrial sabotage and the Iranians' reliance on inefficient methods," Mark Fitzpatrick, director of the IISS non-proliferation and disarmament program, said, according to Reuters ([Bio Prep Watch, 2011](#)).

**Title:** Leaked Cable Warns Of Iranian Chemical Weapons Plant

**Date:** April 22, 2011

**Source:** [Bio Prep Watch](#)

**Abstract:** According to a U.S. cable sent by Secretary of State Hilary Clinton that was recently released by WikiLeaks, Iran has a secret chemical weapons plant near the city of Qom, Iran.

In the cable, Haaretz.com reports, Clinton requested that the U.S. embassy in Beijing take action against Zibo Chemet, a Chinese company involved in the transfer of equipment, insight and technology to Iran.

The cable, which is dated July 24, 2009, says that Zibo Chemet supplied vital equipment for Iran's chemical weapons program.

Under regulations of the Australia Group, which supervises the sale of sensitive chemical technology, equipment and materials, such sales are forbidden. China is a member of the Australia Group.

"We have new information indicating that Zibo Chemet transferred technology for the production of glass-lined reactor equipment to Iranian customers, significantly enhancing Iran's ability to produce indigenously chemical equipment suitable for a chemical warfare program," the cable says, Haaretz.com reports.

The cable requests that the Beijing embassy pass information about Zibo Chemet to the Chinese government. It also demands aggressive action to force the firm to cease shipments.

According to Haaretz.com, Zibo Chemet was blacklisted by the U.S. in April 2007 after suspicions arose that it had supplied similar equipment to Iran, North Korea and Syria ([Bio Prep Watch, 2011](#)).

**Title:** Iran May Have Supplied Libya With Chemical Weapons Shells

**Date:** November 22, 2011

**Source:** [Bio Prep Watch](#)

**Abstract:** According to U.S. officials, President Obama's administration is currently investigating whether Iran supplied the Libyan government of Muammar Gaddafi with hundreds of special artillery shells for chemical weapons that Libya kept secret for decades.

The shells, which Libya filled with highly toxic mustard agent, were uncovered in recent weeks by revolutionary fighters in central Libya at two separate sites. Both of the sites are under heavy guard and round-the-clock surveillance by drones, Libyan and U.S. officials said, the Washington Post reports.

The discovery of the shells has prompted a U.S. intelligence led probe into how the Libyans obtained them. Several sources said early speculation had fallen on Iran.

A U.S. official with access to classified information confirmed that there were "serious concerns" that Iran had provided Libya with the shells, albeit some years ago, according to the Washington Post. In recent weeks, U.N. inspectors have released new information indicating that Iran has the capacity for developing a nuclear bomb, a charge officials in Iran have long rejected. Confirmed evidence of Iran's provision of the specialized shells may worsen international tensions over the country's alleged pursuit of weapons of mass destruction.

One U.S. official said Iran may have sold the shells to Libya after the end of its eight year war with Iraq, in which the Iraqis used nerve and mustard agents against tens of thousands of Iranian troops, the Washington Post reports.

Four diplomatic and American sources said that the shells contain sulfur mustard, popularly known as mustard gas. Mustard gas is a liquid that is rapidly absorbed and causes debilitating respiratory damage and burns. Victims are unaware of their exposure for several hours but then experience swollen eyes, accelerated breathing trouble, widespread blisters, vomiting, nausea, diarrhea and, in severe cases, loss of sight or death. There is no antidote, and recovery, if possible, takes months of skilled medical care ([Bio Prep Watch, 2011](#)).

**Title:** Iran Dismisses Connection To Libyan Chemical Weapons

**Date:** November 28, 2011

**Source:** [Bio Prep Watch](#)

**Abstract:** Iran has dismissed a United States news report implicating it in a chemical weapons cache that was uncovered in Libya.



A spokesman for Iran said that the country was actually a champion in the fight to eradicate such arms. The spokesman was responding to a Sunday Washington Post report that quoted an anonymous U.S. official who said that special artillery shells made by Iran and filled by Libya with mustard gas were discovered in recent weeks at two different sites, AFP reports.

"About the arms delivery to the regime of (toppled Libyan leader Muammar) Gaddafi...The West would do better to look to itself, because Iran has always been at the forefront in the fight against chemical weapons," Ramin Mehmanparast, the foreign ministry spokesman for Iran, said, according to AFP.

Mehmanparast said that Iran had experience as a victim of chemical weapons, when Iraq used mustard gas its troops during the 1980-1988 war.

"Western countries have to answer how certain nations supplied the Iraqi regime with such weapons during the Iran-Iraq war," Mehmanparast said, AFP reports.

Officials in Iran said that Western countries supplied Baghdad with the chemical weapons for the war.

The shells were uncovered by revolutionary fighters in central Libya. Both of the sites are under round-the-clock surveillance by drones, the Washington Post reports ([Bio Prep Watch, 2011](#)).

# Bio Terror Bible

## EXPOSING THE COMING BIO-TERROR PANDEMIC

**BIOTERRORBIBLE.COM:** Despite the fact that the United States and its European Union allies have been researching, planning and drilling for a major bio-terror attack and the subsequent pandemic, the nations of [Egypt](#), [Iran](#), [Iraq](#), [Libya](#), [North Korea](#) and [Syria](#) have been quietly set up over the last decade as potential bio-terror scapegoats. Based on the evidence available, it appears that the U.S., [Israel](#) and [South Korea](#) may be the future victims of major false-flag bio-terror attacks.

The war torn country of Iraq was scapegoated for bio-weapons and bio-terror long before U.S. and NATO ever invaded the country. Despite the fact that [no weapons of mass destruction](#) (WMD) were ever found in Iraq, the Middle Eastern nation is still paying the price of Pentagon propaganda.

**Title:** U.S. Says Iraq Would Target Troops

**Date:** July 14, 2002

**Source:** [UCLA](#)

**Abstract:** The threat from Iraq's chemical and biological weapons is primarily to U.S. troops and to enemies of President Saddam Hussein inside and near Iraq rather than to civilians in the United States, defense and intelligence officials say.

Iraq is believed to have biological weapons including anthrax spores and botulinum poison, which causes botulism. As for chemical agents, Iraq is thought to possess mustard, tabun, sarin and possibly VX gases, said the officials, who spoke on condition of anonymity. Those are what U.N. inspectors had found in significant amounts before they left Iraq in 1998 and were not allowed to return.

Saddam's most likely targets would be Israel, any U.S. troops attacking Iraq and any rebel forces inside Iraq, the officials said.

The Iraqi military could strike targets inside the country and in surrounding countries with short-range missiles, artillery or aircraft using bombs or sprayers.

Officials say Saddam's military probably also has squirreled away a few Persian Gulf War-vintage Scud missiles capable of reaching targets 400 miles away. That would pose a danger to Israel and Iraq's other neighbors but not U.S. territory.

Saddam would be likely to consider using the weapons only if the Bush administration were close to removing him from power militarily, officials say. They say any attack that endangered his hold on power, even if it were to cause few deaths, probably would bring massive retaliation.

The United States considers chemical and biological weapons on a par with nuclear weapons.

It is uncertain how much damage an Iraqi counterattack could do, in part because it is unclear what weapons he has developed since 1998, said analyst Anthony Cordesman, who has worked in the departments of Defense, State and Energy.

Experts surmise that Saddam could not stop a U.S. attack by using such weapons. But a chemical or biological attack that caused even a few deaths among American troops in Iraq or civilians in Israel could cause widespread panic.

In the worst case, an attack on Israel could lead that country to consider nuclear retaliation, said Cordesman, now at the Center for Strategic and International Studies in Washington.

The administration points to Iraq's pursuit of chemical, biological and nuclear weapons as the principal reason to get rid of Saddam. Deputy Defense Secretary Paul Wolfowitz visits NATO ally Turkey beginning Sunday to discuss what to do about Iraq. He will be joined by the top U.S. military commander in the region and the No. 3 State Department official.

Cordesman said America's failure to provide specifics on Saddam's activities since 1998 makes allies reluctant to support a U.S. attack.

"Most people outside the U.S. feel we are crying wolf," he said.

Iraq asserts it has destroyed its chemical and biological weapons. Talks between the United Nations and Iraq to renew weapons inspections have stalled repeatedly.

At the end of 1998, Iraq told U.N. inspectors it had 550 tons to 650 tons of mustard gas. Experts estimate it has the chemicals to make another 220 tons. Likewise, Iraq declared it had 2,245 gallons of concentrated, weapons-grade anthrax. The United Nations believes current stocks could be as much as four times that.

Iraq also has researched nuclear weapons but is not believed to have the material to build any. Israeli jets attacked and destroyed an Iraqi nuclear research center at Tuwaythah, near Baghdad, in 1981.

Saddam ordered chemical weapons used against Iraqi Kurds and Iranian forces in the 1980s and killed thousands of people.

To make a successful strike with such weapons, the target must have no defenses. U.S. troops have protections against them, defense officials said.

Biological weapons are more of an unknown, Cordesman said. Iraq's were relatively primitive before the Gulf War and the U.N. inspections that followed. But since biological and chemical weapons require only small production capabilities and can be hidden easily, Cordesman said, "It's almost impossible to track what they may have and may not have done."

Iraqi weapons laboratories would provide even more important targets for a U.S. strike than his weapons stockpiles, defense and intelligence officials say, because a lot of lethal agents can be produced in a short time.

U.S. officials say Iraq's scientists have survived, and production facilities bombed by the United States in 1998 have been rebuilt. Since Bush stepped up anti-Saddam rhetoric after Sept. 11, Iraq has moved more production capabilities underground ([UCLA, 2002](#)).

**Title:** In Assessing Iraq's Arsenal, The 'Reality Is Uncertainty'

**Date:** July 31, 2002

**Source:** [UCLA](#)

**Abstract:** U.S. intelligence analysts have been closely examining satellite images of the west bank of the Tigris River in Baghdad for signs of a laboratory rumored to exist there. Called Tahhaddy, or "Challenge," the lab is purported to have 85 employees and a top-secret mission: making biological weapons for Iraq's military.

Details about the lab have trickled out of Iraq in recent months in accounts from defectors and Iraqi exiles opposed to President Saddam Hussein. They tell of underground test chambers, heavy security and a viral strain code-named "Blue Nile," which sounds suspiciously like the Ebola virus.

If confirmed, the very existence of the lab could fuel the debate over whether the United States should attack Iraq. But confirming the lab's presence from satellite photos has proved difficult, so the laboratory today remains a mere shadow in the U.S. government's intelligence assessment -- an unknown threat in a landscape filled with others just like it.

"It sounds credible. It is certainly plausible," a Pentagon intelligence analyst who specializes in Iraq said of the facility last week. "But proving it is another matter."

The search for the laboratory illustrates one of the more vexing challenges facing White House and congressional leaders as they weigh military action against Iraq. Two days of Senate hearings on the topic open today. The decision about war hinges largely on a single issue: whether Iraq is actively seeking biological, chemical and nuclear weapons that could pose a threat to the United States and its allies, and how to respond if so.

President Bush has declared that Iraq belongs to an "axis of evil," countries that are seeking weapons of mass destruction, and has threatened to carry out "regime change" in Iraq. Senior administration officials have said Iraq's threat is grave enough to warrant a military invasion.

But intelligence officials and military experts on Iraq, both in the United States and abroad, express caution. While many analysts are convinced that Iraq is rebuilding its stockpile of weapons, the White House has not publicly offered evidence of a single factory or lab known to be actively producing them.

Congressional officials who receive classified briefings on Iraq say the case has not yet been made there, either -- in part because of what some officials perceive as a lack of reliable intelligence-gathering on the ground.

"The central reality is uncertainty, and the defectors' stories only reinforce that," Sen. Bob Graham (D-Fla.) said in an interview after a recent tour of the Middle East, where he discussed Iraq with regional leaders. "None of the people we met claimed to have conclusive knowledge of the status of Iraq's weapons program," said Graham, chairman of the Select Committee on Intelligence.

According to interviews with dozens of analysts in government, the military, intelligence agencies and academia, Iraq has a reservoir of knowledge, technology and equipment to create weapons of mass destruction. These specialists also agree that Iraq still has a residual arsenal from the 1991 Persian Gulf War, including stocks of chemical agents and possibly biological weapons that were hidden from the United Nations during seven years of inspections.

The experts also note that Hussein is clearly determined to preserve whatever capability he has. Iraq attempted to conceal its weapons infrastructure from U.N. inspectors throughout the 1990s, and for the past four years it has refused to allow the inspectors back into the country, even at a cost of continuing international sanctions.

Beyond that, the evidence that Iraq is actively rebuilding its arsenal consists of a mosaic of defector stories and intriguing intelligence data, including satellite images showing new construction in bombed-out industrial parks where weapons were once made, and documented attempts by Iraq to purchase specialized equipment and supplies.

But the intelligence reports and defector claims also leave some large questions unanswered. If an active weapons program exists, it is far from clear how extensive it is or how a serious threat it poses. Before the 1991 war, Iraq struggled with faulty weapons designs, and weapons often backfired on Iraq's own troops. The military also has not yet managed to marry its weapons with a reliable missile system that can accurately deliver warheads to distant targets.

The intelligence about Iraq is cloudy enough to lead to differing interpretations. Iraq experts who favor an aggressive response said the data add up to a compelling, if largely circumstantial, case. "It's as clear as these things get," said R. James Woolsey, director of the CIA from 1993 to 1995. "If defectors are all you've got, that's a problem. But you can triangulate -- you get more than one source."

But others, including some former U.N. weapons inspectors, say the evidence is simply inconclusive, underscoring the need for the inspectors' prompt return to Baghdad.

"I'd be the first to admit I have no idea what has gone on inside Iraq since 1998," said Scott Ritter, a former Marine Corps intelligence officer and chief U.N. weapons inspector in Iraq, who accused the Clinton administration of not aggressively seeking the country's full disarmament. "If someone can demonstrate that Iraq has [weapons of mass destruction] and continues to develop them, then Iraq is a rogue nation and I would be the first to sign up for that war. But no one has made that case yet."

Congressional leaders are pressing the White House for better intelligence -- and a public airing of the existing evidence -- as reports circulate that the administration is preparing plans for a possible strike against Baghdad.

"There's an important role for the Iraqi opposition, but we should be doing more than simply trying to confirm its stories," said Sen. Joseph R. Biden Jr., (D-Del.) chairman of the Foreign Relations Committee. "My attitude is we should be like the Missourians: Show me."

### **Biological Weapons**

The Tahhaddy lab, if it exists, could point to an Iraqi biological weapons program that was kept secret from Western intelligence agencies for more than 15 years.

Iraq's known bioweapons labs were so carefully hidden that U.N. officials failed to discover them until 1995 -- four years after the start of inspections. Only after the defection of the program's chief, Saddam Hussein's son-in-law, Hussein Kamal, did inspectors find secret laboratories that were producing lethal bacteria by the ton.

Iraq eventually acknowledged making three types of biological weapons using anthrax bacteria and two kinds of biological toxins: botulinum toxin and aflatoxin. But Iraq is also known to have conducted extensive research on at least three other pathogens that attack humans or crops, and it dabbled with a half-dozen others, U.N. inspection reports show.

In its final three years in Iraq, the U.N. Special Commission, or UNSCOM, destroyed all of Iraq's known biological munitions, and much of the equipment needed to make new ones. But the inspectors didn't get it all.

"UNSCOM didn't destroy everything," said Richard Spertzel, a retired Army biological warfare expert who oversaw the dismantling of Iraq's bioweapons program. "Iraq still has enough equipment, material, people and know-how to make biological weapons."

Spertzel said he observed industrial fermenters, spray dryers and other equipment that could be used today to mass-produce viruses and bacteria -- equipment that UNSCOM could not legally destroy because it had no proof the machines were being used to make weapons. He concludes that Iraq can now produce biological weapons without any help from abroad, which it could not have done a decade ago.

Iraq may still possess actual biowarfare bombs, as well. In a report to the U.N. Security Council in 1999, UNSCOM concluded that Iraq had concealed nearly 160 bombs and more than two dozen missile warheads filled with anthrax or other pathogens.

While Iraq insists it destroyed the weapons unilaterally, it has offered no proof. Iraq also never handed over its "cookbooks" of instructions for making biological weapons, or accounted for its seed stock of lethal pathogens or hundreds of pounds of imported nutrient broth used to grow the germs in bulk.

While conclusive proof remains elusive, there have been persistent reports since the late 1990s suggesting that Iraq has continued biological weapons research using small labs built underground or concealed inside specially modified trucks. Detailed accounts of what were described as secret labs were given to U.S. intelligence officials last fall by Adnan Ihsan Saeed al-Haidari, an engineer specializing in constructing dust-free "clean rooms" needed for certain types of laboratory work. After fleeing Iraq in early December, he reported that as many as 300 secret weapons facilities had been "reactivated" since the withdrawal of U.N. inspectors.

The engineer is being kept in a safe house by the Defense Intelligence Agency, which declined requests to interview Saeed. But according to a transcript of his debriefing session, which was made available by the Iraqi National Congress, a leading opposition group, Saeed said most of the facilities were small and cleverly disguised.

"In some areas, houses or a small factory would get converted into labs," Saeed said. He also described a visit to an underground biological lab on the grounds of one of Hussein's Baghdad

palaces, and his account is similar to reports of the Tahhaddy biological site offered by the Iraqi National Congress, which claims to have investigated the facility using informants. A document provided to The Washington Post by the group gives directions to the lab, lists its senior officers and describes a layout that includes above-ground offices and rooms for a special security detachment assigned to the building.

Most of its 85 employees work in a small underground lab that conducts research on deadly pathogens, including a mysterious Blue Nile strain, officials of the opposition group said. Biowarfare experts suggested the name may refer to Ebola, a disease that strikes in the Blue Nile region of East Africa.

The Iraqi National Congress officials said they have been unable to learn whether the lab had successfully produced viruses in a weaponized form. Several intelligence and UNSCOM officials described the group's report as credible but none could verify it independently.

Under UNSCOM, inspectors investigated several reports of underground weapons facilities but found none.

### **Chemical Weapons**

Chemical agents are the oldest and most technologically simple component of Iraq's arsenal of weapons of mass destruction. They were used to put down a rebellion by Iraqi Kurds in 1988. Experts interviewed for this article said there is convincing evidence Iraq still has chemical weapons stockpiles.

In their seven years in Iraq after the 1991 Gulf War, U.N. inspectors destroyed hundreds of chemically armed warheads and artillery shells. UNSCOM's incinerator ran for months, burning tons of mustard gas and nerve agents as well as the precursor compounds used to make them.

Yet, a vast amount of Hussein's chemical stockpile was never found and remains unaccounted for, U.N. inspection records show.

Among the more worrisome items: at least 3.9 tons of highly lethal VX, an advanced nerve agent so powerful that a few drops on the skin can kill. Iraq acknowledged making the VX and reported acquiring at least 600 tons of precursor chemicals.

Iraq claims to have destroyed the chemicals, along with about 550 mustard-gas shells and 107,000 special artillery shell casings, the U.N. documents show. But no evidence was offered, and UNSCOM dismissed the claim as a lie.

"Even while we were monitoring, Iraq was conducting activities right under our noses," said Charles A. Duelfer, former deputy executive chairman of UNSCOM and a resident scholar at the Center for Strategic and International Studies.

Duelfer and other UNSCOM veterans say Iraq could, without much difficulty, resume modest-scale production of chemical weapons -- and there is scattered evidence that it already has. In a report to Congress two years ago, the CIA said Iraq was rebuilding factories at which it once made chemical weapons, and installing dual-use equipment that can be employed to make new ones. More construction was spotted by spy satellites last year at a massive former chemical site known as Falluja, said Kelly Motz, weapons specialist at Iraq Watch, a research group in Washington that tracks arms-control issues.

Iraqi opposition officials and recent defectors such as Saeed contend that chemical munitions work is underway at such sites, but their accounts could not be independently confirmed.

The leader of the Iraqi National Congress, Ahmed Chalabi, citing informants within the Iraqi intelligence community, contends that Hussein's VX stockpile is far larger than the 3.9 tons Iraq reported -- something UNSCOM inspectors have long suspected. Chalabi also says that the VX had been converted into a dry salt for long-term storage and was positioned in various sites across Iraq for use in the event of a foreign attack. UNSCOM officials said the account seemed credible, given what was learned about Iraq's VX program in the final months of weapons inspections ([UCLA, 2002](#)).



**Title:** Blair Says Iraqis Could Launch Chemical Warheads In Minutes

**Date:** September 22, 2002

**Source:** [UCLA](#)

**Abstract:** Britain asserted today that the Iraqi government of President Saddam Hussein could launch chemical or biological warheads within 45 minutes of an order to use them and acquire a nuclear weapon in one to five years.

The claims were made in a 50-page report intended to bolster the Bush administration's case against the Iraqi leader and released today a few hours before Prime Minister Tony Blair outlined to British lawmakers his case for war if necessary to make Iraq disarm.

Addressing an emergency session of Parliament, Mr. Blair said: "Our case is simply this. Not that we take military action come what may. But that the case for Iraqi disarmament is overwhelming." In a clear allusion to the possible need for the use of force against Iraq, he added: "Alongside the diplomacy there must be genuine preparedness and planning to take action if diplomacy fails."

President Bush praised Mr. Blair for demonstrating what he called the Iraqi leader's "murderous ways." Iraq responded with contempt, calling the report a collection of "exaggeration and lies" and saying United Nations weapons inspectors would be granted "unfettered access" to go wherever they wanted upon their expected return to Iraq in the next several weeks.

During a heated, 11-hour debate in Parliament after Mr. Blair's statement, several lawmakers from the prime minister's Labor Party criticized him sharply. But there was also vigorous and widespread praise for his stand. In general, opposition to the Bush administration's war plans is less strong in Britain than elsewhere in Europe, where it is often virulent.

Once more today, Mr. Blair was cast in the role he took on energetically a year ago, when he rallied support for American's fight against Al Qaeda in Afghanistan. Once again, Britain issued information justifying a potential war against a target chosen by the Bush administration, with the purpose of broadening support and convincing those skeptical of findings attributed to American intelligence sources.

The report contained what it said was intelligence information that Iraq was trying to acquire significant quantities of uranium from unspecified countries in Africa, despite having no civilian nuclear program, and had extended the range of its ballistic missiles as part of a plan to dominate the region.

The chief new elements in the report, experts said, appeared to be the British assessments that Iraq could so quickly launch a chemical or biological warhead and that it had sought to acquire uranium in Africa that could be used to make nuclear weapons.

The view that Iraq is one to five years away from producing a nuclear bomb, depending on whether it could procure fissionable material abroad or produce it itself, is within the range given by other intelligence agencies.

"Intelligence shows that the Iraqi program is almost certainly seeking an indigenous ability to enrich uranium to the level needed for a nuclear weapon," the report said.

In a foreword to the report, Mr. Blair said he believed that the compilation of information from Britain's intelligence and security agencies had proved that Mr. Hussein threatened the stability of the world and had to be blocked now.

"What I believe the assessed intelligence has established beyond doubt is that Saddam has continued to produce chemical and biological weapons, that he continues in his efforts to develop nuclear weapons

and that he has been able to extend the range of his ballistic missile program," he said. "I also believe that, as stated in the document, Saddam will now do his utmost to try to conceal his weapons from U.N. inspectors."

The report said Iraq had stored and was continuing to produce chemical and biological agents capable of causing mass casualties, including mustard gas, sarin, [anthrax](#) and [botulinum toxin](#).

It added that there were command-and-control arrangements in place to use those chemical and biological weapons, and that intelligence showed Mr. Hussein might have delegated authority over them to his son Qusay.

Mr. Blair, Mr. Bush's staunchest ally on Iraq, was obliged earlier this month to summon Parliament back from summer recess for a one-day session after many lawmakers, mostly from his own party and at least two in his own cabinet, raised doubts about Britain's involvement in an anti-Iraq military campaign.

In a bid to get international support for moving against Iraq, the United States and Britain are preparing a United Nations resolution that would oblige Mr. Hussein to give up his programs to produce weapons of mass destruction and would threaten military action if he did not. Mr. Blair said the measure was just "days away." But opposition to any specific mention of military action is strong in the Security Council.

President Jacques Chirac of France said he still placed his faith in the weapons inspectors. China said it would study any United Nations draft resolution on Iraq, referring to the American and British plan to propose a measure threatening military action if Iraq did not disarm.

The report said Mr. Hussein had recalled specialists to work on his nuclear weapons program.

It asserted that Iraq had rebuilt chemical plants destroyed during the Persian Gulf war in 1991, and it published satellite pictures of two of them surrounded by high walls, watchtowers and security guards that the report said proved they were for military rather than civilian use. It also said Iraq had developed mobile laboratories for making biological weapons that could escape detection and attack invading troops.

Though it was forced upon him, the high-profile Parliament session gave Mr. Blair an opportunity to chronicle the thinking behind the government's position with the kind of clarity and persuasiveness welcomed in Washington. It also afforded his most vociferous critics at home their sought-for chance to air grievances.

But in the end, the feared revolt was limited to 53 of Labor's 412 members in a concluding technical protest vote.

One of the most prominent Labor skeptics in Parliament, Diane Abbott, said she had found the report unpersuasive. "Tony Blair will have to do better than this if he wants to convince the British public to go to war," she said.

Protesters in an open-top bus outside the House of Commons loudly sang John Lennon's "Give Peace a Chance."

While the report put forth no startling new disclosures and provided no "smoking gun," Donald Anderson, head of the foreign affairs select committee, told the Commons that he thought that was one of its merits. "It's a very British document," he said. "There is no hyperbole. It is low key, yet at the same time it is very sober and chilling."

Menzies Campbell, the foreign affairs spokesman for the Liberal Democrats, said he was still unconvinced of the need for military action. "Where is the evidence that containment and deterrence have now failed to the point at which military action is deemed necessary?" he asked.

The report said Mr. Hussein had retained up to 20 Al Hussein missiles, with a range of 650 kilometers (400 miles), capable of carrying chemical or biological weapons, and it published a map showing that Iraqi weapons under development could reach the whole of the Arab Middle East, Israel, Greece, Cyprus and Turkey. A report by the London-based International Institute of Strategic Studies earlier this month put the number of Al Hussein at 12.

In Baghdad, a government minister denied all the charges. "Mr. Blair is acting as part of the Zionist campaign against Iraq, and all his claims are baseless," Culture Minister Hamed Youssef Hummadi said at a news conference.

Mr. Blair, seeking to sway the opinions of the many critics in Britain who agree that Mr. Hussein is dangerous but believe that he has been effectively contained, said: "It is clear that, despite sanctions, the policy of containment has not worked sufficiently well to prevent Saddam from developing these weapons. I am in no doubt that the threat is serious and current, that he has made progress on weapons of mass destruction and that he has to be stopped."

In an implied response to criticism that he has hewn too closely to the Bush administration's hard line on Iraq, he said, "I believe that faced with the information available to me, the U.K. government has been right to support the demands that this issue be confronted and dealt with."

John Chipman, director of the International Institute of Strategic Studies, said today that the government's assessment disclosed fresh details about Mr. Hussein's efforts to procure materials abroad for a nuclear program and highlighted Iraq's strategy for confounding new inspections. "It shows that Iraq has prepared for the possible return of inspectors by developing more sophisticated concealment strategies," he told the BBC.

Gary Samore, a nonproliferation specialist who wrote the institute's report, said he had had only public information to go on, while the government had access to intelligence and could thus portray what has happened since United Nations weapons inspectors left Iraq in 1998, just before the United States and Britain began a bombing campaign.

Maj. Charles Heyman, editor of the defense journal *Jane's World Armies*, told Reuters that "there really is nothing new" in the report. He added, "We were all expecting the evidence for war, and what we got was evidence for U.N. inspections."

Polls have shown that Britons want action against Mr. Hussein only with United Nations approval, and that view was put forward repeatedly in the debate in Commons today.

The report went out of its way to portray the Iraqi leader as constantly and flagrantly in violation of United Nations rules and resolutions.

In one of the more original entries, the report made its case for Mr. Hussein's diversion of largesse to his own comfort by publishing a drawing of one of his vast presidential palaces overlaid on the distinctly smaller area taken up by Buckingham Palace.

Mr. Blair singled out passages attacking Mr. Hussein's human rights record. "Read it all, and again I defy anyone to say that this cruel and sadistic dictator should be allowed any possibility of getting his hands on more chemical, biological or even nuclear weapons," he said.

The report said that Mr. Hussein was able in 2001 to make \$3 billion in "illicit earnings" outside the control of the United Nations oil-for-food program. The report did not identify the sources of the money but said it went to finance his luxurious lifestyle and arms development ([UCLA, 2002](#)).

**Title:** U.S. Supplied Germs To Iraq In '80s

**Date:** October 1, 2002

**Source:** [UCLA](#)

**Abstract:** Iraq's bioweapons program that President Bush wants to eradicate got its start with help from Uncle Sam two decades ago, according to government records getting new scrutiny in light of the discussion of war against Iraq.

The Centers for Disease Control and Prevention sent samples directly to several Iraqi sites that U.N. weapons inspectors determined were part of Saddam Hussein's biological weapons program, CDC and congressional records from the early 1990s show. Iraq had ordered the samples, claiming it needed them for legitimate medical research.

The CDC and a biological sample company, the American Type Culture Collection, sent strains of all the germs Iraq used to make weapons, including anthrax, the bacteria that make botulinum toxin and the germs that cause gas gangrene, the records show. Iraq also got samples of other deadly pathogens, including the West Nile virus.

The transfers came in the 1980s, when the United States supported Iraq in its war against Iran. They were detailed in a 1994 Senate Banking Committee report and a 1995 follow-up letter from the CDC to the Senate.

The exports were legal at the time and approved under a program administered by the Commerce Department.

"I don't think it would be accurate to say the United States government deliberately provided seed stocks to the Iraqis' biological weapons programs," said Jonathan Tucker, a former U.N. biological weapons inspector.

"But they did deliver samples that Iraq said had a legitimate public health purpose, which I think was naive to believe, even at the time."

The disclosures put the United States in the uncomfortable position of possibly having provided the key ingredients of the weapons America is considering waging war to destroy, said Sen. Robert Byrd, D-W.Va. Byrd entered the documents into the Congressional Record this month.

Byrd asked Defense Secretary Donald H. Rumsfeld about the germ transfers at a recent Senate Armed Services Committee hearing. Byrd noted that Rumsfeld met Saddam in 1983, when Rumsfeld was President Reagan's Middle East envoy.

"Are we, in fact, now facing the possibility of reaping what we have sown?" Byrd asked Rumsfeld after reading parts of a *Newsweek* article on the transfers.

"I have never heard anything like what you've read, I have no knowledge of it whatsoever, and I doubt it," Rumsfeld said. He later said he would ask the Defense Department and other government agencies to search their records for evidence of the transfers.

Invoices included in the documents read like shopping lists for biological weapons programs. One 1986 shipment from the Virginia-based American Type Culture Collection included three strains of anthrax, six

strains of the bacteria that make botulinum toxin and three strains of the bacteria that cause gas gangrene. Iraq later admitted to the United Nations that it had made weapons out of all three.

The company sent the bacteria to the University of Baghdad, which U.N. inspectors concluded had been used as a front to acquire samples for Iraq's biological weapons program.

The CDC, meanwhile, sent shipments of germs to the Iraqi Atomic Energy Commission and other agencies involved in Iraq's weapons of mass destruction programs. It sent samples in 1986 of botulinum toxin and botulinum toxoid -- used to make vaccines against botulinum toxin -- directly to the Iraqi chemical and biological weapons complex at al-Muthanna, the records show.

Botulinum toxin is the paralyzing poison that causes botulism. Having a vaccine to the toxin would be useful for anyone working with it, such as biological weapons researchers or soldiers who might be exposed to the deadly poison, Tucker said.

The CDC also sent samples of a strain of West Nile virus to an Iraqi microbiologist at a university in the southern city of Basra in 1985, the records show ([UCLA, 2002](#)).

**Title:** How Vulnerable Are Troops If Iraq Taps Poison Agents?

**Date:** October 2, 2002

**Source:** [UCLA](#)

**Abstract:** In the Persian Gulf War, Iraqi troops loaded Scud missiles and artillery shells with chemical and biological agents, but never fired them at American forces. This time, things may be different.

Here at a desert base 50 miles from the Iraqi border, U.S. Army Maj. James Blankenhorn, an expert in chemical and biological weapons, worries about what that threat means for his troops. His primary concern isn't Iraq's arsenal of Scud missiles, which is badly depleted, or its rockets and artillery shells, which don't have the range to be much of a threat beyond Iraq's borders.

Maj. Blankenhorn thinks Baghdad's best chance to wreak havoc would be to use a less-conventional technique: deploy a small group of special-operations forces via truck, boat or crop-duster. They would spray chemical or biological agents five or 10 miles upwind from this base, which figures to be a key staging ground for any American move into Iraq.

Wind and temperature conditions would have to be just right, or the cloud might blow out to sea or evaporate. Still, if the base is crowded -- as it probably will be in the weeks leading up to a war -- a few hundred soldiers could be contaminated before sensors sounded and they scrambled into their protective gear. If Iraq used a long-lasting chemical, such as VX nerve agent, Camp Doha, with its hundreds of tanks, armored vehicles and humvees and thousands of troops, could be shut down for weeks of decontamination.

### **'Portal Shields'**

The possibility that Iraq will use biological or chemical weapons is one of the most difficult issues facing the White House and Pentagon as they contemplate a new effort to oust Saddam Hussein. In recent weeks, the Pentagon has quietly stepped up preparations to defend against such an attack. Five new biological-weapons detection systems, dubbed "Portal Shields," have been sent to military bases in Qatar, Saudi Arabia, Oman, the United Arab Emirates and Bahrain, all likely launching pads for a U.S. attack on Iraq. A sixth is on its way here.

In the next few weeks, the Pentagon will also ship 35,000 gallons of an experimental foam that can be used to decontaminate both soldiers and sensitive electronic equipment exposed to chemical weapons.

The U.S. Central Command, which will oversee any military action, has told manufacturers it could need as much as one million gallons, according to a defense official.

The Pentagon has also extended the tours of its chemical and biological reserve units -- called up after Sept. 11, 2001 -- for another year of active duty. And psychological-operations officers are developing a campaign of leaflets and broadcasts to warn Iraqi officers that they will be tried for war crimes if they follow orders and launch a biological- or chemical-weapons attack.

### **Safer at the Front?**

Paradoxically, military planners say U.S. forces closest to the front lines may be much less vulnerable than military or civilian targets farther away. Thanks to better sensors and extensive training, most soldiers at the front could don protective suits before being contaminated in a chemical-weapons attack -- although reacting to a biological-weapons attack would be harder. A large-scale, clandestine attack on a base like Camp Doha could be far more deadly and a logistical nightmare that disrupts support for thousands more troops in the field.

The most frightening scenario, and the one defense officials concede they are least prepared for, is if the Iraqi leader launches a chemical or biological attack on civilian populations either in a neighboring Arab state -- chiefly Kuwait, Qatar and Bahrain -- that is hosting U.S. forces or against Israel. The goal would be to weaken the resolve of Arab neighbors by intimidating them or by drawing Israel into the fight. With the exception of Israel, which has purchased the best gas masks and sensors for its citizens, none of the states in the region is currently prepared for such an attack, defense officials say.

There are also some notable gaps in the Pentagon's planning and potential problems with equipment. Civilians working at ports that will be used to bring equipment into the Gulf region haven't all received proper protective gear and training for a chemical- or biological-weapons attack. Defense officials say they are working on the problem. Meanwhile, about 250,000 defective protective suits, produced in the late 1990s, cannot be accounted for. Some probably remain in the Pentagon's 4.5-million-suit inventory, according to a report by the General Accounting Office presented at a congressional hearing Tuesday. The report also warned that many soldiers haven't received adequate training in using the hot, bulky suits.

Mr. Hussein already has proved his willingness to use such weapons. During the Iran-Iraq war of 1980-88, Baghdad launched chemical attacks mainly with rockets and artillery shells filled with mustard gas. The attacks wounded more than 40,000 unprotected Iranian soldiers and killed 2,000 to 3,000 troops. The Iraqi dictator appeared ready to do even more in the Gulf War. According to reports from United Nations weapons inspectors, in the weeks straddling late 1990 and early 1991, Mr. Hussein ordered his military to fill 75 Scud warheads, hundreds of aerial bombs, and thousands of rockets and artillery shells with sarin nerve agent, mustard gas, anthrax spores, botulinum toxin and the cancer-causing agent Aflatoxin.

No one is sure why he never used these weapons, but many analysts assume that he was deterred by the first Bush administration's threats of "overwhelming retaliation." With the current Bush administration's declared goal to overthrow or even kill Mr. Hussein, such threats may not deter the Iraqi dictator this time around.

It's difficult to estimate the size of Iraq's current arsenal. But its appetite for such weapons has been considerable. U.N. weapons inspectors destroyed 2,850 tons of mustard gas -- enough to contaminate hundreds of miles of territory -- and about 5.5 tons of sarin, cyclosarin and VX nerve agent, which could kill troops over a six-square-mile swath. The inspectors also destroyed about 2,210 gallons of anthrax and nearly 5,000 gallons of botulinum toxin. It isn't clear how much the inspectors didn't find. And Iraq has now had four years without inspections, during which time it has almost certainly restarted production at both biological- and chemical-weapons plants.



While the volume of toxins sounds terrifying, the means of delivering the weapons will determine a lot about their effectiveness. To start, Mr. Hussein is thought to have at most only a few dozen Scuds -- the most frightening weapon of the Gulf War and the one with the longest-reach. Scuds, artillery shells and rockets can't disperse deadly chemicals or bacteria over a wide area, and the blast from their explosive warheads destroys much of what the weapon carries. Less than 3% of anthrax and less than 0.05% of botulinum toxin can survive a blast, according to U.S. Army research. Less than 70% of VX nerve agent and less than 50% of mustard gas typically survives the explosion.

Pentagon officials also say that even for troops exposed, there are ways to counter the effects. Nearly half a million soldiers have already been vaccinated against anthrax. An attack with VX can be countered by an injection of atropine -- standard issue for troops in the field -- although the side effects, mainly dehydration and fatigue, could sideline a soldier for at least 24 hours.

Despite a 10-year push to develop new sensors, there are still some deadly chemical and biological agents that can't be detected. Military officials believe that Iraq has tried to produce a powder version of VX nerve agent, known as "Dusty VX," that is extremely hard to detect and decontaminate.

Perhaps most worrisome is the psychological impact of such an attack on the morale of troops and host countries. "As soon as a biological or chemical attack occurs, everyone feels exposed, everyone feels symptoms. That's its power," says Camp Doha's Maj. Blankenhorn.

U.S. military analysts say they can imagine several scenarios in which such weapons would be used:

Front-line troops: Some analysts believe that Mr. Hussein would only order an attack in extremis, as U.S. troops advanced on Baghdad or his hometown of Tikrit.

To halt advancing troops, chemical weapons, which would incapacitate troops in minutes, are more likely to be used than biological agents that take days before they sicken the enemy. Such an attack carries big risks for the attacker. "When you use artillery shells you have to worry that if the wind conditions aren't right it will blow back on your own troops," says Bill Patrick, who researched chemical weapons for the U.S. military for decades.

And while a chemical or biological attack could kill dozens of troops, defense officials play down the threat of large casualties on the battlefield. The likelihood of a direct attack on ground troops also may depend on how many ground forces the U.S. decides to send into Iraq.

The Iraqis' biggest problem, defense officials say, would be delivering such weapons over a large area. Since each of Mr. Hussein's artillery shells and rockets can't carry a lot of agent, the Iraqi leader would have to fire hundreds of artillery and rocket rounds spread out over the entire battlefield. During the Gulf War, U.S. pilots easily destroyed Iraqi artillery and rocket launchers whenever they massed in the desert. Mr. Hussein also has been developing unmanned aerial drones, which carry large tanks of agent and could spray a fine mist over troops. But the drones are slow-moving and would be easy targets for U.S. fighter jets.

Another factor that probably would limit the damage from such an attack are U.S. chemical-weapons sensors, which have been developed since the Gulf War and would give troops ample time to don protective gear. Today's chemical sensors can identify both mustard gas and nerve agents in less than a second. The Army's M-93 Fox chemical reconnaissance vehicle, fielded in the early 1990s, uses an infrared beam to detect a chemical cloud as far away as three miles, allowing troops to maneuver around suspicious clouds and to put on protective gear before they are contaminated.

The real weakness would be with biological weapons. The Army's biological sensors can detect eight to 10 biological agents in about 15 to 45 minutes. That's far better than what the U.S. brought to the fight during the Gulf War, but it still doesn't give soldiers enough time to don protective gear. The sensors,

however, should give doctors ample time to treat troops infected with agents such as botulinum toxin, Q fever or tularemia, before serious symptoms take hold. Most soldiers have been vaccinated against anthrax.

That said, an attack would still slow a U.S. advance, as soldiers near the infected area donned heavy jackets, gloves and pants lined with charcoal filters to screen out chemical agents. They would also have to put on masks, which limit peripheral vision. If the attack took place in spring or summer, when temperatures regularly soar above 100 degrees, it would be very hard for soldiers to advance on Baghdad without losing significant numbers of men to heat exhaustion.

Attacks on airfields or ports: If Mr. Hussein's goal is to kill U.S. soldiers and slow down an invasion, he might strike in the early days of a campaign at regional ports or airfields when those facilities are filled to capacity with U.S. forces gathering for the fight.

For years military planners have speculated that Mr. Hussein's best means for delivering his chemical and biological weapons to U.S. ports and airfields was with small teams of terrorists. In 1997 a Pentagon team of 18 generals and admirals projected different ways such an attack could take place, according to a Pentagon report.

In one scenario, small teams of Iraqi soldiers unleashed mustard gas from an old bread truck outfitted with agricultural sprayers. The truck was mistakenly let on base by troops who thought it was delivering food. In another scenario, a helicopter took off from a barge floating about 15 miles from the Indian Ocean island of Diego Garcia and sprayed cholera into the air, infecting thousands of U.S. Marines preparing to board ships. The Marines didn't fall ill until they were at sea.

Finally, the generals envisioned speedboats, loaded with chemical and biological weapons, ramming into docks near key U.S. ports in Bahrain and Kuwait -- a scenario eerily reminiscent of the 2000 attack on the USS Cole in Yemen.

Although Mr. Hussein's Scud arsenal is depleted and less of a threat than a terrorist attack, he could use the missiles to strike U.S. ports and airfields. Key U.S. bases in Kuwait, Bahrain and Qatar are all within range of Mr. Hussein's Scuds, which can travel distances of about 405 miles and carry as much as 55 gallons of agent -- about 10 times more than an artillery shell. But Mr. Hussein's Scuds aren't very accurate and, like artillery shells and rockets, which rely on explosive charges to disperse chemical or biological substances into the air, they can't spread their poisons over a great distance.

Civilian populations: With few Scuds left in its arsenal, Iraq could decide its best use would be against an Arab state hosting U.S. troops. An even more likely target would be Israel with the hope of drawing it into the fight, and turning the Arab world even more against the Americans.

During the Gulf War, Iraq fired 39 Scuds in and around Tel Aviv. Although the Scuds contained no chemical agent, they produced widespread panic. At U.S. insistence, the Israelis didn't respond. But Israeli officials have made clear that won't be the case this time around, especially if the Scuds are carrying chemical or biological weapons.

In recent years, to protect its major cities, Israel has purchased the same chemical and biological sensors that the U.S. military relies on. But it isn't clear how well the sensors, which were designed for battlefields and bases, will work in big cities where cars and tall buildings often create unpredictable wind patterns.

Although all Israeli citizens are required by law to get fitted for gas masks, the vast majority don't practice with the masks as much as U.S. soldiers do. If a Scud loaded with chemical weapons were to land in a busy marketplace, the casualties could soar into the hundreds.

A terrorist attack with chemical or biological weapons on a major Israeli city could produce even larger casualties. If the terrorists were using deadly sarin nerve gas, which vaporizes quickly, they would have to strike on a hazy day to ensure the chemicals don't dissipate into the atmosphere. In the case of a VX or mustard-gas attack, the terrorists would need to rely on wind to spread the droplets. If successful, thousands could die.

If Mr. Hussein were to strike one of his Arab neighbors, where there are few sensors and scant protective gear, casualties could be far higher than Israel.

Another major wild card involves the exact kinds of agents Mr. Hussein possesses. Iraq was one of the last countries in the world to have a smallpox outbreak, in the early 1970s. If Iraqi scientists saved some smallpox, Mr. Hussein could unleash on a city human agents infected with the disease but not yet showing symptoms. Such attacks would be impossible to detect until people began to fall ill, and the death toll would be high. A recent Pentagon-funded study, dubbed "Dark Winter," estimated that terrorists infected with smallpox might be able to spread the disease to three million people in a matter of two months ([UCLA, 2002](#)).

**Title:** U.S. Likely Sent Iraq Toxic Bugs

**Date:** October 2, 2002

**Source:** [UCLA](#)

**Abstract:** Evidence that the U.S. government once authorized and sent to Iraq germ cultures capable of being used for biological weapons underscores the sometimes fuzzy boundary separating research on public health from that on weapons of mass destruction.

Whether the disease is anthrax, smallpox or West Nile fever, science for the common good as well as evil ultimately depends on ready access to the same bugs.

Details of the potential germ warfare agents the Centers for Disease Control and Prevention in Atlanta and a Virginia biologics company shipped to Iraq in the 1980s are stirring concerns about the country's ability to control the export of deadly germs.

To Sen. Robert Byrd (D-W.Va.), the situation has created "the equivalent of a Betty Crocker cookbook of ingredients that the U.S. allowed Iraq to obtain and that may have been used to concoct biological weapons."

But CDC officials say the shipments, which occurred during a period when the United States viewed Iraqi President Saddam Hussein as an ally, are old news -- and part of an essential worldwide exchange of disease-causing bacteria, viruses and fungi.

"We ship over 300 agents to several dozen countries every year," said CDC spokesman Thomas Skinner. "It's important for the CDC to cooperate with international health authorities on research that . . . saves lives. At the same time it's equally important to us to work with the U.S. Commerce Department to see that these organisms don't fall into the wrong hands."

As with other exports, the Commerce Department has a list of countries and germs that are restricted in international trade. Iraq wasn't on the list of countries in the 1980s, but it is today, along with Iran, Syria, Libya, Sudan, North Korea and Cuba.

Because potentially deadly cultures could be reshipped for illicit use to a third country, the Commerce Department also lists dozens of possible bio-warfare agents -- including anthrax, smallpox, botulinum toxin and hemorrhagic fevers -- that require government approval before they can be exported at all.

Byrd says even tighter controls are needed to guard against a future in which "today's friend may be tomorrow's enemy."

CDC officials said absolute assurance that biological materials won't be misused is probably not possible.

Bugs for good and evil

Even within the United States, compartmentalizing medical and weapons research has not been entirely successful. The strain of microbe responsible for last year's [anthrax-by-mail](#) attacks closely matches one used by a number of U.S. research institutions -- including the U.S. Army Medical Research Institute of Infectious Diseases in Fort Detrick, Md.

In the case of Iraq, Byrd says at least 11 shipments -- a "witches brew of pathogens including anthrax, botulinum toxin and gangrene," came from the American Type Culture Collection, a nonprofit firm in Manassas, Va., that has supplied biological cultures and products for global research since 1925.

The company's products, including nearly 18,000 strains of bacteria and more than 2,000 viruses, can be ordered by fax, phone or online from the firm's Web site.

In a tersely worded statement Tuesday, company spokeswoman Nancy Wysocki dismissed the controversy as "old news" that surfaced in congressional hearings in 1993.

"The Department of Commerce approved all requests for shipments of biological samples by Iraq," Wysocki said, adding that the firm's shipments currently comply with all government regulations.

"As a global biological resources center, the American Type Culture Collection's mission is to provide resources to scientists in medicine, public health, industry and education," she said.

Between 1985 and 1988, the Commerce Department approved export licenses for more than 110 shipments of biological materials. The timing of the shipments coincides with the period during which Iraqi scientists turned from studying literature on biological weapons experiments to working with actual samples of anthrax and botulinum toxin.

The Bush administration's charges that Iraq is developing biological weapons have revived congressional interest in how and where the country got the raw materials.

Byrd doesn't contend that the government deliberately approved the shipment of potential seed stock for biological weapons. "It was simply a matter of business as usual, I suppose," he said.

Now, however, he said the risks of lax export controls are apparent. "We not only know that Iraq has biological weapons, we know the type, strain, and the batch number of the germs that may have been used to fashion these weapons," he said. "We know the dates they were shipped and the addresses to which they were shipped."

### **CDC Verified Shipments**

In a response to a congressional inquiry in 1993, former CDC Director David Satcher acknowledged eight shipments of "viruses, retroviruses, bacteria and fungi" from the agency's laboratories in Atlanta to researchers in Iraq.

Destinations for the CDC shipments included the Iraqi Ministry of Health in Baghdad, the University of Baghdad -- later identified by U.N. weapons inspectors as a front for the acquisition of biological weapons

samples -- and at least one researcher in Al-Muthanna, a site 40 miles south of Baghdad that has the nucleus of Iraq's chemical weapons program.

Several months later, Satcher reported that the CDC had also discovered that additional cultures -- including the germ that causes dengue fever and a non-virulent strain of the bug that causes plague -- were hand-carried to Iraq in May 1985 by Dr. Mahammad Mahmud, a doctor who had just finished three months of research on mosquito-borne viruses at the CDC.

Of the dozens of approved biological materials shipped to Iraq by the government and corporate sources, a 1992 Defense Department report to Congress identified five so-called Class III pathogens as being of particular concern:

*Bacillus anthracis*, the anthrax bacterium whose finely powdered spores killed five people and sickened 17 others in the United States last year in the country's first brush with biological terrorism.

*Clostridium botulinum*, the bacterial source of a toxin that can cause vomiting, fever, partial paralysis and is often fatal.

*Histoplasma capsulatum*, which causes a disease that afflicts the liver and spleen and at least superficially resembles tuberculosis.

*Brucella melitensis*, a bacteria that causes chronic fatigue, nausea and damage to major organs.

*Clostridium perfringens*, a highly toxic bacteria that causes gas gangrene.

Although the United States has increased the number of biological agents and countries on its restricted export list since the Gulf War, the Bush administration has balked at efforts to strengthen the 1972 Biological Weapons Convention, which bans the development and stockpiling of germ warfare agents.

The treaty has been signed by 164 nations, including the United States and Iraq.

Over the objections of European allies, however, the State Department in July withdrew from negotiations to strengthen the treaty on the grounds that the proposed inspection system was ineffectual and measures to assure the compliance of rogue nations such as Iraq would not be legally binding.

U.S. officials have indicated they plan no further discussion on the treaty until 2006 to give them time to consider alternate means of enforcement ([UCLA, 2002](#)).

**Title:** A Virus-Fed Doomsday

**Date:** October 10, 2002

**Source:** [LA Times](#)

**Abstract:** The debate among the nation's politicians and the advice they're receiving from intelligence experts should not focus exclusively on diplomacy versus preemptive military action against Saddam Hussein. Instead, there is one nightmarish outcome -- the so-called bio-Armageddon scenario -- that is of immediate concern.

It goes like this: We go in to take out Hussein, and his obedient henchmen pull a "doomsday" switch, releasing contagious biological agents for which there is no vaccine and no cure. Not only are hundreds of thousands of American troops wiped out but, if Hussein wishes to die a martyr's death, the virulent agents are released to spread around the world and wipe out half of mankind.

Even mentioning this subject may seem like scaremongering, but it's not. In today's dicey world, this horrific possibility is a biological, military and political fact of life -- or death -- that cannot be dismissed out of hand.

How seriously has the bio-Armageddon scenario been weighed in councils of war? An Oct. 7 letter from CIA Director George Tenet to Sen. Bob Graham (D-Fla.), chairman of the Intelligence Committee, stated that a cornered Hussein might use "his last chance to exact vengeance by taking a large number of victims with him."

It costs about \$1 million to kill one person with a nuclear weapon, about \$1,000 to kill one person with a chemical weapon and about \$1 to kill one person with a biological weapon. Low cost alone may dictate that current and future terrorists will opt for the \$1 biological killers.

Last year, a bombshell of a scientific paper, published in the *Journal of Virology*, revealed that a bioengineered form of mousepox -- a close cousin of smallpox -- was vaccine-resistant and 100% lethal. It showed that simply inserting one immune-inhibiting gene into mousepox was all it took.

Is it conceivable that Hussein's well-trained scientists, who crave to please their boss at any cost, have not read this paper and applied its findings to smallpox?

This year, another stunning paper in the research journal *Science* described the complete synthesis of the poliovirus genome in the test tube. This feat of bioengineering pointed out that deadly viruses, such as smallpox, can be resurrected in the test tube. No seed germs are required, as previously thought, just genetic sequences, training in molecular biology at the master's-in-science level and a few years of laboratory work.

It's hard to underestimate or sugarcoat these scientific papers. They offer a blueprint for creating vaccine-resistant and highly lethal viruses that could, for example, render the current smallpox vaccine stockpile and the U.S. government's emergency vaccination program absolutely useless. This biological genie may pose a far greater threat than 1,000 atomic bombs.

It's no longer hypothetical to bioengineer such an agent. And less than \$1 million would be required to create deadly and contagious agents.

In the wrong hands, a bioengineered virus could be bottled and used as an insurance policy against invasion and overthrow. And, if unleashed, it could change the very fabric of remaining modern civilization. At a minimum, too many people might be stricken to continue to operate oil refineries, power plants, airlines and communications.

A completely new appraisal and posture are needed to deal with these threats.

First, the U.S. needs to train and place more intelligence agents knowledgeable in this type of warfare throughout the world, because the work taking place in a secret offensive biological weapons program cannot be monitored from airplanes or satellites. It must be spied on firsthand.

Building our biological human intelligence capabilities will take years. It will require the scientific, law enforcement and national security communities to finally work together, which they have shown little inclination to do.

Second, we need to build a high-speed/high-volume infectious disease laboratory and information processing system that links the molecular fingerprints of biological agents to their sources worldwide.

Such a system would provide comprehensive and rapid analyses of biological agents and, when every moment counts, it could help to save countless lives after an attack -- both at home and abroad.

If we had such a laboratory and biological sample collection program working, we could test for the combined signatures of pox viruses and virus-altering proteins. If, for example, the two were found to reside in the wrong hands or places, we could take preemptive actions.

Here's the bottom line: Bio-Armageddon and biological blackmail cannot continue to remain as realistic options for terrorists ([LA Times, 2002](#)).

**Title:** Official: U.S. Has Bioterrorism Holes

**Date:** January 8, 2003

**Source:** [UCLA](#)

**Abstract:** The United States has some serious holes in its defenses against the kind of biological weapons the military assumes Iraq has, the Army's top biological defense expert said Wednesday.

The Pentagon has few or no vaccines or treatments for several biological weapons Iraq has acknowledged producing, such as botulinum toxin, said Col. Erik Henschal, head of the Army's biological defense laboratory. Other holes in the military's biological defenses include the lack of good vaccines or treatments for plague, various viruses which cause the brain inflammation called encephalitis and bacterial poisons called staphylococcal enterotoxins, Henschal said.

"We're trying to fill those holes as best we can," said Henschal, who directs the Army's Medical Research Institute of Infectious Diseases, or USAMRIID.

For example, the Army lab has developed vaccine-like preventative treatments for the seven forms of deadly botulinum poison but hasn't had the money to get them into full-scale production, he said.

"We've been fairly helpless, except to say we hope someone's paying attention," Henschal told a group of reporters.

"Until 9-11, it was difficult to get the pharmaceutical industry interested in our products. We have 20 medical products on the goal line, waiting to go."

**Military officials assume Iraq has biological weapons including the smallpox virus, and Iraq can produce novel germ weapons such as antibiotic-resistant bacteria, Henschal said.**

He said the Army is sending its only mobile biological testing unit to the Persian Gulf this week. The Maryland-based unit does rapid testing to help confirm an attack with germ weapons.

U.S. military intelligence officials say biological weapons are one of Iraq's few major threats to American forces should President Bush decide to go to war. The Pentagon assumes Saddam has the missiles, aircraft and other gear needed to launch a biological attack against either military or civilian targets in the region.

Anthrax is the military's top biological weapon worry, since it's a common, hardy bacterium that's relatively easy to make into a deadly weapon, Henschal said. But countries like Iraq might be reluctant to use anthrax against U.S. troops because American soldiers are immunized against anthrax and have the antibiotics needed to treat anthrax illness, he said.

That makes botulinum toxins a big worry.



The U.S. military has some botulinum toxoids, which are inactivated forms of the poisons which work like vaccines to prevent the poisons' deadly effects. But those toxoids are losing potency, Henchal said. USAMRIID hopes to have vaccines against two botulinum toxins in production by the end of the year, he said.

The U.S. military assumes that North Korea, as well as Iraq, has samples of the smallpox virus, and it's possible the two countries have exchanged information on that and other biological weapons, Henchal said. He said "it's a bit of a fantasy" to assume that the only smallpox samples in the world are the two publicly declared samples in the United States and Russia.

"It's clear from intelligence that the genie is out of the bottle," Henchal said of smallpox ([UCLA, 2003](#)).

**Title:** US Plans For Use Of Gas In Iraq

**Date:** February 7, 2003

**Source:** [Sunshine Project](#)

**Abstract:** Top US military planners are preparing for the US to use incapacitating biochemical weapons in an invasion of Iraq. Secretary of Defense Donald Rumsfeld and Gen. Richard Myers, Chairman of the Joint Chiefs of Staff, revealed the plans in February 5th testimony before the US House Armed Services Committee. This is the first official US acknowledgement that it may use (bio)chemical weapons in its crusade to rid other countries of such weapons. The Sunshine Project and other nonprofits have warned since late 2001 that the "War on Terrorism" may result in the United States using prohibited biological and chemical armaments, thereby violating the same treaties it purports to defend. The US announcement creates grave concerns for the future of arms control agreements, particularly the Chemical Weapons Convention.

Rumsfeld stated that plans are being made for multiple applications, including use of gas or aerosols on unarmed Iraqi civilians, in caves, and on prisoners. Rumsfeld reiterated the confusing, typical US official language about so-called "non-lethal" biochemical weapons. Rumsfeld described applications of a "*riot agent*" that clearly imply the complete incapacitation of victims, combatant and non-combatant, in armed conflict - a definition and usages that are at odds with the Chemical Weapons Convention (CWC). Rumsfeld acknowledged US ratification of the CWC but expressed "*regret*" about its restrictions, stating that the US has "*tangled ourselves up so badly*" on policy for use of incapacitating biochemical weapons. Rumsfeld indicated that - in his opinion - if President Bush signs a waiver of long-standing restrictions on US use of incapacitating chemicals, that the US will be able to legally field them in Iraq and elsewhere.

The focal points for US development of these weapons are the Joint Non-Lethal Weapons Directorate in Quantico, Virginia, and the US Army Soldier Biological Chemical Command, located at Edgewood/Aberdeen Proving Ground, Maryland. Following their capture in Afghanistan and elsewhere, the US has used incapacitating chemicals on suspected terrorist "detainees". In October 2002, Russian Special Forces used a so-called "non-lethal" incapacitating biochemical weapon when storming the Palace of Culture Theater in Moscow. It resulted in the deaths of over 100 hostages and was used to facilitate the extrajudicial execution of as many as 50 Chechen separatists. Before the War on Terrorism began, British officials stated that they would not cooperate with the US military in missions where US troops used incapacitating chemicals.

The Sunshine Project has established an [online clearinghouse of dozens of documents from the US research program](#) on these weapons, obtained under the Freedom of Information Act ([Sunshine Project, 2003](#)).

**Title:** Bush Bio Says He Was Told Of Iraqi Bioweapons By Egyptian President

**Date:** November 12, 2010

**Source:** [Bio Prep Watch](#)

**Abstract:** Former U.S. President George Bush recently announced that he had been told of Iraqi weapons of mass destruction, including biological weapons, by Egyptian President Hosni Mubarak.

Bush made the statement in his memoirs, "Decision Points." In the book, Bush also highlights other mistakes he made during the Iraq war campaign, according to the Voice of America.

"President Hosni Mubarak of Egypt had told [general] Tommy Franks that Iraq had biological weapons and was certain to use them on our troops," Bush wrote, according to Voice of America.. "Intelligence from a Middle Eastern leader who knew [former Iraqi president] Saddam [Hussein] well had an impact on my thinking."

The former president also revealed that Mubarak had insisted the information stay private, so that ordinary Arabs would not become incensed. Bush wrote that he had to consider the wishes of those in power in the Middle East.

"Prince Bandar of Saudi Arabia, the kingdom's longtime ambassador to Washington and a friend of mine since dad's presidency, came to the Oval Office and told me our allies in the Middle East wanted a decision," Bush wrote, Voice of America reports.

As concern grew among America's Middle Eastern allies in 2003, Federal Reserve Chairman Alan Greenspan insisted that the indecision was hurting the U.S. economy. Bush said that such events increased the pressure on him to act.

Bush also wrote of how he felt when it became certain that weapons of mass destruction were not going to be found.

"No one was more shocked or angry than I was when we didn't find the weapons [of mass destruction]," Bush said, according to Voice of America. "I had a sickening feeling every time I thought about it. I still do" ([Bio Prep Watch, 2010](#)).

**Title:** Iraq Marks Anniversary Of 1988 Chemical Bombings

**Date:** March 18, 2011

**Source:** [Bio Prep Watch](#)

**Abstract:** The anniversary of the 1988 chemical bombings of Iraqi Kurds by Saddam Hussein's regime was recently marked in Halabja, Iraq.

"We cannot forget the time we lived in the shadow of one of the worst dictators of the world," Halabja's mayor, Kdher Kareem said, according to PressTV.ir.

The bombing claimed the lives of more than 5,000 people and injured at least 10,000. Tens of thousands responded by fleeing the area for the Iranian border, taking refuge in makeshift camps, according to PressTV.ir.

Hundreds came to Halabja to mourn the victims of the attack. Iraqi Kurdistan Prime Minister Barham Salih was present and gave a speech. During the speech, Salih was heckled by two men, one of whom took aim at the prime minister with his prosthetic leg.

Taking the incident in stride, Salih later spoke with the men and listened to their complaints.

"They are our people," Salih said, according to PressTV.ir. "I have to listen to them. I have to answer their needs. I am proud of what we have done in Halabja. Look at Halabja today compared to what it was years before."

Kareem witnessed the aftermath of the bombing raids and later went on to appear as a witness in the trial of the man known as Chemical Ali, who would later be executed for his role.

In the town square, 1,000 protestors gathered to voice their displeasure about the government, despite warnings from security forces and the mayor's office. Some recent anti-government protests have turned violent, claiming the life of one police officer.

Despite the protest ban, the demonstrations this day were largely peaceable and were carried on without incident, PressTV.ir said ([Bio Prep Watch, 2011](#)).

# Bio Terror Bible

## EXPOSING THE COMING BIO-TERROR PANDEMIC

**BIOTERRORBIBLE.COM:** Despite the fact that the United States and its European Union allies have been researching, planning and drilling for a major bio-terror attack and the subsequent pandemic, the nations of [Egypt](#), [Iran](#), [Iraq](#), [Libya](#), [North Korea](#) and [Syria](#) have been quietly set up over the last decade as potential bio-terror scapegoats. Based on the evidence available, it appears that the U.S., [Israel](#) and [South Korea](#) may be the future victims of major false-flag bio-terror attacks.

Israel is the only modern nation that has not signed the 1972 [Biological Weapons Convention](#) (refusal to engage in offensive biological warfare, stockpiling, and use of biological weapons). Israel is also the only modern nation that has signed but not ratified the 1993 [Chemical Weapons Convention](#) (refusal to produce, stockpile and use chemical weapons). Based on recent news and events, the state of Israel is preparing its population for a major false-flag bio-terror attack. Should Israel be "attacked", it is highly likely that Egypt, Iran or Syria will be scapegoated.

**Title:** Israeli Soldiers Sue Over Exposure To Anthrax

**Date:** March 29, 2010

**Source:** [Bio Prep Watch](#)

**Abstract:** The Israeli Defense Ministry has been sued by 64 former soldiers for approximately \$4.8 million over claims that they suffered damage from experiments in the early 1990s involving an anthrax vaccine.

The experiments, nicknamed "Omer 2," were used to determine the efficacy of an anthrax vaccine. Omer 2 followed what was believed at the time to be the threat of a biological attack from Israel.

Omer 2 involved 716 Israeli Defense Force soldiers, which had been pared down from a pool of 4,000 soldiers.

The soldiers' lawsuit, which was filed with the Petah Tikva District Court, follows the principle that says anyone deciding to take part in an experiment must do so willingly and only after considering the risks involved.

The lawsuit cites an Israel Medical Association report that called the experiments unjustifiable. The report says that Israel was already in possession of a stockpile of vaccines while the experiments took place.

"An accelerated effort to produce large quantities of the vaccine was underway a year prior to the experiment, and by the time the experiments were launched, Israel had enough vaccines to cover the civilian concerns," the report said, according to YNetNews.com.

"No scientific justification was found for the experiment, scientific background was lacking, the experiment's design and execution did not suit its goals, and no result would have justified those goals," the report said. "Also, conventional guidelines were not followed, risks and possible side effects were not thoroughly investigated, and a follow-up mechanism to keep track of participating soldiers was not set up."

The soldiers' lawsuit also demands that Israel reveal the ingredients of the serum used as well as approximately \$80,000 in damages for each plaintiff for mental anguish and emotional distress ([Bio Prep Watch, 2010](#)).

**Title:** Chemical And Biological Attacks Simulated In Israel

**Date:** November 25, 2009

**Source:** [Bio Prep Watch](#)

**Abstract:** Israel has finished civilian exercises to aid in preparing its citizens for a chemical attack.

Chemical attack were brought home to Israelis during the first Gulf War in early 1991, when fears were raised by 39 Scud missiles launched by Iraq that many feared contained chemical agents. Citizens sealed rooms and donned gas masks to protect themselves during that war.

Many Israeli citizens continue to keep potential sealed rooms stocked and gas masks at hand, just in case. Stories have also filtered to the nation's citizens of the Iran's potential military capabilities and the growing missile ranges of Hezbollah in the north and Hamas in the south.

Under the many potential threats, the Israeli government simulated a chemical warfare drill recently, including mass simulated casualties. Approximately seven million citizens took part in the preparedness drill, taking refuge in shelters.

As part of the drill, Haredi Jews played the role of fatalities at a Jerusalem shopping mall while rescue workers equipped with protective suits practiced their chemical weapons attack training.

Unconventional methods of attack such as biological and chemical weapons were also simulated by Israeli and U.S. armies last month as part of a joint preparedness drill.

A U.S. Army spokesman noted that the training drill was necessary to prepare for any possible attack scenario ([Bio Prep Watch, 2009](#)).

**Title:** Israel's Home Front Command Simulates CBRN Strike

**Date:** December 15, 2009

**Source:** [Bio Prep Watch](#)

**Abstract:** Israel's Home Front Command has begun joint exercises with Magen David Adom and the Shaare Tzedek Medical Center to prepare for chemical, biological, radiological and nuclear missile attacks.

The simulated attacks, which consist of three missiles hitting a Jerusalem neighborhood in quick succession, leave hundreds of people injured by a chemical substance. The victims are rushed by Home Front Command and Magen David Adom ambulances to a large site prepared by Shaare Tzedek Medical Center.

Before the injured can receive medical attention, they must first be cleaned of the chemical substance. They are covered with a talc-based powder to absorb the chemical before being rinsed and taken to receive appropriate medical procedures.

The Shaare Tzedek Medical Center is able to treat several hundred wounded during emergency situations. To test its capacity, the exercise sends 200 wounded citizens through its door, taking two hours to decontaminate them all.

More than 100 soldiers took part in the exercise, which was deemed a great success, acted as a means of reassuring the government and citizens to the readiness of its soldiers for a biological or chemical attack.

"I am very satisfied," Col. Yoram Lev-Ran, Commander of the Home Front Command Jerusalem District, told the Israel Defense Forces. "The civilian and military medical staff cooperated very well during the exercise. The system treating civilians in this kind of situations isn't natural, it's made up of a lot of bodies and organizations. We work on connecting them as well as possible, and I think that this sends a strong message to the Israeli public."

More exercises will be performed by the Home Front Command over the coming months at hospitals throughout the country to practice and improve preparedness in emergency situations ([Bio Prep Watch, 2009](#)).

**Title:** Israel To Simulate Biological Attacks

**Date:** January 6, 2010

**Source:** [Bio Prep Watch](#)

**Abstract:** Israel will simulate the largest exercise in its history simulating a response to a biological warfare attack next week.

The exercise, code named Orange Flame, will be held in Tel Aviv, Ramat Gan and Holan in the nation's Dan region. The goal of Orange Flame is to evaluate the ability of the Home Front, medical services, rescue teams and municipal authorities to respond during the conditions created by a biological attack caused by either terrorists or accident.

During the exercise, to be held next Wednesday and Thursday, Home Front Command rescue units and special Health Ministry detection units will search for biological hazards while dealing with hundreds of citizens presenting exposure symptoms.

The simulated injuries will be treated at major hospitals including Ichilov, Tel Hashomer and Sheba as well as health maintenance organizations.

Affected citizens will also be received at Beit Dani in Tel Aviv, Winter Stadium in Ramat Gan and the Holon Country Club. More than 1,000 volunteers trained in behaving as if they have been exposed to biological agents will receive treatment at the centers.

Brigadier General (res.) Ze'ev Snir, the defense minister's special assistance on the subject, told Haaretz.com that the exercise will, "train the country to deal with biological terrorism attacks" ([Bio Prep Watch, 2010](#)).

**Title:** Planned Bioattack Simulation In Israel Could Be Sign Of Coming Biowar, Activist Warns

**Date:** January 8, 2010

**Source:** [Bio Prep Watch](#)

**Abstract:** Israel's planned simulated biological warfare attack could be the run up to a catastrophic response to Iran and Hezbollah, Elias Bejjani, a Canadian-Lebanese human rights activist has said.

Bejjani, noting European diplomatic reports that quoted high ranking Israeli officials, said that the Netanyahu government as well as the Israeli army expect an imminent war against their nation against either Iran, Hezbollah or the Hamas movement, working alone or jointly, by next march.

The diplomatic reports also said that Israel, if faced with no other option, would carry out a preemptive attack against Iran or Lebanon or the Gaza Strip if any threat is made to the safety of its citizens or its infrastructure.

Fears have been raised that one or both sides would employ biological or chemical weapons. Those fears were further raised when Israel, which had previously provided 60 percent of its population with anti-biological and chemical masks, stated that it would not provide its entire population with the masks. Israel said it would concentrate its mask delivery on its second largest city, Tel Aviv, as well as cities and villages around it, which it considers to be among the first targets of any biological attack.

Statements by Israeli officials recently circulated in European diplomatic and intelligence reports, Bejjani said, made it clear that the Israeli army will not hesitate to respond to any biological or chemical attacks. The army said that it would retaliate with similar weapons.

The same reports also say that if Iran uses long-range missiles with biological or chemical warheads, Israel will respond in kind, targeting Tehran and other major Iranian cities not equipped or trained to deal with such a strike ([Bio Prep Watch, 2010](#)).

**Title:** Israel Begins Bioattack Simulation

**Date:** January 14, 2010

**Source:** [Bio Prep Watch](#)

**Abstract:** Israel's National Emergency Authority has begun the largest-ever exercise meant to train security forces on the proper response to a citywide biological attack.

The drill began with the arrival of dozens of people presenting a multitude of symptoms at hospitals – including Ichilov, Tel Hashomer and Wolfson – throughout the center of the country. The hospitals will not be informed beforehand of who the impersonators are, requiring them to identify them and the cause of their symptoms.

The impersonators will be presenting symptoms of a biological attack, with the IDF Home Front Command working to clear the infected area in conjunction with the Israel Police and Magen David Adom.

“We need to be ready for everything that can happen,” one senior official involved in planning the drill told The Jerusalem Post. “There are crazy people running around the world who, with the right materials and access to the Internet, can carry out such an attack.”

“This is terrorism. There have been cases like this in the world and we need to make sure that the Israeli system works well and knows how to deal with such attacks.”

Officials noted that victims of an anthrax attack would not display symptoms for several days. Those symptoms would then include high fever and fatigue, similar to the flu.

“The trick is for the hospitals to be able to distinguish between the regular seasonal illnesses and the people who are suffering from a biological attack which requires special treatment,” the official said ([Bio Prep Watch, 2010](#)).

**Title:** 30 Countries Joined Israel In Mass Bio-Terror Drill

**Date:** January 20, 2010

**Source:** [Haaretz](#)

**Abstract:** The security and health systems conducted a mass drill against a smallpox terror attack last



week, involving a scenario whereby terrorists infected with a virus entered Tel Aviv posing as tourists from a European country. It was the largest drill of its kind ever held in Israel.

Among other things, the drill, which was conducted in the Dan region over a two-day period, involved the simulated purchase of tens of thousands of courses of medication against the disease.

Dubbed "Operation Orange Flame 4," the biological defense drill was conducted by the Defense Ministry and the Health Ministry, along with the Israel Defense Forces Home Front Command.

Also involved in the drill were representatives from 30 other countries, in Israel to participate in a conference on emergency and disaster management. The drill included a response to a smallpox outbreak affecting about 1,000 people.

The teams in the drill that were to investigate the identity of the biological contaminant as well as the medical teams were not told what material they were meant to be dealing with and how it would be spread.

Among the participants was the CEO of SIGA Technologies Dr. Erik Rose, whose company produces anti-viral pharmaceutical agents, and which is developing a smallpox anti-viral medicine, known as ST-246 for the U.S. Department of Health.

A statement released by the company in the United States said SIGA Technologies had contracted with the defense and health ministries to immediately sell Israel tens of thousands of anti-viral medications against smallpox.

The exercise simulated a scenario whereby two infected terrorists spread the disease by going to a sports stadium and a hotel and infecting as many passersby as possible. In addition to the 1,000 mock-infected persons, the drill also simulated treatment and isolation of 20,000 others with the disease, and initiated a national inoculation operation against smallpox.

According to researchers, smallpox has killed more people than any other disease in history - between 300 and 500 million people in the 20th century alone. In the 1960s, a world campaign began to eradicate the disease, with the last death from smallpox occurring in the mid-1970s.

Medical experts say that for all intents and purposes, the disease has been completely wiped out, with samples of the virus remaining only in a small number of guarded World Health Organization labs.

However, intelligence and medical officials fear that terror groups could get hold of the virus and use it for mass biological warfare.

Israel is said to have enough vaccines to inoculate the entire population against smallpox. However, it is believed that terror groups could use the virus to infect a large number of people before the vaccination campaign could reach the whole population. Such a campaign could be expected to take a few weeks.

The Health Ministry spokeswoman confirmed that a mock-purchase of medication against smallpox was made during last week's operation ([Haaretz, 2010](#)).

**Title:** SIGA Technologies Takes Part In Israel's Simulated Bioattack

**Date:** January 21, 2010

**Source:** [Bio Prep Watch](#)

**Abstract:** Representatives from SIGA Technologies took part in Israel's recent "Operation Orange Flame 4" biological defense drill conducted by the Defense Ministry and Health Ministry in conjunction with the Israel Defense Forces Home Front Command.

The drill, which included a response to a smallpox outbreak that affected approximately 1,000 people, included Dr. Erik Rose, the CEO of SIGA Technologies. SIGA Technologies is developing ST-246, a smallpox anti-viral medicine, for the U.S. Department of Health.

In a statement released by SIGA Technologies, the company said that it had contracted with the Israeli defense and health ministries to immediately begin selling Israel tens of thousands of anti-viral medications against smallpox.

Enough vaccines are believed to be held by Israel to inoculate its entire population against smallpox, but a terror attack using the virus could infect a large number of people before a vaccination campaign could reach the whole population. That type of campaign is expected to take several weeks.

As part of Operation Orange Flame 4, a national inoculation operation was simulated. The exercise also included 1,000 mock-infected persons as well as treatment and isolation of 20,000 others with the disease.

A Health Ministry spokeswoman told Haaretz.com that the exercise included the mock-purchase of smallpox medication.

Smallpox is responsible for more deaths than any disease in history, with the estimated death count from the 20th century believed to be between 300 and 500 million people ([Bio Prep Watch, 2010](#)).

**Title:** Israel Prepares For Biological, Chemical Attacks

**Date:** October 29, 2010

**Source:** [Bio Prep Watch](#)

**Abstract:** Officials with Israel's Home Front Command recently announced that they are preparing for a wide range of scenarios, including the possibility that Hezbollah will one day obtain biological or chemical weapons.

**A recent drill simulated missile attacks in Tel Aviv and on Bloomfield Stadium, in Jaffa, Israel, where hundreds of "spectators" were preparing for a soccer match, the Jerusalem Post reports. During the drills, a chemical attack was also simulated with an actual cloud formed near the impact site.**

Home Front Command officials said that in the state's 62 years of existence, it has never been attacked by a chemical or biological missile. Officials also told the Jerusalem Post that they do not count on that trend to continue.

As a result, senior officials reported that they have begun a wide array of different drills and scenarios including the possibility that Hezbollah will one day obtain chemical weapons.

To prepare for this eventuality, officials said that two years ago they awarded Elbit Systems, Ltd., a contract to build a state-of-the-art simulator to train commanders in dealing with the fallout from chemical or biological attacks.

The training simulator is housed at the Home Front Command headquarters, near Ramle, Israel. It includes 50 different stations. The simulated missile attack drill was the simulator's first large-scale inaugural drill.

Lt. Col. Nir Golkin, head of research and development in the Home Front Command, told the Jerusalem Post the simulator enables commanders to train for threats that are almost impossible to drill in the field.

"It is extremely difficult to simulate a chemical missile attack in Tel Aviv," Golkin told the Jerusalem Post. "On the simulator, we can insert all of the different parameters and make it seem as real as possible. That way, we can test commanders in their ability to deal with the fallout and dispersion of the chemical agent" ([Bio Prep Watch, 2010](#)).

**Title:** Israel Holds Bioterror Drill

**Date:** November 10, 2010

**Source:** [Bio Prep Watch](#)

**Abstract:** "Orange Flame," a detailed simulation of a biological terror attack, will be held this week in Israel, and will affect three participating hospitals in the center of the country.

The exercise is managed by the Home Front Command and the Health Ministry in Ramle, but it will also occur in several other locales. The hospitals affected by the drill will be the Assaf Harofeh Medical Center in Tzifrin, the Kaplan Medical Center in Rehovot, and the Meir Medical Center in Kfar Saba, JPost.com reports.

Several organizations, including the Israel Police, the Defense Ministry, Magen David Adom and the L. Greenberg Center for Forensic Medicine at Abu Kabir, will participate.

The annual Orange Flame exercise, now in its fifth year, has been planned over several months to ready hospitals and other facilities to be able to cope with a biological emergency and to be able to coordinate among several groups of authorities, an IDF spokesman told JPost.com.

The scenario is kept secret for the exercise so that the participants will be surprised like a true emergency. The participating hospitals will need to discover the biological agent and cope with the situation. Hundreds of simulated injured victims will need to be treated after "poisoning" by the biological agents while rescuers will wear special equipment and "decontaminate" the victims ([Bio Prep Watch, 2010](#)).

**Title:** IDF Launches Special CBRN Battalion

**Date:** December 14, 2010

**Source:** [Bio Prep Watch](#)

**Abstract:** The Israeli Defense Force recently inaugurated a battalion dedicated to dealing directly with the effects of a chemical, biological, radiological or nuclear attack.

The unit, known as Yanshuf, or Owl, has been in existence for some time, but it has only just been fully recognized as a battalion in its own right, according to the IDF website.

Becoming a full battalion involves a series of major changes to the unit's operation. The company soldier track for the unit has been lengthened and company commanders are now required to complete the same training course as company commanders in regular units, according to IsraelNationalNews.com.

Yanshuf recently conducted its first battalion-level exercise. Its companies drilled in scenarios involving a simulated CBRN attack in open spaces and urban environments. In the exercise, the new battalion worked with a team from the Engineering Unit for Special Operations.

The IDF's Ground Forces Commander, General Sami Turjeman, welcomed Yanshuf and implied that its recent upgrade could have something to do with fears of an Israeli confrontation with Syria, IsraelNationalNews.com reports.

"We are here in the southern Golan Heights," Turjeman said, according to IsraelNationalNews.com. "Not far away from us, the Syrians are preparing various capabilities that we need to prepare for. Our job is not to prepare for the conventional events but for the extreme scenarios, and Yanshuf Battalion is the spearhead of the [CBRN] defense element. You have a very heavy responsibility on your shoulders. We are building a highly professional unit here with the spirit of an operational fighting unit" ([Bio Prep Watch, 2010](#)).

**Title:** Israel Simulates Chemical, Missile Attacks

**Date:** June 23, 2011

**Source:** [Bio Prep Watch](#)

**Abstract:** Israeli military, government and rescue services, along with 80 municipalities and millions of civilians, recently participated in a simulated drill of a simultaneous mass missile strike across the country on Wednesday.

During the drill, the entire population was instructed to seek cover, CRI English reports. The test was part of the week-long "Turning Point 5" drill.

The scenario simulated the 13th day of a full-scale war after approximately 7,000 missiles had been lobbed toward Israel by their foes, hitting Jerusalem, Tel Aviv and other major population centers. This resulted in the simulated deaths of hundreds and left thousands wounded, Matan Vilnai, the Home Front Command minister, who lead the government's civilian responses to the mass attack, told CRI English.

Police and Israeli Defense Forces soldiers, as well as civilian first responders, dressed in chemical warfare protection suits to simulate mass intake and triage of citizens suffering from chemical weapons and burns.

"In last year's exercise, about 47 percent of the population entered protected areas," Col. Efi Mishov, head of the Home Front Command's Population Department, said, according to CRI English. "The past several years have seen a moderate increase in exercise participation, and this trend is expected to continue this year, but not in drastic numbers."

As part of the drill, sirens rang once to signal that it was part of a drill. Sirens malfunctioned in several cities, going off twice, scaring residents who thought it was a real attack. The government security cabinet met for the first time in a secret underground bunker in the Jerusalem area as part of the drill.

While the exercise was meant to ready the populace for the worst and to comprehensively synchronize crisis management responses to a rocket attack, it was also meant to warn potential foes that an attack like this would cause little damage to a government, public and military protected and ready for the worst.

"Our enemies know perfectly well that if they attack us, we will strike them with very tough blows, but we must prepare," Vilnai said, according to CRI English. "Because they have the capacity to fire missiles and rockets at all of our territory" ([Bio Prep Watch, 2011](#)).

**Title:** Facebook Application To Simulate Spread Of Virus

**Date:** September 6, 2011

**Source:** [Bio Prep Watch](#)

**Abstract:** A Facebook application developed in a lab at Israel's Tel Aviv University that simulates the spread of a virus may serve as a strong indicator of how infections spread among populations.

The app, called PiggyDemic, allows users to "infect" their friends with a simulated virus or become infected themselves. The resulting patterns may allow researchers to gather information on how a virus mutates, how it spreads through human interaction and the amount of people it infects, Health Care IT News reports.

Gal Almogy and Nir Ben-Tal of the Department of Biochemistry and Molecular Biology at TAU's George S. Wise Faculty of Life Sciences developed the app. Scientists currently use mathematical algorithms to determine which virus will spread and how, but the system assumes a virus has equal distribution across populations, which does not take into account patterns of social interaction.

"HIV is concentrated in Africa; certain types of flu are widespread in North America and Asia," Almogy said, according to Health Care IT News. "Adding the element of human interaction, and looking at the social networks we belong to, is critical for investigating viral interaction."

Because Facebook's digital interactions simulate in-person interactions, the site is an ideal tool for such an undertaking, according to Almogy.

Once the app is added to a user's account, PiggyDemic follows the user's newsfeed to determine the people with which they interact, according to Health Care IT News. The researchers follow these interactions using network visualization software, which creates a more accurate model of viral dynamics. Almogy said that improving this model is vital for developing public health policy.

"People who have this software can report if they are actually ill," Almogy said, according to Health Care IT News. "If we know who their friends are and the sequence of the infecting virus, we can figure out which virus they have and how it passes from one person to another" ([Bio Prep Watch, 2011](#)).

**Title:** "Orange Flame 6" Exercise Is Part Of Wider Process Of Increasing Israel's Ability To Deal With Unconventional Threats

**Date:** November 26, 2011

**Source:** [DefPro](#)

**Abstract:** Next week, the Israeli Defense Ministry, in conjunction with the Israel Defense Forces (IDF) and the Health Ministry, will conduct an exercise simulating an unconventional terror attack.

The exercise, called "Orange Flame 6" will simulate a biological outbreak of a contagious disease in the cities of northern Israel.

The exercise will be held in Afula, Tiberias, Nazareth and Nazareth-Ilit. It is part of a number of exercises in the field of unconventional terrorism. Such exercises take place every year. In the up and coming months, the Ministry of Defense intends to hold additional drills in the field of unconventional terrorism. This is part of a wider process of increasing Israel's preparation, alertness and competence in dealing with this particular threat.

The exercise will test and drill the various organs of the Defense Ministry, the Health Ministry, the Home Front Command, hospitals, healthcare centers, local authorities, the police, Magen David Adom, the fire brigade, the Environmental Protection Ministry, the Foreign Ministry, and the Water Authority, as well as other bodies.

As part of the exercise, the local authorities will set up Mass-Prophylaxis Treatment Centers which will simulate the provision of preventative treatment to citizens who are suspected of exposure to the outbreak. Each center will be drilled on their capacity to treat approximately 5,000 patients per day. The hospitals will be drilled on their ability to treat those who already displaying symptoms of the disease.

The aim of the drill is to increase the preparedness and competence of all the relevant national services in coping with biological terror attacks.

"The aim of the exercise is to improve and increase the capabilities of the State of Israel to handle an unconventional terror attack," said Brigadier General (res.) Ze'ev Snir, Assistant Minister of Defense for CBRN (Chemical, Biological, Radiological, Nuclear) Defense. "It is important that the citizens of Israel know that there are people in the Defense Establishment, as well as the other relevant authorities, whose permanent job is to prepare the State of Israel to handle these types of threats. The State of Israel is at the global forefront of preparedness for such events. However we are committed to continuously testing ourselves in order to increase and improve both our capabilities and preparedness for the array of potential challenges that we could face" ([DefPro, 2011](#)).

**Title:** Israel To Simulate Bioterror Attack

**Date:** November 29, 2011

**Source:** [Bio Prep Watch](#)

**Abstract:** The Defense and Health Ministries in Israel are preparing to hold a two day drill starting Wednesday that will test the country's preparedness for an unconventional terrorist attack.

The exercise, called "Orange Flame 6," will examine the potential of an outbreak of an infectious disease in the country's northern cities. The drill is part of a series of training exercises planned by the Defense Ministry. Another drill that is scheduled for January will simulate a radiological attack on Haifa, Y Net News reports.

As part of the event, fake patients will flood northern hospitals presenting the symptoms of a suspicious illness. Medical crews will use this simulation to practice responding quickly to a biological attack, while an inter-ministerial committee will train on managing such a national crisis.

Distributing vaccinations and quarantining entire regions are just two of the possible strategies the state could implement should an agent like chicken pox or anthrax be unleashed on Israel's population.

On the second day of the drill, local authorities will open clinics that simulate the treatment of civilians infected in the biological attack. Each center will practice treating approximately 5,000 patients a day, according to Y Net News.

Experts estimate that if such an epidemic were to break out, thousands of healthy citizens will arrive at hospitals fearing that they have been infected, which could overload the medical crews and prevent the sick from getting treatment.

Home Front Command, fire and police departments, local authorities, clinics and hospitals plan to take part in the drill, along with other national establishments ([Bio Prep Watch, 2011](#)).

**Title:** Foreign Embassies In Israel Plan Evacuation, Request Gas Masks

**Date:** February 7, 2012

**Source:** [Infowars](#)

**Abstract:** The news media in Israel this evening reports foreign embassies are organizing contingency plans for the evacuation of their nationals and diplomats and are requesting gas masks from the Israeli Foreign Ministry.

Diplomats and their families are worried about a missile strike that may prompt a mass evacuation of Israeli citizens with passports. The European Union does not currently have the resources to undertake an evacuation of its citizens in a short period of time.

Israeli officials have provided embassies with a list of public bomb shelters in the country and an instructional pamphlet produced by the IDF, [Ynetnews.com](http://ynetnews.com) reports.

Earlier on Tuesday, Lebanon's Hezbollah leader [Sheik Hassan Nasrallah](#) said Iran will not ask the group to retaliate if Israel strikes Iran. He said by video link to supporters that Hezbollah would make the decision in the event of an Israeli attack.

"There is speculation about what would happen if Israel bombed Iran's nuclear facilities," Nasrallah said. "I tell you that the Iranian leadership will not ask Hezbollah to do anything. On that day, we will sit, think and decide what we will do."

According to estimates, Hezbollah has more than [40,000 rockets](#) in its arsenal. Most are of the Katyusha variety with a range under 100 kilometers. It also possesses several hundred Iranian Zelzal-2 missiles with a range between 100 and 400 kilometers.

In 2010, the [Pentagon reported](#) the Shi'ite group also has 40 to 50 Fatah-110 missiles and 10 Scud-D missiles. The Fatah can be accurately target and reach most of Israel, including Tel Aviv.

In November 2009, it was estimated that if war broke out, Hezbollah would launch 400 to 600 rockets a day and would be able to sustain the attacks for at least two months.

During the 2006 Lebanon War Hezbollah fired about 3,699 rockets into Israel ([Infowars, 2012](#)).



# Bio Terror Bible

## EXPOSING THE COMING BIO-TERROR PANDEMIC

**BIOTERRORBIBLE.COM:** Despite the fact that the United States and its European Union allies have been researching, planning and drilling for a major bio-terror attack and the subsequent pandemic, the nations of [Egypt](#), [Iran](#), [Iraq](#), [Libya](#), [North Korea](#) and [Syria](#) have been quietly set up over the last decade as potential bio-terror scapegoats. Based on the evidence available, it appears that the U.S., [Israel](#) and [South Korea](#) may be the future victims of major false-flag bio-terror attacks.

While the world was distracted by the “Arab Spring” in Libya, the North African country has been quietly set up as a bio-terror state that will likely be scapegoated in a future false-flag bio-terror attack on the state of Israel. Libyan Al Qaeda, whose [flag is now flying over Libya](#), will also likely be the staging ground for future false-flag terror attacks on the European countries of Greece, Spain, Turkey and Italy.

**Title:** [Gadhafi Has Destroyed His Chemical Weapons, U.N. Watchdog Says](#)

**Date:** February 24, 2011

**Source:** [Bio Prep Watch](#)

**Abstract:** A United Nations watchdog group has confirmed that Libyan leader Moammar Gadhafi has kept to his word, destroying his chemical weapon stockpile that produces mustard gas, and that he has no weapon to deliver a chemical payload.

While there are local fears among the protesters facing Gadhafi's supporters and militias that the regime will use a biological or chemical weapon, the Organization for the Prohibition of Chemical Weapons believes the use of chemical weapons is unlikely, the Washington Post reports.

Libya's delivery systems, which consisted of 3,300 unloaded aerial bombs, were crushed by bulldozers in 2004 when Gadhafi agreed to let his weapons of mass destruction be dismantled. The destruction of 13.5 metric tons of sulfur mustard last year was about 54 percent of the nation's stockpile.

"So far as we know, Libya gave up the capacity to deliver chemical agents seven years ago," Michael Luhan, a spokesperson for the OPCW, said, according to The Associated Press. "And in the last year we've also seen, after some delays, substantial progress toward destroying their existing stockpile of chemical agent, which is all mustard."

There are still some worries from outside Libya that if weapons do exist, Gadhafi might still be willing to use them.

"We know that this is a person who could unleash either chemical or biological weapons which he possibly still has," David Owen, a former British foreign secretary, said on BBC Radio Wednesday, the Washington Post reports. "(Gadhafi) is deeply unstable, and has been for 42 years" ([Bio Prep Watch, 2011](#)).

**Title:** Former Libyan Official Says Gaddafi Has Bioweapons

**Date:** March 3, 2011

**Source:** [Bio Prep Watch](#)

**Abstract:** With the conflict in Libya worsening, a growing number of experts and ex-Libyan officials are worried dictator Muammar Gaddafi could use biological and chemical weapons to seek an end the revolt taking place there.

Libya's former Justice Minister Mustafa Abdel-Jalil said that Gaddafi still possesses biological weapons like anthrax, nerve agents like sarin and possibly genetically modified smallpox. Abdel-Jalil said that Gaddafi is not afraid to use them, according to NewKerala.com.

According to experts, while Gaddafi gave up substantial amounts of such weapons in 2003 as part of a means to reenter the international community, he still maintains an arsenal capable of causing a significant amount of damage.

Despite being hailed as "the real non-proliferation success story of the new millennium" by Paula DeSutter, President Bush's assistant secretary of state for compliance and verification, the process of verifying Gaddafi's weapons programs and their destruction has been slow and incomplete, NewKerala.com reports.

Gaddafi still maintains an arsenal of Scud-B missiles and conventional artillery shells that could be easily adapted to carry biological and chemical agents.

It is thought that Gaddafi has at least 650 tons of material that could produce a wide array of chemical weapons, NewKerala.com reports. The Rabta Chemical Weapons Production Facility, located in Libya, is believed to be the largest in the developing world ([Bio Prep Watch, 2011](#)).

**Title:** Libya Reaffirms Commitment To Chemical Weapons Convention

**Date:** March 15, 2011

**Source:** [Bio Prep Watch](#)

**Abstract:** The Permanent Resident of the Libyan Jamahiriya reaffirmed Libya's commitment to its treaty obligations under the Chemical Weapons Convention this week.

OPCW Director-General Ambassador Ahmet Uzumcu called on the Permanent Resident in order to express his concerns and those of the states parties regarding the status of Libya's chemical weapons have not yet been destroyed under the requirements of the convention, according to OPCW.org.

Uzumcu reminded the Permanent Resident that the responsibility for the physical security of those weapons remains in Libya's hands and asked that every possible measure be taken to prevent their potential use.

The Permanent Resident reiterated to the director-general his country's commitment to implementing the treaty. He assured the OPCW that, in accordance with the information he has received from Tripoli, the situation regarding the weapons slated for destruction remains unchanged and under control.

According to experts, while dictator Muammar Gaddafi gave up substantial amounts of such weapons in 2003 as part of a means to reenter the international community, he still maintains an arsenal capable of causing a significant amount of damage.

Libya has over 10 tons of mustard gas remaining years after signing the CWC, but has destroyed many of the systems for using them, according to the AFP.

Gaddafi still maintains an arsenal of Scud-B missiles and conventional artillery shells that could be easily adapted to carry biological and chemical agents ([Bio Prep Watch, 2011](#)).

**Title:** Satellites Monitoring Libyan Chemical Weapons

**Date:** March 21, 2011

**Source:** [Bio Prep Watch](#)

**Abstract:** Western reconnaissance satellites have been monitoring a garage at a remote site in the desert of Libya because of reports that the Libyan government keeps close to 10 tons of mustard gas there.

Approximately six large canisters are believed to be in the garage south of the city of Sirte. Western officials are worried that Libyan leader Mommar Gadhafi might use the chemical weapon to kill many of his people, the Washington Post reports.

This comes on the heels of air and missile strikes that occurred in the city of Sirte on Saturday. The strikes from the air and the sea are part of a U.N. Security Council resolution to impose a ceasefire between rebels and loyalists after a month-long standoff.

There are concerns by European leaders and former Libyan officials that Gadhafi may consider draining the tanks and using the mustard gas to terrorize the city of Benghazi, according to the Washington Post.

Admiral Mike Mullen, chairman of the Joint Chiefs of Staff, told the Washington Post that the U.S. is keeping a close watch on Gadhafi's mustard gas stores.

"He does have stores of that," Mullen said on CBS's "Face The Nation, according to The Hill. "A significant quantity. There's no indication that he is moving towards using that but certainly that is something we are watching very carefully. It is something that he could do a lot of damage with. I honestly haven't seen him move in that direction, and it's something that we think have a very good handle on right now" ([Bio Prep Watch, 2011](#)).

**Title:** Experts Toured Libyan Chemical Weapons Lab, Report Reveals

**Date:** April 8, 2011

**Source:** [Bio Prep Watch](#)

**Abstract:** An unfinished chemical lab in Libya that was toured by American and British scientists in 2006 is now suspected to be a chemical weapons facility.

The Libyan government claimed the lab, located on a military facility on the outskirts of Tripoli, was being built for chemical weapons defense purposes, but a recent report released by the WikiLeaks website suggests otherwise, Telegraph.co.uk reports.

According to the report, the visiting lab experts from the U.S. and the U.K. viewed an air handling system, an almost fully tiled "preparation room" and what appeared to be a "cold storage" room, all of which align with labs that work with chemical and biological agents.

The report goes on to raise suspicions by stating that although the lab could easily be completed in a short time, the lab's staff estimated it could take up to a year to finish construction.

The experts suggested Libya may have to declare its lab's contents to the Office for the Prohibition of Chemical Weapons, the organization that monitors stockpiles.

"Libya clearly did develop chemical weapons," Andy Oppenheimer, editor of Chemical and Biological Warfare Review, said, according to Telegraph.co.uk. "There was a load of mustard gas and blistering agent that that was being destroyed under the terms of the Chemical Weapons Convention, but there are now fears that the Libyans are lying and that they have stocks which haven't been declared."

Libya, which has been in turmoil since massive protests broke out in February, is estimated to have 13.6 metric tons of mustard and 556 tons of chemical warfare precursor chemicals ([Bio Prep Watch, 2011](#)).

**Title:** Libyans Fear Chemical Attack By Gaddafi After Weapons Found

**Date:** April 29, 2011

**Source:** [Bio Prep Watch](#)

**Abstract:** The recent deadly attack by Libyan government forces on the port of the besieged western city of Misratah, Libya, raised concerns that embroiled dictator Muammar Gaddafi may engage in chemical warfare.

Misratah, a conduit for military and humanitarian supplies for insurgents, is seen as a large target by Gaddafi and his supporters. The attack generated fears that Gaddafi could use suspected stockpiles of chemical weapons against the port city, TheAustralain.com reports.

Used as a military base during occupation, Misratah's local university has been a confirmed storage place for cyanide.

A rapidly acting, potentially deadly chemical, cyanide exposure can occur by breathing air, drinking water, eating food or touching contaminated soil. Symptoms include convulsions, slow heart rates, loss of consciousness and respiratory failure leading to death, according to the Centers for Disease and Control Prevention.

"Even 100 milligrams would be enough to kill 20,000 people if he put it in the water supply," a local professor of chemistry who asked not be named said, according to TheAustralain.com. Sent by city leaders, the professor found the supply of cyanide to be untouched and removed it for safekeeping.

Regardless of the discovery, concerns about chemical warfare remain among the people of Libya.

"If he has them he will use them," Khaled Abu Folgha, a director of a local hospital, said, according to TheAustralain.com ([Bio Prep Watch, 2011](#)).

**Title:** Chinese Experts Say Gaddafi Will Not Use Bioweapons

**Date:** May 9, 2011

**Source:** [Bio Prep Watch](#)

**Abstract:** According to Chinese analysts on the "Focus Today" CCTV-4 television program, there is a low likelihood that Libyan leader Muammar Gaddafi will use biological and chemical weapons against rebel troops.

Zhang Zhaozhong, a professor at the National Defense University and a CCTV-4 contributing commentator, and Yin Gang, a researcher of West Asian and African studies at the Chinese Academy of Social Sciences, discussed Gaddafi on Focus Today, hosted by Lu Jian, Investors.com reports.

After watching a video clip of an Associated Press report that Libyan government troops were seen wearing gas masks, Jian asked the commentators if the scenario was likely that Gaddafi would be prepared to use biochemical weapons.

Zhaozhong said that Libya does not have biological weapons and that the country has destroyed much of its previous chemical weapon stockpile, Investors.com reports. He said that while some remnants of the weapons remain and that Libya still has the production capability to manufacture chemical weapons, he does not think that Libya will use the weapons.

Gang agreed that the likelihood that Gaddafi would use chemical weapons was low. He said that while the country may have some chemical weapons, he thinks the country will not use chemical weapons right now since the war is at a stalemate, according to Investors.com. Gang say, however, that Gaddafi might use chemical weapons as a “doomsday weapon” and last resort ([Bio Prep Watch, 2011](#)).

**Title:** Chemical Weapons Antidotes Found On Libyan Soldiers

**Date:** July 27, 2011

**Source:** [Bio Prep Watch](#)

**Abstract:** Rebel soldiers fighting against the regime of Muammar Qaddafi in Nalut, Libya, have discovered kits filled with antidotes to chemical weapons abandoned by government soldiers.

The rebels fear that Qaddafi might be willing to use weapons of mass destruction on his own people in order to retain power, according to the L.A. Times.

Military weapons experts warn that Qaddafi may be holding on to a supply of mustard gas, but that he does not have the capability to deliver it effectively. The labels on the antidote kits say they are to aid persons injured by nerve and paralyzing war poisons.

Recent victories by rebel soldiers in the Nafusa Mountains have yielded clues about the state of the army supporting the Libyan leader, according to the L.A. Times. In recently captured houses, the rebels found abandoned assault rifles that were new and well-maintained.

In the town of Rayana, bottles of liquor were found, which are considered a sign of moral depravity to the strictly observant Muslim rebel forces.

Libyan government soldiers taken prisoner are often more willing to speak once they realize their captors are Libyans and not the foreigners they say they thought they were fighting. According to a rebel commander, most prisoners claim they want to join the opposition, but fear being killed by mercenaries, the L.A. Times reports.

Government forces have reportedly been told that they are fighting invaders from Algeria or Islamic radicals and are surprised to find that the rebels are Libyans ([Bio Prep Watch, 2011](#)).

**Title:** Qaddafi May Be Planning To Use Remaining Chemical Weapons

**Date:** August 18, 2011

**Source:** [Bio Prep Watch](#)

**Abstract:** Recent reports from U.S. defense officials that a Scud missile was launched against rebel forces have raised concerns that forces loyal to Libya’s embattled leader Colonel Muammar Qaddafi may have plans to use the nation’s remaining stockpile of chemical weapons.

High-ranking Libyan defectors have reported that Qaddafi still possesses at least a quarter of the chemical weapons he was able to accumulate during the 1990s, mainly in the form of mustard gas. U.S. intelligence reports that Qaddafi may have 10 tons of the chemical agent remaining, and with 200 Scud missiles in his arsenal, a means to deliver it, according to the Telegraph.

Former Iraqi dictator Saddam Hussein developed a means of adapting the Scud to carry chemical and biological weapons, and it is believed the only reason he did not do so was because of a dramatic warning that came from Washington.

It is unclear at this point how NATO would respond if Qaddafi used chemical weapons, and if the United Nations Security Council would support any decision to retaliate, the Telegraph reports.

General Abdul Fatah Younis, the former rebel commander who was recently assassinated, speculated in April that, if cornered, Qaddafi would be ready to use mustard gas.

"He will fight up to the final drop of his blood," Younis said, the Telegraph reports. "He still has about 25 percent of his chemical weapons, which he might use if he is in a desperate situation. He always says, 'You love me or I will kill you'" ([Bio Prep Watch, 2011](#)).

**Title:** Qaddafi May Turn To Chemical Weapons As Last Resort

**Date:** August 25, 2011

**Source:** [Bio Prep Watch](#)

**Abstract:** British Foreign Secretary William Hague warned on Wednesday that desperate members of Muammar Qaddafi's collapsing regime may try to unleash Libya's stocks of chemical weapons.

According to the Pentagon, American armed forces were monitoring Qaddafi's chemical weapons sites, the Irish Independent reports. NATO commanders are also bracing for Scud missile attacks as a final resort against towns being held by opposition forces.

Intelligence sources said that Qaddafi has up to 240 Scud B missiles that could be used on civilians. At least one such missile has been launched from Qaddafi's Sirte stronghold on the opposition-held town of Misrata but it fell off target, possibly into the sea.

Despite giving up most of his biological and chemical weapons after 2003, Qaddafi retained stocks of the chemicals that are required to make mustard gas, the Irish Independent reports. The stockpile of mustard gas components is said to be quite small and likely out of date.

According to defense sources, there is always the possibility that Libyan sleeper cells could have already been inserted into Europe to carry out revenge acts of terrorism by using arms taken from Qaddafi's stores.

Two months ago, a significant NATO raid attacked a facility that had rocket-fueling canisters and Scud launchers. Out of the 240 rockets, only a few dozen might be viable, according to the Irish Independent.

If Qaddafi attempts to fire Scuds or send armored vehicles or artillery from outlying garrisons into Tripoli, NATO jets will be ready to respond ([Bio Prep Watch, 2011](#)).

**Title:** Rep. Rogers Raises Concerns Of Al-Qaeda Acquiring Libyan Chemical Weapons

**Date:** September 8, 2011

**Source:** [Bio Prep Watch](#)

**Abstract:** Representative Mike Rogers, a Michigan Republican and chairman of the House Intelligence Committee, has approached the White House with concerns that al-Qaeda will acquire Libyan weapons that were once controlled by dictator Muammar Qaddafi.

Rogers said that the time frame to secure loose weapons "is rapidly closing" and he has urged the White House to quickly dedicate additional resources and work with NATO allies and the Libyan National Transitional Council on the problem, Bloomberg reports.

"We need to be doing more to secure these weapons systems now," Rogers, a former Army officer and FBI special agent, said, according to Bloomberg. "(The U.S. has) special capabilities. There is nobody better who can get their hands on this stuff, account for it and render it safe."

Rogers said that the U.S. could have been more aggressive in safeguarding the munitions in Iraq and that Libya's "systems are even more lethal."

According to a White House fact sheet, Libya's chemical stockpiles of 11.3 metric tons of mustard agent and 845 metric tons of chemical precursors are stored in non-weapon form inside steel containers and secure bunkers in a remote part of Libya.

Rogers said that Qaddafi might not have disclosed all his chemical and biological weapons.

"We just don't know," Rogers said, according to Bloomberg. "There had been sarin gas and other things."

The U.S. has provided \$3 million to two international humanitarian organizations – the Swiss Foundation for Mine Action in Geneva and the Manchester, U.K.-based MAG International – specializing in removing weapons and munitions. To date, the teams have cleared more than 450,000 square meters of land and destroyed 5.8 tons of munitions.

Qaddafi's vast military and industrial complex has been kept under constant surveillance by NATO aircraft since the rebellion began in February, according to U.S. officials ([Bio Prep Watch, 2011](#)).

**Title:** Expert Says That U.S. Focusing On Securing Libyan WMDs

**Date:** September 15, 2011

**Source:** [Bio Prep Watch](#)

**Abstract:** The Obama administration's chief counterterrorism advisor recently said that keeping Libyan weapons of mass destruction away from terrorist organizations has become a focus of U.S. anti-terror efforts.

The statement from John Brennan, an assistant to the president for homeland security and counterterrorism, came amid reports that former Libyan leader Muammar Qaddafi may be planning to deploy chemical or biological weapons from his last remaining strongholds, according to the Christian Science Monitor.

"We have indications that individuals of various stripes are looking to Libya and seeing it as an arms bazaar," Brennan said, the Christian Science Monitor reports. "We are concerned about the potential for certain weapons to get into the hands of terrorists."

Qaddafi is known to have retained a large supply of mustard gas, though it remains unclear whether or not he possesses the means to use it. Recently seized documents indicate that Qaddafi's regime received a large number of gas masks and hazmat suits before it lost control of much of the country.

Brennan also remarked on the state of al-Qaeda, saying the terrorist organization has been significantly degraded, but not eliminated.

"It is much more difficult now for al-Qaeda to carry out an attack here," Brennan said, according to the Christian Science Monitor ([Bio Prep Watch, 2011](#)).



**Title:** Libyan Rebel Forces Discover Chemical Weapons Stockpile

**Date:** September 23, 2011

**Source:** [Bio Prep Watch](#)

**Abstract:** Libyan rebel forces claim to have discovered stockpiles of banned chemical weapons in the southern desert areas captured from Qaddafi loyalists in the last few days.

Spokesmen from the National Transitional Council said that the depot was found in the Jufra area, 435 miles south of Tripoli, during an offensive against strongholds of the regime in the remote south of the country, the Guardian reports.

CNN reported that Qaddafi's Qaddadfa tribe in Sebha is prepared to surrender its weapons and wants to negotiate an agreement with the NTC. Libya was supposed to have destroyed its entire stockpile of chemicals weapons in early 2004 as part of a rapprochement with the west engineered by the British. The country also abandoned a rudimentary nuclear program.

The Organization for the Prohibition of Chemical Weapons, however, said that it believed Libya had kept 9.5 tons of mustard gas at a secret location, which now appears to have been captured and secured.

In 2010, Libya destroyed nearly 15 tons of sulphur mustard, which represented approximately half of its stockpile. It received an extension to eliminate the rest by May 15 and twice-yearly inspections have found no evidence of the country reviving the chemical weapons program.

The persistence of significant pockets of Qaddafi resistance are delaying plans by the NTC to declare the entire country liberated, which is a necessary step before the beginning of ambitious reforms to create a free and democratic Libya ([Bio Prep Watch, 2011](#)).

**Title:** U.N. Security Council Calls For Control Of Libyan WMDs

**Date:** September 28, 2011

**Source:** [Bio Prep Watch](#)

**Abstract:** The U.N. Security Council has been warned that the weapons of mass destruction that have been stashed in Libya for years in Muammar Qaddafi's regime could be taken by terrorists unless immediate action is taken.

Lynn Pascoe, the U.N. undersecretary-general for political affairs, issued the warning on Monday during a meeting in New York with the council and officials from Libya's new interim government, the National Transitional Council, Radio Free Europe reports.

"It is imperative that the [National Transitional Council] and the international community establish control over the large stocks of sophisticated arms, including ground-to-air missiles amassed by the Qaddafi government," Pascoe said, according to Radio Free Europe. "The spread of these weapons and the dangers that they could fall into the hands of terrorists are matters of grave concern. Re-establishing control over chemical weapons material is also of major importance."

Qaddafi's regime began producing chemical weapons in the 1980s and is known to have used them against Chadian troops in 1987. The Rabta industrial complex in Libya produced mustard gas and sarin during the late 1980s and 1990s until U.N. sanctions forced the facility to become inactive. Qaddafi declared his chemical weapons program abandoned in 2003, but after destroying 3,200 chemical weapon artillery shells under supervision in 2004, the regime declared it still had a stockpile of 23 tons of mustard gas, as well as the materials needed to produce sarin and other chemical weapons.

Leaked classified cables from the U.S. Embassy in Tripoli detail how Qaddafi's government may have kept 9.5 tons of mustard gas hidden away in secret desert stockpiles. One massive stockpile of chemical agents was discovered during last week in an area no longer under the control of Qaddafi's troops.

"Qaddafi is still at large. He has a lot of assets – money, gold – and the simple fact of thinking that he is still free and that he has at his disposal such wealth means that he is still able to destabilize the situation," Mahmud Jibril, the interim prime minister of Libya, said, according to Radio Free Europe. "Not only within my country but also along the coast and in the African desert. It is no exaggeration to say that even beyond the African continent, Qaddafi, with the means that he has, could return to his terrorist practices."

A Qaddafi spokesman said on Monday that the ousted ruler still remains in Libya and is contributing to the battle against NTC forces ([Bio Prep Watch, 2011](#)).

**Title:** Libyan Mustard Gas Storage Site May Have Been Broken Into

**Date:** October 4, 2011

**Source:** [Bio Prep Watch](#)

**Abstract:** Chemical weapons experts recently acknowledged that they are investigating reports that a Libyan mustard gas storage site may have been broken into before falling into rebel hands.

The Organization for the Prohibition of Chemical Weapons, headquartered in The Hague in the Netherlands, said that it had inspected the site, known as the Bunker, before the war and that it contained at least nine tons of mustard agent, according to IrishTimes.com.

"There is this rumor that there's a door broken down, we're been in contact with the Libyan national authority," Bob Fairweather, an OPCW official, said, IrishTimes.com reports. "We are checking on the veracity of the story."

A Libyan rebel fighter named Muhsen al Gubbi was one of 25 fighters issued hazmat suits and ordered to patrol the facility and lookout for loyalist units. During one of these patrols he noticed that one of the containment sheds had been broken into.

"NATO said to us 'don't touch three sheds, numbers 105, 106, and 107,'" Al Gubbi, from Misurata's Chain Brigade, said, according to IrishTimes.com. "We went in with masks, we don't know what is inside. One of the gates was open, NATO told us no one can go inside."

The news may cause anxiety among those that fear Muammar Qaddafi, who is still at large, may use chemical weapons as rebel fighters close in on his whereabouts, or that the mustard gas may find its way to other countries.

Al Gubbi said that the site was being closely protected by NATO forces. A group of rebel fighters who approached the site looking for weapons were reportedly bombed by NATO aircraft. Al Gubbi said his unit was told that unauthorized movement into the base would result in lethal force against him by NATO forces ([Bio Prep Watch, 2011](#)).

**Title:** Libyan Paper Says Rebels Planned Anthrax Attack

**Date:** October 20, 2011

**Source:** [Bio Prep Watch](#)

**Abstract:** According to information from the Libyan publication Zengetna, rebels may have been preparing an operation to launch biological weapons as part of an attack in Sirte.

The publication claims that the rebels were planning to send a group into Sirte to disperse anthrax in the city to kill the population that was resistant to the rebellion. In an editorial for Mathaba, the writer asked if this proposed use of biological weapons was coordinated with NATO and the TNC, Mathaba reports.

"The front of the Libyan 'Hello Misrata' has evidence that a large amount of anthrax was brought into Libya illegally, transiting the Aljagbob region from Egyptian territory," the author wrote, according to

Mathaba. "The group accompanying the shipment of anthrax was surprised by the fighters from the front of the salvation of Misrata who have killed the rebels involved and recovered all their cargo consisting of three canisters of anthrax and a laptop. One of the rebels confessed that important information is stored in the computer. This information will be publicly available soon. The rebel was sentenced to death and executed. It's amazing to see that the rebels use any means to force the people of Libya to accept them!"

The Libyan civil war began on February 15 as a series of peaceful protests that escalated through the use of military force against the protesters. The conflict was waged between forces loyal to Col. Muammar Qaddafi and his regime and those seeking to depose him.

According to a report by the New York Times, Libyan officials claim that Qaddafi was killed on Thursday during a battle in Sirte ([Bio Prep Watch, 2011](#)).

**Title:** Chemical Weapons Stockpile Found In Tripoli

**Date:** November 1, 2011

**Source:** [Bio Prep Watch](#)

**Abstract:** Mahmoud Jibril, the head of the executive committee of Libya's ruling National Transitional Council, reported on Sunday that chemical weapons were spotted in Tripoli.

The chemical weapons cache, found by the NTC last week in Tripoli, is believed to be part of fallen leader Muammar Qaddafi's stockpile, Jibril announced at a press conference, Xinhua reports.

Jibril did not provide further details for the chemical weapons' location or the amount of chemical weapons discovered.

"The military will be authorized to release a report on Nov. 3," Jibril said, before adding that an international investigation team had also arrived in Tripoli.

The U.N. Security Council has recently taken into consideration a draft resolution calling on Libya's transitional government to take steps to eliminate former leader Muammar Qaddafi's large weapons stockpiles.

Russia submitted a draft urging the new Libyan authorities to take "all necessary steps to prevent the proliferation of all arms and related materiel of all types," MonstersAndCritics.com reports.

The proposed draft calls for Tripoli to take custody of shoulder-fired surface-to-air missiles, ammunition and all types of weapons. Tripoli should also work closely with the Organization for the Prohibition of Chemical Weapons "with the aim of destroying their stockpiles of chemical weapons and their precursors," according to the draft ([Bio Prep Watch, 2011](#)).

**Title:** Inspectors May Soon Return To Libya For Mustard Gas Destruction

**Date:** November 2, 2011

**Source:** [Bio Prep Watch](#)

**Abstract:** International health inspectors may soon return to Libya to supervise the destruction of that country's stockpiles of mustard gas that began almost a year ago.

The Organization for the Prohibition of Chemical Weapons may announce as early as next week that it will resume the monitoring mission it halted in Libya due to a malfunction at a destruction facility in February, approximately the same time the rebellion broke out, according to BusinessWeek.com.

"We should have something to announce next week on this," Michael Luhan, a spokesman for the organization, said, BusinessWeek.com reports. "We're consulting regularly on arrangements to enable the return of our inspectors to Libya."

The United States is concerned about the security of the remaining stockpiles. U.S. President Barack Obama raised the issue with National Transitional Council Chairman Mustafa Abel Jalil in September.

Libya currently holds 11.3 metric tons of mustard agent and 845 metric tons of chemical precursors. The weapons are currently stored in non-weaponized states in steel containers located in secure bunkers in remote areas inside the country, according to the White House.

U.S. officials are currently working with Libya and the OPCW to get inspectors back inside Libya to take inventory and fully secure the sites.

The OPCW, which oversees an international treaty banning the use and stockpiling of chemical weapons, has been involved in Libya since it signed the agreement in 2004. Its inspectors were working to verify Libya's official accounting of the destruction process when they initially left the country ([Bio Prep Watch, 2011](#)).

**Title:** NATO Watched Over Three Libyan Chemical Weapon Stockpiles, Report Says

**Date:** November 3, 2011

**Source:** [Bio Prep Watch](#)

**Abstract:** NATO and Libyan secret agents kept close watch over hidden stockpiles of mustard gas stockpiled by ex-dictator Muammar Qaddafi during the war that toppled him to prevent his forces from using them.

Only one stockpile, located near Wadden in central Libya, was known to the United Nations. The new Libyan regime revealed on Tuesday that there were two formerly unknown sites with stocks prepared by Qaddafi. One of the sites contained weapons that could immediately be used for military purposes. Mustard gas can cause serious chemical burns in the eyes, on the skin and in the lungs, AFP reports.

Yussef Safi ad-Din, a Libyan expert who is in charge of dealing with the gas, said that both sites had been "securitized" and posed no health risk. A special team of local technicians and others from NATO had been set up, working secretly from Benghazi, to prevent the chemical weapons from being used.

"The first stage was to maintain surveillance of the chemical arms which Qaddafi controlled, and prevent him from using them," Safi ad-Din said, according to AFP. "The second step was to take control of all the chemical sites. Our forces conquered them one by one."

According to Mansur Daou, the interior security chief in the overthrown regime, the operation was a success. He is currently imprisoned in Misrata, 135 miles east of Tripoli.

"Qaddafi had quickly abandoned the idea of using chemical weapons, the Americans were watching over them from too near," Daou said, according to AFP. "We could not get near them (without being bombed from the air)."

The watch over the mustard gas at the three sites is tight, according to Safi ad-Din and local fighters. Three weeks ago, an air strike destroyed the car of two fighters who got too close to the bunkers at Waddan. Stun bombs were also been used against other fighters roaming the site some days earlier.

The U.N. Security Council adopted a resolution on Monday calling on Libya to end proliferation in the region of looted weapons that were amassed by the Qadaffi regime ([Bio Prep Watch, 2011](#)).

**Title:** U.N. Sending Weapons Experts To Libya

**Date:** November 4, 2011

**Source:** [Bio Prep Watch](#)

**Abstract:** United Nations Secretary-General Ban Ki-Moon recently said that the U.N. would send experts to Libya to help secure the country's chemical weapons and sites containing nuclear material.

In addition, Ban also offered to send technical support to aid Libya's transition to democracy. He called on the new authorities to ensure that human rights abusers are punished, according to Reuters.

"The former regime under Qaddafi has reported to the relevant United Nations organizations on nuclear materials, as well as chemical weapons," Ban said, Reuters reports. "It is very important that all these materials, very carefully and without fail, be secured."

The secretary-general also announced that experts from the Organization for the Prohibition of Chemical Weapons and the U.N.'s International Atomic Energy Agency are planning to visit Libya soon.

Despite publicly renouncing chemical and nuclear weapons within the last decade as a means of growing closer to the United States and other Western nations, former Libyan leader Qaddafi kept nuclear material for research purposes and is thought to have had remaining chemical weapons stockpiles.

The Chairman of the National Transitional Council Mustafa Abdel-Jalil said that once more of Libya's assets are unfrozen, the NTC will be able to properly control Libya's remaining weapons stockpiles and adequately control the remaining armed militias in the country ([Bio Prep Watch, 2011](#)).

**Title:** Libya Reports Progress In Securing Chemical Weapons

**Date:** November 7, 2011

**Source:** [Bio Prep Watch](#)

**Abstract:** A top United Nations envoy in Libya recently warned that some weapons depots in that country have been looted entirely, but noted progress in securing Libya's chemical and nuclear material.

The envoy, Ian Martin, said that preventing weapons from being smuggled out of Libya will be a difficult task considering how porous the nation's borders are, especially those along the desert, according to the Associated Press.

Last week, Libyan officials announced that they had discovered two sites containing chemical weapons that had not been declared by Muammar Qaddafi's regime, despite his assurances that he would not pursue non-conventional weapons.

Officials said that they have found an additional 7,000 drums of raw uranium. Martin said that the uranium has since been secured.

"That has to be a priority now, to secure what still remains in Libya," he said, the AP reports. "Over time, the international community can assist Libya and its neighbors with that, but I am afraid there is not a quick and easy solution to that problem."

Reporters came across a number of weapons depots that had been left unguarded or looted after forces loyal to Muammar Qaddafi retreated during Libya's eight month civil war.

Martin said that mines, ammunition and should-fired missiles remain a cause for serious concern.

"It's clear that much has already gone missing from unsecured locations and that there are still locations which have not been properly secured," Martin said, according to the AP ([Bio Prep Watch, 2011](#)).

**Title:** England Sending Chemical Weapons Experts To Libya

**Date:** November 16, 2011

**Source:** [Bio Prep Watch](#)

**Abstract:** British Prime Minister David Cameron recently announced that he would send chemical weapons experts to Libya to help an international team dispose of secret caches of Libyan chemical weapons.

Cameron said that the weapons were produced behind the backs of weapons inspectors who were in Libya before the international effort to remove dictator Muammar Qaddafi began in March, according to the Tribune.

"In the last few days we have learnt that the new Libyan authorities have found chemical weapons that were kept hidden from the world," Cameron said, the Tribune reports.

The prime minister said that when Qaddafi agreed to dismantle his weapons of mass destruction programs in 2003, it was clear that he had already decided to proceed with another means of producing the weapons.

Cameron lauded the efforts of the British military and derided its doubters.

"I would argue that our action helped keep the Arab Spring alive," Cameron said, the Tribune reports. "Some told us we shouldn't, because they said it would only end in failure. Some said we couldn't, because they said Britain didn't have the military might any more.

"Well, to those who predicted failure, look at what we have achieved. We saved civilian lives as Qaddafi's tanks bore down on Benghazi. We helped the Libyan people to liberate themselves."

A small military liaison team will be dispatched to Libya in the coming weeks to work alongside a group of American experts. Together, they will establish a counter WMD proliferation program for the National Transitional Government ([Bio Prep Watch, 2011](#)).

**Title:** Iran May Have Supplied Libya With Chemical Weapons Shells

**Date:** November 22, 2011

**Source:** [Bio Prep Watch](#)

**Abstract:** According to U.S. officials, President Obama's administration is currently investigating whether Iran supplied the Libyan government of Muammar Gaddafi with hundreds of special artillery shells for chemical weapons that Libya kept secret for decades.

The shells, which Libya filled with highly toxic mustard agent, were uncovered in recent weeks by revolutionary fighters in central Libya at two separate sites. Both of the sites are under heavy guard and round-the-clock surveillance by drones, Libyan and U.S. officials said, the Washington Post reports.

The discovery of the shells has prompted a U.S. intelligence led probe into how the Libyans obtained them. Several sources said early speculation had fallen on Iran.

A U.S. official with access to classified information confirmed that there were "serious concerns" that Iran had provided Libya with the shells, albeit some years ago, according to the Washington Post. In recent weeks, U.N. inspectors have released new information indicating that Iran has the capacity for developing a nuclear bomb, a charge officials in Iran have long rejected. Confirmed evidence of Iran's provision of

the specialized shells may worsen international tensions over the country's alleged pursuit of weapons of mass destruction.

One U.S. official said Iran may have sold the shells to Libya after the end of its eight year war with Iraq, in which the Iraqis used nerve and mustard agents against tens of thousands of Iranian troops, the Washington Post reports.

Four diplomatic and American sources said that the shells contain sulfur mustard, popularly known as mustard gas. Mustard gas is a liquid that is rapidly absorbed and causes debilitating respiratory damage and burns. Victims are unaware of their exposure for several hours but then experience swollen eyes, accelerated breathing trouble, widespread blisters, vomiting, nausea, diarrhea and, in severe cases, loss of sight or death. There is no antidote, and recovery, if possible, takes months of skilled medical care ([Bio Prep Watch, 2011](#)).

**Title:** Iran Dismisses Connection To Libyan Chemical Weapons

**Date:** November 28, 2011

**Source:** [Bio Prep Watch](#)

**Abstract:** Iran has dismissed a United States news report implicating it in a chemical weapons cache that was uncovered in Libya.

A spokesman for Iran said that the country was actually a champion in the fight to eradicate such arms. The spokesman was responding to a Sunday Washington Post report that quoted an anonymous U.S. official who said that special artillery shells made by Iran and filled by Libya with mustard gas were discovered in recent weeks at two different sites, AFP reports.

"About the arms delivery to the regime of (toppled Libyan leader Muammar) Gaddafi...The West would do better to look to itself, because Iran has always been at the forefront in the fight against chemical weapons," Ramin Mehmanparast, the foreign ministry spokesman for Iran, said, according to AFP.

Mehmanparast said that Iran had experience as a victim of chemical weapons, when Iraq used mustard gas its troops during the 1980-1988 war.

"Western countries have to answer how certain nations supplied the Iraqi regime with such weapons during the Iran-Iraq war," Mehmanparast said, AFP reports.

Officials in Iran said that Western countries supplied Baghdad with the chemical weapons for the war.

The shells were uncovered by revolutionary fighters in central Libya. Both of the sites are under round-the-clock surveillance by drones, the Washington Post reports ([Bio Prep Watch, 2011](#)).



# Bio & Terror Bible

## EXPOSING THE COMING BIO-TERROR PANDEMIC

**BIOTERRORBIBLE.COM:** Despite the fact that the United States and its European Union allies have been researching, planning and drilling for a major bio-terror attack and the subsequent pandemic, the nations of [Egypt](#), [Iran](#), [Iraq](#), [Libya](#), [North Korea](#) and [Syria](#) have been quietly set up over the last decade as potential bio-terror scapegoats. Based on the evidence available, it appears that the U.S., [Israel](#) and [South Korea](#) may be the future victims of major false-flag bio-terror attacks.

While the world is distracted by the rhetoric and propaganda in respect to North Korea's missile program, North Korea has been quietly been set up as a bio-terror state that will likely play a pivotal role in the upcoming war of bio-terror. Based on recent news and events, it is highly likely that North Korea will attack South Korea with a bio-terror agent possibly causing a pandemic in the region.

**Title:** U.S. Report Finds Active Biological Weapons Programs In Iran, North Korea, Russia And Syria

**Date:** September 7, 2005

**Source:** [NTI](#)

**Abstract:** The U.S. State Department has found that Iran, North Korea, Russia and Syria are maintaining biological weapons programs, the Associated Press reported last week (see [GSN](#), March 29).

The State Department also found that China still has "some elements" of a biological weapons program, while experts failed to agree on Cuba's bioweapons production capacity, AP reported.

The findings were outlined in the State Department's "Adherence to and Compliance with Arms Control, Nonproliferation, and Disarmament Agreements and Commitments" report. The congressionally mandated report, covering the two-year period ending in December 2004, details individual country's WMD capabilities and missile proliferation efforts, according to AP.

According to the report: Based on available intelligence, Iran is believed to have an offensive biological weapons program; North Korea has a "dedicated, national-level effort to develop a BW capability; Russia "continues to maintain" a weapons program; and Syria would be in violation of the Biological Weapons Convention if it was a member.

China "maintains some elements of an offensive BW capability," while Cuba has at least a "limited offensive BW research and development effort," the report found (George Gedda, Associated Press/[Baltimore Sun](#), Aug. 30).

China rejected the report's findings, according to *Voice of America*.

"These statements are far from the truth, and are irresponsible," said Zhang Yan, director general of the Chinese Foreign Ministry's arms control department. "We hope that the U.S. side will stop such erroneous practices, and we also express our strong dissatisfaction" (Luis Ramirez, [Voice of America](#), Sept. 1).

Russia has also challenged statements made in the report regarding its weapons programs, RIA Novosti reported last week.

"Those are not new accusations," the Russian Foreign Ministry said in a statement. "The Russian Foreign Ministry has had to comment on similar points in other 'research papers' that put Russia in a group of countries violating nonproliferation agreements without providing any evidence many times before."

The Foreign Ministry said the report presents "a one-sided and distorted picture of the implementation of the Strategic Arms Reduction Treaty."

Russia said the State Department offered no evidence that it has failed to honor its Chemical Weapons Convention and Biological Weapons Convention commitments ([NTI, 2005](#)).

**Title:** N Korea 'Tests Weapons On Children'

**Date:** July 24, 2009

**Source:** [Al Jazeera](#)

**Abstract:** Ex-special forces captain says biological and chemical weapons tested on human guinea pigs.

When Im Chun-yong made his daring escape from North Korea, with a handful of his special forces men, there were many reasons why the North Korean government was intent on stopping them.

They were, after all, part of Kim Jong-il's elite commandos - privy to a wealth of military secrets and insights into the workings of the reclusive regime.

But among the accounts they carried with them is one of the most shocking yet to emerge – namely the use of humans, specifically mentally or physically handicapped children, to test North Korea's biological and chemical weapons.

"If you are born mentally or physically deficient, says Im, the government says your best contribution to society... is as a guinea pig for biological and chemical weapons testing."

Even after settling into the relative safety of South Korea, for 10 years Im held on to this secret, saying it was too horrific to recount.

But with Kim's health reportedly failing, and the country appearing increasingly unpredictable, Im felt it was time he spoke out.

### **Daughter Given Up**

The former military captain says it was in the early 1990s, that he watched his then commander wrestle with giving up his 12-year-old daughter who was mentally ill.

The commander, he says, initially resisted, but after mounting pressure from his military superiors, he gave in.

Im watched as the girl was taken away. She was never seen again.

One of Im's own men later gave him an eyewitness account of human-testing.

Asked to guard a secret facility on an island off North Korea's west coast, Im says the soldier saw a number of people forced into a glass chamber.

"Poisonous gas was injected in," Im says. "He watched doctors time how long it took for them to die."

Other North Korean defectors have long alleged that the secretive nation has been using political prisoners as experimental test subjects.

Some have detailed how inmates were shipped from various concentration camps to so-called chemical "factories".

### **'Widespread Practice'**

But Im's is the first account of mentally-ill or physically challenged children being used.

Security analysts believe Kim oversees one of the most aggressive and robust biochemical weapons programmes in the world.

A member of the special forces' Brigade No.19, Im says he was trained on how to use biochemical weapons against the "enemy" – including how to fire them from short-range "bazooka-style" weapons.

He says such training was normal practice for all elite units.

Today it is estimated the country has accumulated a stockpile of more than 5,000 tonnes of biochemical weaponry; from mustard gas, to nerve agents such as sarin, to anthrax and cholera.

The extent of the stockpile is a concern to Kim Sang-hun, a retired UN official who has spent years investigating the North's chemical and biological weapons programme.

He believes over the past 20 years, the programme has advanced at a startling pace, specifically because the country's rulers approve and support the use of human test subjects.

"Human experimentation is a widespread practice," Kim says.

"I hoped I was wrong, but it is the reality and it is taking place in North Korea and it is taking place at a number of locations."

There are some who question claims that the North conducts human trials. But Kim says he has interviewed hundred of defectors who, more times than not, volunteer personal vivid accounts.

"The programme is now a commonly known fact in the North Korean public," he says.

As a former member of the elite special forces, Im agrees.

While the government may be secretive about a lot of things, he says "when it comes to human experimentation, most know it happens".

Investigating what he says are serious UN violations regarding the rights of children and prisoners, Kim Sang-hun has amassed a vast amount of evidence.

Compiled in folders at his home in Seoul are reams of testimonies and documents.

Some bear what appear to be official government stamps approving the transfer of prisoners from camps to chemical "factories".

He says he believes these are, in reality, experimental weapons sites.

He has pinpointed at least three to five labs that he believes are situated in different parts of the country, including one just a few kilometres north of the capital, Pyongyang.

Security analysts suspect there are as many as 20 such plants across the country.

### **Biochemical Threat**

As the world's attention focuses on the North's nuclear programme, Im is worried the international community will miss what he believes is the more imminent threat posed by the country's biochemical arsenal.

Arms experts say at least 30 per cent of North Korea's missile and artillery systems are capable of delivering such weapons. With each successive test, they warn the North's accuracy improves, and so too its range.

The UN Security Council now says it believes three of the seven missiles tested by the North on July 4 were Scud-ER missiles, which are known to be more accurate and have a range of 1,000km.

Tokyo is roughly 1,160km from the base on North Korea's east coast from where the missiles were fired, while other parts of Japan are closer.

Im believes the government would not hesitate to use such arms, saying he has seen the "ruthlessness" of the country's leaders.

During his escape from North Korea in December 1999, Im says he and his men battled their way out, chased by dozens of members of other commando units.

"I myself killed three men," he says. "Then after swimming across the half frozen Tumen river into China, we sold our guns, and left that life behind."

Im now devotes his time to gathering intelligence about the North's military capabilities.

Even a decade after his escape, the threat he still poses to the North Korean government means that he now lives under the constant protection of South Korea's National Intelligence Service ([Al Jazeera, 2009](#)).

**Title:** North Korea's Biochemical Threat

**Date:** October 1, 2009

**Source:** [Popular Mechanics](#)

**Abstract:** While its nuclear test spurs outrage, North Korea has grown a vast biochemical weapons arsenal in secrecy. We investigate Kim Jong Il's deception, plus his rogue nation's human trials and its deadly harvest's terror potential.

Fifty miles south of the Chinese border lies the rural town of Chongju. Like many North Korean towns, it is a small, impoverished place where people scratch a bare existence from government-controlled farms. What photographs exist of Chongju reveal a brown landscape of depleted-looking fields and shanty-style houses. It is hard to believe anything of value grows here.

But, according to intelligence reports, something precious to the North Korean regime may be under cultivation in Chongju. Beyond the shacks stands an installation suspected of being a component in North Korea's bioweapons (BW) research and development program. The effort is steeped in a level of secrecy possible only in a totalitarian state, but it is thought to encompass at least 20 facilities throughout the country. Another 12 plants churn out chemical weapons.

In late November, delegates of the signatory countries to the Biological and Toxin Weapons Convention (BTWC) met at the United Nations office in Geneva for the sixth review of the treaty since its inception in 1972. The meeting took place just weeks after North Korea publicly added the third prong to its capacity for weapons of mass destruction (WMD) by testing a nuclear device.

On day one, the U.S. delegate, Assistant Secretary of State John C. Rood, charged North Korea, along with Iran and Syria, with violating the ban on researching and developing biology for war. "We have particular concerns with the activities of North Korea ... in the biological weapons context, but also because of their ... support for terrorism and their lack of compliance with international obligations," Rood said. Internationally, it is widely agreed that the country is aggressively developing several weapons of mass destruction.

North Korea has been a signatory to the BTWC since March 1987. But, according to defectors, South Korean intelligence agencies and other sources, the nation's Fifth Machine Industry Bureau has led a successful effort to build one of the world's most extensive biochemical warfare programs. The weaponry is thought to have the potential to decimate North Korea's southern neighbor and the 28,000 U.S. troops stationed there, and to disrupt the regional economy. The gravest danger may be that North Korean dictator Kim Jong Il could sell his weapons to terrorists.

In contrast to the global frenzy triggered by North Korea's nuclear weapons test, the threat of biochemical WMDs has prompted a muted response from the West. The reason may be what former weapons inspector Christopher Davis has dubbed "nuclear blindness," which he defines as "the tunnel vision ... brought on by the mistaken belief that it is only the size of the bang that matters."

### **Dual-Use Deception**

North Korea's Chemical and Bioweapons (CBW) program appears to be modeled on that of the former Soviet Union, which covertly constructed a massive biological weapons infrastructure within the shell of a civilian research organization called Biopreparat. Inside Biopreparat, the Soviets developed deadly agents that included weaponized forms of anthrax and pneumonic plague.

Intelligence reports from the United States and South Korea list anthrax, smallpox, pneumonic plague, cholera and botulism toxins as leading components of North Korea's bioweapons projects. "Information from U.S. government sources indicates that North Korea is capable of growing several biological agents," says Michael Stebbins, head of Biology Policy at the Federation of American Scientists. And, he says, the country "has the infrastructure to weaponize them."

Anthrax is believed to be one of North Korea's most fully developed biological weapons. Growing anthrax on a large scale is relatively easy: It can be done with basic brewing equipment. Sources indicate that North Korea also has developed the ability to mill anthrax (grinding the cake into microscopic powder), and to treat it to form a lethal and durable weapon. An attack might use a modified missile that cruises at low altitude to spray a fine mist of weaponized germs over its target area. The resulting deaths and injuries could number in the thousands.

Following the same model that it employs in its BW program, the North Korean regime has folded a chemical weapons (CW) initiative into its civilian chemical industry. A 2003 CIA report stated: "Pyongyang continue[s] to acquire dual-use chemicals that could potentially be used to support [its] long-standing CW program. North Korea's CW [can] produce bulk quantities of nerve, blister, choking, and blood agents, using its sizable, although aging, chemical industry." An example is mustard gas, famously employed during World War I. It is made using 2-chloroethanol, a byproduct of carbide production.

Daniel Pinkston, director of the East Asia Nonproliferation Program at the Center for Nonproliferation Studies in Monterey, Calif., says most assessments of North Korea's WMD capabilities point to a chemical weapons stockpile of some 5000 tons of agents, including large amounts of sarin, mustard gas

and hydrogen cyanide. That would make it one of the largest chemical arsenals in the world. Up to 30 percent of the country's missile and artillery stocks is capable of delivering such chemicals, according to the Nuclear Threat Initiative, an organization that monitors nuclear, biological and chemical weapons proliferation.

North Korea is the only world government that has never signed, acceded to or even responded to invitations to join the Chemical Weapons Convention. There appears to be a good reason for that: Unlike the BTW Convention, the chemical weapons treaty mandates independent inspections.

## **Human Trials**

North Korea's biological and chemical weapons have never been deployed against outside enemies. According to defectors, however, they have been used inside the country on human test subjects. The victims: political prisoners.

Former prisoner Lee Sun Ok described one such test before the U.S. House Committee on International Relations: "In February 1990, I was asked by the chief guard to follow him to an administration warehouse ... He ordered me to check out six bundles (five pairs in each bundle) of gas masks with rubber gowns, which looked like a sea diver's kit. When I returned to my prison chamber, a total of 150 prisoners, several from each unit, were selected and separated from the other[s]. The selected prisoners were mostly crippled and weak women who had less labor value."

Later, said Lee, "I saw many prisoners lying on the slope of a hill, bleeding from their mouths and motionless, enveloped by strange fumes and surrounded by scores of guards in the gas masks ... I delivered earlier in the morning."

Additionally, a South Korean human rights activist has obtained what he claims are documents authorizing the transfer of prisoners for WMD experimentation. "The above person is transferred ... for the purpose of human experimentation with liquid gas for chemical weapons," one document reads.

## **The Terror Potential**

Tens of thousands of American troops and millions of civilians reside within range of North Korea's missiles. However, Robert Templer, Asia Program director for the International Crisis Group, says the most threatening scenario may not be a direct attack by North Korea, but rather what might happen to the weapons during the chaos that would erupt if the regime crumbles.

"Over the past 10 years we Templer says. **"If the country collapses, then in the vortex created by the lack of command and control and restraint on these weapons, some general may have seen different parts of the state beginning to operate with a greater level of freedom," decide to sell them to a middleman, to someone in China, to an arms dealer with enough money.**"

And it wouldn't take a change in the power structure for the North Korean government to begin selling such weapons to terrorist groups. Ironically, North Korea's WMD threat may be sharpest when the weapons move beyond the control of Kim Jong Il, the world figure who has come, perhaps more than any other, to symbolize the dangers of WMD proliferation ([Popular Mechanics, 2009](#)).

**Title:** N Korea Said To Have 13 Types Of Biological Weapons.

**Date:** October 5, 2009

**Source:** [Free Library](#)

**Abstract:** North Korea is thought to have 13 types of viruses and germs which can be used in biological weapons, as well as up to 5,000 tons of chemical weapons, South Korea's defence ministry said Monday.

In a report to parliament, the ministry said the communist North has one of the world's largest stockpiles

of chemical and biological weapons.

The list of diseases that could be caused by the biological weapons includes cholera, yellow fever, smallpox, eruptive [typhus](#) typhus, any of a group of infectious diseases caused by microorganisms classified between bacteria and viruses, known as rickettsias. Typhus diseases are characterized by high fever and an early onset of rash and headache. , typhoid fever and [dysentery](#) dysentery (dīs`əntēr`ē), inflammation of the intestine characterized by the frequent passage of feces, usually with blood and mucus. , it said. The ministry estimated its neighbour s stockpile of chemical weapons at between 2,500 to 5,000 tons.

The assertions that the North has chemical and biological weapons, in addition to its nuclear and conventional weaponry, are not new. But Monday s report gave more details of the alleged biological arsenal.

The International Crisis Group said in a report in June that PyongyangEoe1/4aos nuclear capabilities are the greatest threat, but it also has a large chemical weapons stockpile and a suspected biological weapons programme.

The chemical weapons could be deliverable by artillery or missile to cause massive civilian casualties in South Korea, the Brussels-based think-tank said.

The stockpile includes between 2,500-5,000 tons of mustard gas, [phosgene](#) phosgene (fös`jēn), colorless poison gas, first used during World War I by the Germans (1915). When dispersed in air, the gas has the odor of new-mowed hay. , blood agents, [sarin](#) sarin (zārēn`), volatile liquid used as a nerve gas. It boils at 147°C; but evaporates quickly at room temperature; its vapor is colorless and odorless. , [tabun](#) tabun (tä`bən), liquid chemical compound used as a nerve gas. It boils at 240°C; with some decomposition. The liquid is colorless to brownish; its vapors have a fruity odor similar to that of bitter almonds. and persistent nerve agents and can be delivered by long-range artillery, missiles, aircraft and naval vessels, it said.

The North and South have remained technically at war since their 1950-53 conflict ended only in an armistice and not a peace treaty. The South s 655,000-strong military, backed up by 28,500 US troops, faces off against the North s 1.2 million-member armed forces ([Free Library, 2009](#)).

**Title:** Army Questions Preparedness In Face Of N. Korean Bio-Threat

**Date:** February 4, 2010

**Source:** [Bio Prep Watch](#)

**Abstract:** Senior U.S. officials, noting North Korea's biological and chemical weapons as well as nuclear warheads and long range missiles, announced that U.S. ground forces may not, in the case of an emergency situation in North Korea, be able to arrive in South Korea in time.

"We could not get the Army units required for South Korea into South Korea on the time line required by the plan," Secretary of Defense Robert Gates told a hearing of the House Armed Services Committee. "That's not to say they wouldn't get there. It's just that they wouldn't get there as quickly because of the commitments that we have in Iraq and Afghanistan. And so certainly initially we would be especially dependent on the Navy and the Air Force."

If the proposed troop withdrawal in Iraq in 2011 were to occur, Michael Mullen, chairman of the Joint Chiefs of Staff has said, extra ground troops could arrive in South Korea in time.

If North Korea were to collapse, a report issued by the Council on Foreign Relations issued last year said, 460,00 troops, or approximately three times the number deployed in Iraq, would be needed to maintain stability in the country.



Locating, safeguarding, and disposing of materials and stockpiles of the North's estimated six to eight nuclear weapons, four thousand tons of chemical weapons, and any biological weapons, as well as its ballistic missile program, would be a high priority, especially for the United States," the report said.

North Korea is also believed to be in possession of ballistics missiles that would be capable of reaching western parts of the United States ([Bio Prep Watch, 2010](#)).

**Title:** N. Korea 'Plotting Biochemical Attack'

**Date:** August 13, 2010

**Source:** [Chosun Ilbo](#)

**Abstract:** North Korea is trying to launch a biochemical attack against the South prior to the G20 Summit in Seoul in November, a conservative activist claimed Thursday citing a North Korean source.

Choi Sung-yong, the head of Family Assembly Abducted to North Korea said the North is preparing to send 20 different deadly biochemical weapons attached to balloons and parachutes across the border. He said the campaign is led by Gen. Kim Kyok-sik, who commands the North's frontline fourth corps, at the orders of leader Kim Jong-il's heir apparent Jong-un.

Choi said the story came from "an active soldier in the North Korean Army." Kim Kyok-sik was chief of the General Staff of the People's Army before being demoted to his current post and is thought to have masterminded the torpedo attack on the South Korean Navy corvette Cheonan.

Choi also claimed a number of North Korean mines found south of the border after recent floods were deliberately floated down the Imjin River by Kim Kyok-sik's men at Kim Jong-un's orders.

"The source said the frontline fourth corps is collecting mines from all over North Korea, not only in Hwanghae Province where the fourth corps is located but from as far afield as North Hamgyong Province. It floated the mines down intentionally but blamed it on floods," Choi claimed.

Asked about the claim, a National Intelligence Service spokesman was noncommittal, saying, "It's possible to imagine a number of scenarios, but we can't draw any conclusions at the moment." The Joint Chiefs of Staff declined to comment. ([Chosun Ilbo, 2010](#)).

**Title:** North Korea Has Capability To Mass Produce Chemical Weapons, Expert Says

**Date:** October 14, 2010

**Source:** [Bio Prep Watch](#)

**Abstract:** Officials with the Korea Institute for Defense Analyses have said that they believe that North Korea has the ability to produce up to 12,000 tons of chemical weapons.

In a recent report, Korea Institute for Defense Analyses Kwon Yang-Joo said this capability could cause unprecedented civilian casualties in South Korea, AFP reports. Amidst concerns over North Korea's nuclear capabilities, Yang-Joo told AFP that the North Korea's chemical weapons stockpile is South Korea's number one security priority.

"The international community must show its strong will in seeking disarmament of North Korea's chemical weapons along with its denuclearization," Yang-Joo told AFP.

South Korea Defense Ministry officials estimate that North Korea possess approximately 2,500 to 5,000 tons of mustard gas, blood agents and nerve gas, according to the AFP report. Yang-Joo said North Korea could easily manufacture up to 12,000 tons of chemical weapons that could be deliverable by aircraft, missiles or artillery shells.

Yang-Joo estimated that 5,000 tons of chemical agents could contaminate 950 square miles, an area that is about four times the size of Seoul. He also said that if North Korea was to use all of its chemical stockpile at once, it would have the ability to produce upwards of 1.25 million chemical bombs, AFP reports ([Bio Prep Watch, 2010](#)).

**Title:** Concerns Raised About Potential North Korean Bio Attack

**Date:** November 12, 2010

**Source:** [Bio Prep Watch](#)

**Abstract:** British diplomats have recently announced some concern that North Korea may strike South Korea with biological weapons during the G20 summit in order to create an attention grabbing event.

Among possible scenarios, diplomatic sources revealed, are an incursion into South Korean waters, missile testing in South Korean airspace and even the use of biological weapons filled balloons against Seoul, according to the Telegraph.

"There has been some speculation that North Korea would try to disrupt the summit," a diplomatic source revealed, according to the Telegraph. "They are in the midst of a succession. The leadership must want to demonstrate it's more than business as usual."

Last month, Kim Tae-Young, South Korea's defense minister, warned that North Korea could potentially launch attacks he called provocative during the succession period.

U.S. Secretary of State Hillary Clinton voiced concerns ahead of the G20 meeting that U.S. President Barack Obama will attend. She reportedly went as far as to ask Chinese State Councilor Dai Bingguo to ensure that North Korea abstain from such displays, the Telegraph reports.

British officials said on November 10 that the U.K. position remains that it hopes to see the six party talks concerning North Korea's nuclear program continue, as well as the firm pressure of international sanctions ([Bio Prep Watch, 2010](#)).

**Title:** South Korea Claims North Korea Possesses Mass Chemical, Biological Weapons

**Date:** December 31, 2010

**Source:** [Bio Prep Watch](#)

**Abstract:** In a recently published defense white paper, South Korea claimed that North Korea is in possession of and continues to develop chemical, biological and nuclear weapons.

According to the white paper, North Korea has 2,500 to 5,000 tons of various chemical weapons and has extracted approximately 40 kilograms of plutonium by reprocessing spent fuel rods from a 5 MW nuclear reactor it has run since the 1980s.

Additionally, according to the paper's details as reported by English.Chosun.com, the North has increased the number of its special forces troops by 20,000 over the past two years, reaching a total of approximately 200,000, mostly deployed in a light infantry division under an Army Corps that is stationed near the frontline. A light infantry regiment has also been added to an Army division nearby.

The force of 200,000 is reportedly ready to carry out combined operations aimed at attacking major South Korean facilities, assassinating important people and infiltrating the South by using a network of underground tunnels.

A 2006 defense white paper estimated the North's special forces to number approximately 120,000. By 2008, that number had increased to 160,000, English.Chosun.com reports. Currently, they account for 17 percent of the total number of North Korea's 1.19 million soldiers ([Bio Prep Watch, 2010](#)).

**Title:** North Korean Anthrax Attack Could Kill 600,000

**Date:** October 27, 2011

**Source:** [Bio Prep Watch](#)

**Abstract:** An American defense expert recently warned that North Korea could kill between 20,000 and 600,000 South Koreans if it released anthrax over Seoul, depending on the dispersion method.

Bruce Bennett, a senior policy analyst at the RAND Corporation, said that approximately 40 percent of those infected in such an attack would die within 10 days. Bennet made the comments at an international symposium on North Korea's biochemical capabilities held at the Korean Military Academy, according to Donga.com.

A North Korean attack using an aerosolized form of anthrax would leave many with respiratory anthrax, the most difficult form of the illness to treat. Most of the affected would show symptoms of exposure by the third day and begin dying on the fourth day.

Bennett said that because North Korea would most likely use several means of dispersing anthrax spores, including missiles, aircraft and special forces equipped with specialized equipment, South Korea should take action now to bolster its detection capabilities.

Bennett suggested that aircraft that could potentially carry anthrax should be destroyed, if at all possible, over North Korean airspace because the virus could reach the ground even after the planes are intercepted. Bennett also encouraged South Korea to investigate domestic groups with connections to North Korea that would be capable of spreading chemical materials over a large area.

Overall, Bennett said that the use of biological weapons by North Korea would occur as a prelude to an attack, adding that it would change the nature of any conflict on the Korean Peninsula ([Bio Prep Watch, 2011](#)).

**Title:** Exercise Focuses On Potential N. Korea Biological, Chemical Attack

**Date:** November 10, 2011

**Source:** [Stripes](#)

**Abstract:** U.S. and South Korean military officials huddled in operations centers over the past two weeks going over, in great detail, how they would respond to a chemical or biological attack from North Korea.

While many details of the exercise are classified, 2nd Infantry Division officials said the computer-based Warpath III exercise, which was scheduled to end Thursday, gave 1,000 servicemembers from eight American and South Korean brigades experience in how the alliance would react with the "full spectrum" of its manpower and equipment in the event the North made good on threats it has made over the years.

"That threat is real," 2ID spokesman Lt. Col. Joe Scrocca said. "The regime in North Korea ... they claim to have those weapons (and) they've threatened to use those weapons."

"I think it would be irresponsible not to take that threat seriously. If we don't practice, we will not be ready if they use those weapons. We're practicing for a real-world threat on the peninsula."

After getting an operations center update Tuesday from participants in the exercise, 2ID commander Maj. Gen. Edward C. Cardon said U.S. and South Korean officials should not be lulled into a false sense of

security by conciliatory gestures the North has made in recent months toward the alliance and the rest of the outside world.

"I'm in the security business, where you constantly get surprised," he said. "So, the best thing you can do is be ready. All we can do is remain as ready as possible and show that we are capable."

Earlier in the day, as he flew by helicopter between exercise bases of operation at Camp Casey and at a Korean army base near Gimpo, Cardon said it is "an unknown unknown" whether North Korea will continue to present itself as open to negotiations with the U.S. and the South, and to continue to try to distance itself from last year's sinking of a South Korean warship and shelling of an island near the disputed maritime border between the two Koreas – events that left 50 people dead.

"Our job is to be ready for whatever comes," the commander said. "We're in the business of conducting operations with the least ... loss of life."

While North Korea's developing nuclear weapons program has grabbed the lion's share of headlines in recent years, those familiar with the North believe its chemical and biological capabilities would be key elements of any all-out attack on the South.

A 2007 Popular Mechanics investigative report stated that, according to defectors, South Korean intelligence agencies and other sources, North Korea has built "one of the world's most extensive biochemical warfare programs."

"The weaponry is thought to have the potential to decimate [South Korea] and the 28,000 U.S. troops stationed there," the story said.

In 2009, The Associated Press reported that it is "widely believed the North has a chemical capability that it could unleash in the early stages of a land war to demoralize defending forces and deny the use of mobilization centers, storage areas and military bases."

In September, the Yonhap News Agency reported that South Korean lawmaker Shin Hak-yong called for greater efforts to expand the South's defense against potential biological warfare, saying that North Korea is prepared to spread 13 kinds of biological agents, including anthrax bacterium, the smallpox virus and cholera.

And last month, The Dong-A Ilbo newspaper reported that Bruce Bennett – a senior policy analyst at the U.S.-based RAND Corp. think tank – said as many as 240,000 people would die if North Korea managed to release 10 kilograms of anthrax over Seoul.

Speaking at an international symposium at the Korea Military Academy, Bennett reportedly said the North would use a variety of methods – including missiles, aircraft or special forces – to spread anthrax as the prelude to an attack on South Korea.

Cardon — who recently took over as 2ID commander after serving in Iraq — said the North's chemical and biological capabilities "bring their own set of complexities" the U.S. military has not had to deal with in Afghanistan or Iraq.

"Our job is to be ready for whatever comes," he said.

Commenting on the Warpath III exercise, Scrocca said, "We're just about the only ones in the Army doing this full-spectrum-type stuff against all possible type threats. This is all computer-based ... but we're working on the strategies that would be used in a full spectrum of operations."

“If they were to come across the border, how would we (defend) against that?” he said. “We’re practicing the identification, detection and defense against chemical-biological weapons — How would we be able to detect (chemical-biological weapons)? What would happen once they are detected? How would we decontaminate soldiers and equipment if that happened?” ([Stripes, 2011](#)).

**Title:** North Korea's Other Weapons Threat

**Date:** November 12, 2011

**Source:** [Diplomat](#)

**Abstract:** International attention is usually focused on North Korea's nuclear weapons program. But Pyongyang's growing chemical and biological weapons capabilities are worrying Seoul.

North Korea's latent nuclear weapons program is rightfully the main point of concern for its neighbors and the international community. But far less publicized is Pyongyang's ongoing efforts to build upon its capabilities to produce and maintain chemical and biological weapons (CBW).

North Korea's expansion of these programs is no secret to intelligence agencies around the world, and there are a number of reports detailing sites across the country dedicated to the production of CBW. The question, though how, is has Pyongyang been able to circumvent the international CBW regime so easily?

On the question of chemical weapons, this problem is easier to understand – North Korea isn't a state party to the Chemical Weapons Convention (CWC) and has never been subject to inspections of its chemical industry facilities or sites believed associated with its CW program. Regardless, there's little debate about the existence of the North's CW program, with intelligence assessments from Russia, Britain, the United States and South Korea all indicating that Pyongyang continues to produce CW stocks.

Much less clear is the scope of the CW program and its level of advancement. Most assessments concur that the North has produced all of the main chemical agents such as nerve (including VX gas), blood, blister and choking agents. There's less certainty regarding the amount of chemical agents stockpiled by the regime, although estimates range from 1,000 to 5,000 tons. However, even if the North's program is at the low end of estimates, its capacity is bolstered by the fact that its military has a variety of sophisticated delivery vehicles for CW attacks including missiles, artillery and airborne bombs.

While Pyongyang publicly denies the need for transparency on its CW program, its production of biological weapons is muddled and concealed by weak international non-proliferation standards. Unlike the Organization for the Prohibition of Chemical Weapons (OPCW), which has robust verification standards, the Biological Weapons Convention (BWC) is plagued by the failure of its members to agree on a universal verification mechanism that would adequately ensure that all state parties are held to account for their treaty commitments.

States at the BWC have been engaged in talks to come to an agreement on a suitable verification arm, but these efforts were cut short after the United States withdrew its support back in 2001. At the time, George W. Bush's administration insisted that such a mechanism would require considerable financial capital with little pay off in security terms. The Pentagon also stressed that it was concerned about diverting precious resources on combating BW to a multilateral organization that would in turn take away funds from its successful biodefense programs. But perhaps the largest hurdle is to overcome U.S. and other members' concerns that a strict verification regime may impose heavy restrictions on the biotech industry ([Diplomat, 2011](#)).

**Title:** Greece Seized Anti-Chemical Weapons Suits From North Korea In 2009

**Date:** November 17, 2011

**Source:** [Bio Prep Watch](#)

**Abstract:** Greek authorities seized almost 14,000 anti-chemical weapons suits from a North Korean ship potentially headed for Syria but did not disclose the finding for close to two years, diplomats said on Wednesday.

The seizure was reported to the U.N. Security Council, which discussed monitoring nuclear sanctions against the isolated North. The Greek operation was carried out in November 2009 but was only reported to the United Nations in September, a diplomat told AFP on condition of anonymity. The diplomat also confirmed the number of suits to protect against chemical weapons that were involved, AFP reports.

"It seems the shipment was headed for Latakia in Syria," a second diplomat said, according to AFP. "There is increasing concern because more and more of the violations before several sanctions committees seem to involve Syria."

Syria has already been connected to breaches of an arms embargo against Iran.

Both diplomats spoke on condition of anonymity as the report by Jose Filipe Moraes Cabral, the chairman of the North Korea sanctions committee and Portugal's U.N. Ambassador, was given behind closed doors. The U.N. Security Council ordered tough sanctions against North Korea after the country staged nuclear weapons tests in 2006 and 2009.

The North pulled out of nuclear talks with South Korea, Russia, Japan, China and the United States in 2009 and efforts to kick start negotiations are struggling. The United States and its allies are saying that North Korea is not serious about disarmament.

"(There are) strong concerns in council about the ongoing proliferation efforts," a German diplomat said, according to AFP ([Bio Prep Watch, 2011](#)).

**Title:** North Korea Remains Chemical Attack Threat

**Date:** December 20, 2011

**Source:** [Bio Prep Watch](#)

**Abstract:** The next North Korean leader will take over an impoverished country that supports a large military armed with massive amounts of chemical weaponry and a small nuclear arsenal.

The Korean military is thought to have an annual budget of between \$4 to \$7 billion. The country's population is thought to be approximately 24 million people, 1.2 million of whom are currently serving in its armed forces, according to France24.com.

U.S. and allied military planners believe that South Korea would ultimately win in a conventional war, but fear Pyongyang would seek to inflict mass numbers of casualties and cause panic by using its chemical and biological arsenal.

South Korean defense estimates are imprecise, but the general consensus is that the Korean People's Army is in possession 2,500 to 5,000 tons of chemical weapons, including mustard, phosgene, blood agents, sarin, tabun and V-agents. The chemical agents could be delivered by long-range artillery, multiple rocket launchers, ballistic missiles, aircraft or naval vessels.

Experts are unsure of the extent of Pyongyang's biological weapons development program, but believe they have stockpiles of botulinum toxin and anthrax.

North Korea has not signed the Chemical Weapons Convention but is a signatory to the Biological and Toxin Weapons Convention and the Geneva Protocol, which prohibits the use of chemical or biological weapons in war. Pyongyang denies having programs to create such weapons, according to CrisisGroup.org ([Bio Prep Watch, 2011](#)).

**Title:** North Korea's Chemical and Biological Weapons (CBW) Programmes

**Date:** 2012

**Source:** [IISS](#)

**Abstract:** Deciphering the chemical and biological weapons capabilities of any country is a challenge. Chemical weapons (CW) programmes are difficult to trace because many of the facilities potentially involved in military activities are dual-use, with legitimate peaceful purposes, and are relatively easy to conceal. With biological weapons (BW), this is even more the case. With regard to North Korea, assessments are especially difficult due to the fact that – in comparison to other countries suspected of pursuing chemical and biological weapons – the country has remained less accessible in terms of economic and political contacts. Since North Korea is not a party to the Chemical Weapons Convention (CWC), there have never been any official declarations and international inspections of its chemical infrastructure, much less suspect facilities that might be associated with a chemical weapons programme. Also, although North Korea is officially a party to the Biological Weapons Convention (BWC), the Convention lacks a strong verification and inspection mechanism. Another major hindrance to comprehensive insight on North Korea's presumed chemical and biological weapons programmes is that its research and industrial facilities in these areas are relatively isolated from the outside world, so much so that even basic questions of science and infrastructure are uncertain.

In these circumstances, an analysis of North Korea's possible chemical and biological weapons programmes has to rely on public information provided by governments, defectors, and secondary source publications. Such an analysis, made using sources that by their very nature are not comprehensive, will contain many gaps and uncertainties. There are very few details on these suspect programmes that can be specified with confidence. Nonetheless, an analysis based on a variety of sources, particularly official US, Russian and South Korean statements and reports, concludes that North Korea probably has developed chemical weapons to be part of its deployed military capabilities (although there is little authoritative information on the type and amount of agent or delivery means). It is also probable that North Korea has a biological weapons programme at least at the research and development stage. North Korea has dual-use facilities that could be used to produce biological agents as well as a munitions industry that could be used to weaponise such agents. However, there is not enough information to determine whether Pyongyang has progressed beyond the research and development stage for a biological weapons programme and actually possesses stocks of biological weapons.

### **Chemical Weapons Programme**

Since the early 1990s, official US, Russian and South Korean government publications have all described North Korea as having an active chemical weapons (CW) programme that has gone beyond research and development and includes the actual production and stockpiling of chemical weapons.<sup>2</sup> There is considerable uncertainty, however, over the composition of that stockpile. Given its large – though ageing – chemical industry, North Korea is generally thought to be capable of producing all of the traditional chemical warfare agents (nerve, blister, blood and choking), although it may require imports of some specific precursors to produce nerve agents which are relatively more difficult to fabricate than the first generation blister, blood and choking agents. However, the exact size of the North Korean chemical weapons stockpile remains unknown. Recent South Korean government reports estimate a range of between 2,500–5,000 tonnes, but it is unclear whether these estimates concern the weight of chemical agent or the overall munitions stockpile and even whether they include biological agents. In any event, these figures are highly speculative. There is little authoritative information on the types of chemical munitions that have been stockpiled, but North Korea is capable of using a variety of delivery systems to disseminate chemical agents, including artillery, multiple rocket launchers, mortars, aerial bombs, and missiles, as well as Special Forces. The role of chemical weapons in North Korea's military planning is



unknown, but it may be based partially on old Soviet doctrine. US and South Korean forces operate on the assumption that North Korea would use chemical weapons against both military and civilian targets as part of either offensive operations or in retaliation for an attack on North Korea.

## **Origins and Development**

In 1954, the North Korean army reportedly established regular chemical and biological defence units, which were most likely modelled on Soviet nuclear, biological, and chemical (NBC) units. According to some press accounts, North Korea's offensive chemical weapons programme also began at this time, relying primarily on assistance from the Soviet Union, but the reliability of these reports cannot be determined. In any event, in the late 1950s, North Korea began to develop an extensive chemical industry. The First Five Year Plan (1957–61) placed great emphasis on developing a robust organic and inorganic chemical industry, building on facilities constructed during the Japanese occupation. At the end of 1961, Kim Il Sung issued a 'Declaration of Chemicalisation'. This called for greater efforts to develop various chemical production facilities to support different sectors of the North Korean economy. According to the South Korean Ministry of National Defense, the 1961 declaration reflected North Korean recognition of the importance of chemical warfare. As a result of its large chemical infrastructure, North Korea can produce a number of dual-use chemicals, such as compounds of phosphate, ammonium, fluoride, chloride and sulphur, that could be diverted from civilian chemical uses to support a chemical weapons programme.

By the late 1960s, according to the US Department of Defense, North Korea was believed to have begun experiments with the production of offensive chemical agents. In May 1979, the US Defense Intelligence Agency reported that North Korea possessed only a defensive chemical weapons capability, although it noted that development of offensive chemical weapons would be the next logical step. Several press reports from the 1980s continued this speculation. The first publicly available official report, to the effect that North Korea had produced chemical weapons agents, was published in January 1987. This publication, by the South Korean Ministry of National Defense, reported that North Korea possessed up to 250 tonnes of chemical weapons – including mustard and nerve agents – designed for delivery by artillery shells.

According to official and secondary reporting, North Korea's chemical weapons arsenal expanded in the early 1990s. However, it is difficult to determine the extent to which such statements reflected actual developments on the ground, or whether they resulted from outside factors affecting public reports of North Korea's programme. Political factors have had an impact. For instance, in 1992, as negotiations for the Chemical Weapons Convention (CWC) were drawing to a close, Seoul sought to publicise the extent of North Korea's chemical weapons programme in a bid to pressure Pyongyang to sign the CWC. In October 1992,

for example, Seoul reported that North Korea had 1,000 tonnes of chemical agent held in six storage facilities, a four-fold increase over the 1987 assessment of 250 tonnes of agent.<sup>10</sup> Pyongyang denied these claims, and countered that the US was storing chemical weapons in South Korea. On 14 January 1993, South Korea signed the CWC when it was opened for signature, and later declared a small stock of chemical weapons, which are being destroyed in accordance with the Convention. North Korea, on the other hand, issued a formal statement on 13 January 1993 denying that it possessed a chemical weapons programme, but it refused to join the CWC.

A second factor, in the mid-1990s, that influenced the public reporting of North Korea's chemical weapons capabilities was the appearance of several prominent defectors, who publicised purported details about North Korea's chemical weapons arsenal, along with related research, production and storage facilities. The most influential of these was Sergeant Yi Chung Kuk, who worked in the Nuclear-Chemical Defence Bureau of the Korean People's Army (KPA) and defected in March 1994. He did so, he said, in order to warn South Korea about the dangers posed by North Korea's chemical weapons programme. Sergeant Yi provided first-hand information on the organisation and equipment of North Korea's chemical defence units, which he was directly involved in, but he also reported secondhand information on offensive

chemical weapons activities and facilities. Another key defector was Colonel Choi Ju Hwal, who also worked in the KPA and defected in 1995. Colonel Choi said that he did not have direct knowledge of North Korea's chemical weapons programme, though he claimed to have obtained information from other officials in the Ministry of Defence. Much of Colonel Choi's testimony is identical to information from other defectors, press accounts, and official South Korean government documents, and it is difficult to determine how much is original and how much is derivative. Finally, Hwang Chang Yop, the Secretary of North Korea's Workers Party, defected in August 1996 and said that he had heard from other senior North Korean officials that North Korea had an arsenal of high-grade chemical weapons capable of 'scorching' South Korea and Japan. Mr Hwang did not claim any direct knowledge of chemical weapons production or deployment. Most of the information provided by these North Korean defectors cannot be independently verified, and the usual caveats about information from defectors applies. Nonetheless, their accounts were widely reported in the South Korean media and may have influenced official assessments by Seoul.

Arguably, Pyongyang had a strong incentive to enhance its chemical weapons programme in the mid-1990s, to compensate for the limits on its nuclear capabilities imposed by the October 1994 Agreed Framework. In addition, the financial limits on modernising its conventional forces may have given Pyongyang more reason to build up its CW capabilities. This speculation cannot be confirmed by direct evidence, but Seoul began to report a greater North Korean chemical weapons capability in the mid-1990s. In 1995, for example, the South Korean Foreign Ministry, the National Unification Board and South Korean military sources reported that North Korea had a stockpile of 1,000–5,000 tonnes of chemical and biological agents, including blister agents, nerve agents, choking agent, blood agent, and tear gas, which could be delivered by artillery, multiple rocket launchers, FROG rockets, and Scud missiles. The most recent South Korean Ministry of National Defense report on North Korea's CBW capabilities, from 2001, lists but does not identify by name four research, eight production, and seven storage sites for chemical weapons, and estimates the size of the Pyongyang's stockpile at between 2,500–5,000 tonnes. There is some uncertainty as to whether the various South Korean estimates are for agent or munitions tonnes, and whether they include biological as well as chemical agents.

Official US sources agree on the existence of a North Korean chemical weapons programme, including the stockpiling of agents that could be delivered by a variety of weapons, but Washington has tended to report fewer details than Seoul. In general, US analysts tend to be cautious about the reliability of human information on North Korea's CW programme, and it is extremely difficult to quantify issues concerning potential production rates and possible stockpiles because North Korean chemical facilities are not subject to international inspections, and satellite intelligence has little value in distinguishing between chemical production for military or civilian purposes. A 2001 US Department of Defense report identifies nerve, blister, blood, choking and tear gases as among the agents the North Koreans can produce and assesses that North Korea possesses a 'sizeable stockpile' of these agents, without estimating a specific quantity of agent. According to the US, there may be limits on the North's production capacity. For example, the senior US military official in Seoul, General Schwartz, has testified that the North is capable of independently producing components only for first generation (i.e. World War I-type) chemical agents (e.g. phosgene and mustard). Imports of some precursors may be necessary for the production of more advanced nerve agents. Official US sources agree with South Korean reports that North Korea has weaponised chemical weapons agents for deliver by artillery, missiles, and aircraft, as well as unconventional means, but US public reports generally do not discuss suspect or possible research, production, and storage sites associated with chemical weapons.

North Korean defectors and various secondary sources have provided detailed information about facilities purportedly involved in research, production, and storage of chemical precursors, agents and munitions.<sup>22</sup> According to these sources, North Korea's chemical weapons stockpile includes first generation blister agents (lewisite and mustard), various nerve agents (sarin, soman, tabun, and V-agents), and blood agents (hydrogen cyanide and cyanogen chloride). Chemical weapons research is said to take place at various universities and at a number of institutes under the aegis of the Second Natural Science Academy. Chemical weapons production facilities are reported to include the Kanggye Chemical Factory and Factory No. 108 in Chagang Province, the Sakchu Chemical Factory in North

Pyongan Province, the Ilyong Branch of the Sunchon Vinalon Factory in South Pyongan Province and Factory No. 297 in Pyongwon, South Pyongan Province.

In addition, a number of civilian chemical facilities have been implicated in chemical weapons production, such as the Manpo Chemical Factory and Aoji-ri Chemical Complex. Defectors and press stories also report that chemical agent storage sites are located in the cities of Masan-dong, Samsan-dong, and Sariwon, and in the greater Pyongyang area. These facilities are reportedly comprised of storage tanks housed in warehouses and buildings above ground, partially buried structures, and underground tunnels. It is alleged that chemical weapons agents are transferred to facilities at Sakchu or Kanggye for loading into munitions, which include 80mm artillery shells, 240mm rockets, aerial bombs, and aerial spray tanks. Following final assembly and filling, chemical munitions are reportedly stored at the Maram Materials Corporation and the Chiha-ri Chemical Corporation, located in Masan-dong, Pyongyang, and Anbyon, Kangwon Province, respectively. Most of this information cannot be independently confirmed.

### **Potential Military uses for Chemical Weapons**

Assuming that North Korea maintains a stockpile, chemical weapons agents and munitions could play a role in complementing Pyongyang's conventional military power in offensive or defensive operations. In theory, North Korean forces could use chemical weapons against US and South Korean forces to reduce these forces' combat effectiveness, deny the use of mobilisation centres, storage areas, and military bases, and hinder the arrival of reinforcements from overseas. Non-persistent chemical agents could be used to help break through defensive lines or to hinder an allied counterattack. Persistent chemical agents could be used against fixed targets, including command and control centres, logistics hubs, and airbases. North Korean forces appear to be prepared for operations in a contaminated environment. Chemical defence battalions are reportedly integrated into larger ground force units, and many troops are reportedly equipped with chemical protection equipment, including masks, suits, detectors and decontamination systems. North Korean troops are also said to participate in chemical exercises in an attempt to develop mission capability under chemical warfare conditions.

Of course, these defensive measures could reflect North Korean expectations that their forces may be subjected to a chemical attacks. Nonetheless, US and South Korean military commanders assume that North Korean offensive military plans include the use of chemical agents delivered by a variety of traditional means, such as ballistic missiles, artillery rockets and shells, mortars, and aerial bombs and sprays, against both military and civilian targets. Delivery by Special Forces is also a possibility. Aside from their potential role in offensive operations, chemical weapons presumably contribute to North Korea's deterrent posture, especially since North Korea's conventional capabilities have eroded relative to US and South Korean forces. Although Pyongyang officially denies that it possesses chemical weapons, the widespread belief that North Korea has a substantial chemical weapons arsenal – noted in official US and South Korean government reports – only serves to reinforce the view in the US, South Korea and Japan that a conflict on the Korean Peninsula would result in the use of chemical weapons against civilian and military targets.

### **Biological Weapons Programme**

There is less public information on North Korea's biological weapons programme than on its chemical weapons programme. Official US, Russian and South Korean reports agree that North Korea has conducted biological weapons research, but there is considerable uncertainty as to whether Pyongyang possesses biological weapons and, if so, the types of agents involved. **While official South Korean sources claim that North Korea has weaponised one or two biological agents, official US and Russian sources characterise North Korea as 'capable' of producing a variety of agents, including anthrax, cholera and plague without judging that North Korea has actually produced biological weapons.** Given the dearth of information, it is impossible to make a firm judgement either way. Various defectors and press reports give details of biological weapons research, testing and production, but such information cannot be confirmed. There is no authoritative information on the potential role of biological weapons in North Korean military strategy, beyond speculation that biological weapons may be relatively

less significant than chemical weapons, which have more utility as a battlefield weapon, and nuclear weapons, which are a more capable mass destruction weapon.

Virtually nothing is known about the history of North Korea's biological weapons programme. Official US sources state that North Korea has pursued a biological warfare capability since the 1960s. During this time, according to press reports, a laboratory was established under the authority of the Academy of National Defence and 10–13 different pathogens were investigated, including anthrax, cholera, bubonic plague, smallpox and yellow fever, some of which reportedly were imported from culture collections in Japan. According to another secondary source, construction of an underground biological weapons research and development facility was completed in the 1970s. This facility was located in Onjong-ri, South Pyongan Province and conducted research, development, and testing of biological weapons agents on small laboratory animals.

A 1998 White Paper released by the South Korean Ministry of National Defense, reported that, 'by 1980, [North Korea] had succeeded in its experiments in bacteria and virus cultivation to produce biological weapons, and by the late 1980s had completed live experiments with such weapons.' This is generally consistent with a 1993 report by the Russian intelligence service on proliferation, which stated that North Korea was performing 'applied military-biological research' with anthrax, cholera, bubonic plague and smallpox at a number of institutes and universities and testing biological weapons on North Korean islands. South Korean press and other unofficial sources go even further, claiming that, in the early 1980s, North Korea began actual production of biological agents and obtained a turnkey plant for agar (growth media) from East Germany in 1984 to further the biological weapons programme. In contrast, a 1997 US Department of Defense report judged that North Korea's biological weapons programme was probably still at the level of research and development.

Whatever the status of its biological weapons efforts, North Korea has developed a number of dualuse biotechnology facilities that could be used to research biological weapons agents and produce militarily significant quantities of biological agents. But this infrastructure is not highly developed and there is no definitive evidence that it is being used for this purpose. North Korea joined the BWC on 13 March 1987 (followed by South Korea on 25 June 1987), but the convention has no provisions for mandatory declarations or inspections of civilian or suspect military biological facilities.

The most recent official US and South Korean reports agree that North Korea has a biological weapons programme, although only Seoul reports that it has advanced beyond the research and development stage. In 2001, for example, a South Korean defence White Paper described the North Korean threat as including 'chemical and biological weapons such as anthrax of which North Korea is believed to hold a stockpile of 2,500–5,000 tons.' The report does not address the issue of delivery systems, other than to note that North Korean Special Forces could launch attacks with biological weapons. Another South Korean Ministry of National Defense report from 2001 claims that North Korea possesses three research and six production facilities to support its biological weapons programme and has weaponised one or two types of biological agents. In contrast, the most recent public US government report, from 2001, says that 'North Korea is believed to possess a munitions-production infrastructure that would allow it to weaponize biological warfare agents, and may have biological weapons available for use'. According to press accounts, the US intelligence community has assessed with 'medium' confidence that North Korea possesses stocks of smallpox virus, but the evidence is not definitive.

Most of the detailed information about North Korea's biological weapons programme has come from defectors and other secondary sources of unknown reliability. According to Choi Ju Hwal, the Germ Research Institute in the General Logistic Bureau of the Armed Forces Ministry is responsible for developing biological weapons. Yi Chung Kuk, meanwhile, claims that biological weapons research and development is carried out at the Microbiological Institute and that there are other facilities in North Korea for producing and storing biological weapons. Yi Sun Ok, who was an inmate at a North Korean prison camp, claims she witnessed biological weapons experiments in mid-1980s, which resulted in the deaths of some 50 inmates. However, none of these reports can be confirmed.

A number of secondary sources provide additional details on facilities and suspected agents said to be involved in North Korea's biological weapons programme. According to one report, research on anthrax, bubonic plague, smallpox, yellow fever, cholera and other pathogens is carried out at the National Defence Research Institute and Medical Academy (NDRIMA). Another report says that North Korea's inventory of biological agents includes anthrax, botulism, cholera, haemorrhagic fever (Korean strain), bubonic plague, smallpox, tuberculosis, typhoid, typhus, and yellow fever. Another claims that 13 types of biological weapons agents are produced at the Workers Party's Central Biology Research Institute, the Preventive Military Medical Unit, and the February 25th Plant in Chongju, North Pyongan Province. But these reports also cannot be confirmed. To date there is no reliable information available to confirm whether North Korea has engaged in the development of genetically modified biological agents.

In conclusion, there is not enough information to reach a firm judgement on the progress of, or possible effectiveness of, North Korea's biological weapons programme. This is understandable, given North Korean secrecy and the inherent difficulties of detecting and assessing biological weapons programmes, compared to nuclear or even chemical weapons activities. US, South Korean, and Russian official sources agree that North Korea has conducted research on a variety of biological agents, but only Seoul reports that North Korea has actually produced stocks of one or two types of biological weapons. The basis for this assessment is unspecified. Given its biotechnical infrastructure, North Korea is capable of producing significant amounts of common biological agents, such as anthrax, and delivering these agents through a variety of conventional and unconventional means, but it is not known how important Pyongyang views the development and deployment of a biological weapons capability. In any event, the possibility that North Korea may have biological weapons contributes to deterrence.

## Conclusion

The available evidence suggests that North Korea probably possesses both a chemical and biological weapons programme, although they may differ in terms of scope and state of advancement. The chemical weapons programme probably involves some chemical weapons production and stockpiling, although the amount and types of agents that have been produced, the number and types of munitions that have been stockpiled, and the location of key research, production, and storage facilities cannot be assessed with high confidence. North Korea is thought to be capable of producing a variety of traditional blister, blood, choking and nerve agents, although there may be limits on what it can produce in its ageing chemical industry. Meanwhile, given its munitions industry, North Korea is thought capable of producing a variety of delivery systems for chemical weapons, including artillery, multiple rocket launchers, mortars, aerial bombs, and missiles. **The extent to which Pyongyang has chosen to deploy these capabilities is unknown, but US and South Korean forces prudently assume that North Korea possesses chemical weapons and is prepared to use them against military and civilian targets in offensive operations or in retaliation for an attack on North Korea.** By comparison, less is known about North Korea's presumed biological weapons programme. While there is general agreement that North Korea has conducted research and development on biological agents, there is not enough information to conclude whether it has progressed to the level of agent production and weaponisation, although North Korea is most likely technically capable of both.

Whatever the actual status of North Korea's chemical and biological capabilities, the perception that it has, or likely has, chemical and biological weapons contributes to Pyongyang's interest in creating uncertainties in Washington, Seoul and Tokyo and raises the stakes to deter or intimidate potential enemies. From Pyongyang's perspective, chemical and biological weapons could have utility both on the battlefield and at the strategic level. US and South Korean military commands have to operate on the assumption that North Korea maintains a large stockpile of chemical and possibly biological munitions integrated with its conventional forces and deployed for use on the battlefield. This complicates allied military planning for defence against any North Korean attack or for conducting offensive operations against the North. Some measures have been taken to strengthen allied troops' CBW defences, but it is difficult to accurately assess their effectiveness without knowing the size, composition, or delivery means of North Korea's presumed chemical weapons arsenal. **At the strategic level, the potential delivery of large quantities of chemical or biological agents to nearby targets (such as Seoul) and smaller**

**quantities to more distant targets (such as Tokyo) could cause significant civilian casualties, depending on the amount and type of agent, the delivery means, the extent of civilian defence measures, and many other factors.** In any event, the plausible threat that North Korea might use chemical or biological weapons, if the survival of the regime was at stake, contributes to deterrence and discourages Seoul and Tokyo from pursuing policies that could increase the risk of conflict and drive Pyongyang to take desperate measures ([IISS, 2012](#)).

**Title:** U.N. To Consider North Korea's Attempts To Export Chemical Weapons Reagents

**Date:** January 6, 2012

**Source:** [Bio Prep Watch](#)

**Abstract:** The United Nations will look into allegations that North Korea attempted to export ampules of reagents for chemical weapons to Syria in 2009.

The investigation will be a rare probe into the reclusive communist country's arm trade related to chemical weapons. The case may bring into focus a close relationship between North Korea and Syria in the production and development of weapons of mass destruction, the [Yomiuri Shimbun](#) reports.

Greek authorities seized a container from a Liberia-registered freighter heading toward Syria in November 2009. In the container they found wooden boxes stuffed with multiple types of ampules believed to be made of glass, each allegedly containing powdered or liquid reagents. Reagents are used to identify chemical substances that become airborne after the use of chemical weapons. They can be used in during a chemical weapons attack or in the defense against them.

Greek authorities also seized approximately 14,000 anti-chemical weapons suits from the vessel. The Greek government reported the seizures of the ampules and suits in September as a violation of the U.N. Security Council's Sanctions Committee resolution banning North Korea from exporting arms-related materials, according to the [Yomiuri Shimbun](#).

According to estimates by South Korea's National Defense Ministry, North Korea has 2,500 to 4,000 tons of chemicals weapons, including sarin and mustard gases. Diplomatic sources said that the attempted export of chemical weapons reagents may have been conducted through China. It is unclear whether or not China has strictly inspected North Korea's cargo shipments ([Bio Prep Watch, 2012](#)).

**Title:** North Korea Vows To Launch 'Sacred War' Over US-South Naval Exercises

**Date:** February 25, 2012

**Source:** [Telegraph](#)

**Abstract:** The North's National Defence Commission (NDC) described the exercise as "unpardonable war hysteria" and said its army and people would "foil" the US and South Korean moves with "a sacred war of our own style".

The threat is the latest instance of Pyongyang taking a hostile tone towards Seoul since Kim Jong-un, the youngest son of the late leader Kim Jong-il, took over following the death of his father in December.

Last week the North vowed "merciless retaliatory strikes" if any shells landed in waters claimed by Pyongyang during a live-fire artillery exercise near the disputed Yellow Sea border.

But in the event it took no military action in response to the drill.

The United States and South Korea are to mount two major annual joint military exercises, one in the coming week and the other in March.

Key Resolve, a computerised command post exercise, will start on Monday and continue until March 9. Separately, the joint air, ground and naval field training exercise Foal Eagle will be held from March 1 to April 30.

"Key Resolve and Foal Eagle are unpardonable war hysteria kicked up by the hooligans to desecrate our mourning period and an unpardonable infringement upon our sovereignty and dignity," the NDC said in a statement.

Kim Jong-il died of a heart attack on December 17.

"Our army and people will foil the moves of the group of traitors to the nation and warmongers at home and abroad for a new war with a sacred war of our own style," the NDC said, indicating it will stage a counter exercise.

"War manoeuvres ... are, in essence, a silent declaration of a war. The declaration of the war is bound to be accompanied by a corresponding physical retaliation," it said.

"Now that a war has been declared against us, the army and people are firmly determined to counter it with a sacred war of our own style and protect the security of the nation and the peace of the country," the NDC said ([Telegraph, 2012](#)).

**Title:** N. Korea Calls Criticism Of Its Nuclear Program 'Declaration Of War'

**Date:** March 23, 2012

**Source:** [Russia Today](#)

**Abstract:** Right ahead of the Nuclear Security Summit in Seoul, North Korea announced that it will consider a statement about its nuclear program a direct "declaration of war". This comes as the USA has condemned the country's planned rocket launch in April.

The US administration announced on Thursday that President Barack Obama considers the North Korean "*space experiment*", involving the launching of a ballistic missile with a mounted satellite, a "*provocation*" and direct violation of the international agreements.

According to national security official Daniel Russel, Obama will discuss the issue with the Chinese and Russian leaders in the near future.

North Korea, officially the Democratic People's Republic of Korea, is gearing for the missile satellite launch scheduled for April 2012. The West condemns the move, saying that it comes in violation of the UN Security Council resolutions 1718 and 1874, prohibiting the development of ballistic missiles by the country, as well as the conducting of nuclear tests.

The Western states, as well as South Korea, fear that the launches could be part of Pyongyang's effort to build intercontinental missiles, while nuclear tests might be aimed at providing them with nuclear warheads.

Ex-MEP Glyn Ford however explained to RT that both sides of the conflict – the US and its allies South Korea and Japan on the one hand, and North Korea on the other – seem to be wrong.

*"If you have the technology to launch a satellite – and this would be North Korea's third attempt to launch a satellite – it clearly shows that you are developing a potential, if you want long range intercontinental ballistic missiles," he said. "But at the same time South Korea and Japan are both doing exactly the same thing. South Korea attempted to launch a satellite just after the last North Korean attempt and Japan has put satellites into orbit. So, there is a little bit of double standards floating around here".*



He added that North Korea, in fact, alleviates the risk to Japan as it is shifting the launch from the east coast to the west coast, so it will not fly over Japan.

The country's nuclear program and missile launches have long been a bone of contention for the country's relations with much of the world, leading to its increased isolation.

Back in 2009, North Korea exited the six-party nuclear talks after the UN had condemned its first ballistic launch. The country carried out two successful nuclear tests back in 2006 and 2009, which the West condemned.

On Wednesday North Korean state-run Korean Central News Agency (KCNA) reported that the adoption of any statement against its nuclear program at the upcoming Nuclear Security Summit in Seoul would be an *"extreme insult"*.

*"Any provocative act would be considered a declaration of war against us and its consequences would serve as great obstacles to talks on the denuclearization of the Korean Peninsula,"* said the agency.

It is expected that the Seoul conference will pay some attention to the North Korean nuclear program. South Korean president Lee Myung-bak said that the meeting might play a *"big role in expanding the international community's support for the denuclearization of the North."*

In its latest report, the KCNA said that Lee Myung-bak and his *"group of traitors"* are trying to provoke *"nuclear war"*. It added that in order to resolve the tense situation in the region, it is necessary to talk denuclearization of the whole peninsula, instead of speaking of the *"non-existent"* North's nuclear issue.

The Nuclear Security Summit in Seoul, due on March 26-27, will gather heads of states and representatives of 58 countries and international organizations. US leader Barack Obama and Chinese president Hu Jintao are expected at the meeting ([Russia Today, 2012](#)).

# Bio Terror Bible

## EXPOSING THE COMING BIO-TERROR PANDEMIC

**BIOTERRORBIBLE.COM:** Despite the fact that the United States and its European Union allies have been researching, planning and drilling for a major bio-terror attack and the subsequent pandemic, the nations of [Egypt](#), [Iran](#), [Iraq](#), [Libya](#), [North Korea](#) and [Syria](#) have been quietly set up over the last decade as potential bio-terror scapegoats. Based on the evidence available, it appears that the U.S., [Israel](#) and [South Korea](#) may be the future victims of major false-flag bio-terror attacks.

The nation of South Korea has been quietly preparing its population for a future North Korean bio-terror attack. Based on recent news and events, it is highly likely that North Korea will attack South Korea with a bio-terror agent possibly causing a pandemic in the region.

**Title:** Official: U.S. Has Bioterrorism Holes

**Date:** January 8, 2003

**Source:** [UCLA](#)

**Abstract:** The United States has some serious holes in its defenses against the kind of biological weapons the military assumes Iraq has, the Army's top biological defense expert said Wednesday.

The Pentagon has few or no vaccines or treatments for several biological weapons Iraq has acknowledged producing, such as botulinum toxin, said Col. Erik Henschel, head of the Army's biological defense laboratory. Other holes in the military's biological defenses include the lack of good vaccines or treatments for plague, various viruses which cause the brain inflammation called encephalitis and bacterial poisons called staphylococcal enterotoxins, Henschel said.

"We're trying to fill those holes as best we can," said Henschel, who directs the Army's Medical Research Institute of Infectious Diseases, or USAMRIID.

For example, the Army lab has developed vaccine-like preventative treatments for the seven forms of deadly botulinum poison but hasn't had the money to get them into full-scale production, he said.

"We've been fairly helpless, except to say we hope someone's paying attention," Henschel told a group of reporters.

"Until 9-11, it was difficult to get the pharmaceutical industry interested in our products. We have 20 medical products on the goal line, waiting to go."

**Military officials assume Iraq has biological weapons including the smallpox virus, and Iraq can produce novel germ weapons such as antibiotic-resistant bacteria, Henschel said.**

He said the Army is sending its only mobile biological testing unit to the Persian Gulf this week. The Maryland-based unit does rapid testing to help confirm an attack with germ weapons.

U.S. military intelligence officials say biological weapons are one of Iraq's few major threats to American forces should President Bush decide to go to war. The Pentagon assumes Saddam has the missiles,

aircraft and other gear needed to launch a biological attack against either military or civilian targets in the region.

Anthrax is the military's top biological weapon worry, since it's a common, hardy bacterium that's relatively easy to make into a deadly weapon, Henchal said. But countries like Iraq might be reluctant to use anthrax against U.S. troops because American soldiers are immunized against anthrax and have the antibiotics needed to treat anthrax illness, he said.

That makes botulinum toxins a big worry.

The U.S. military has some botulinum toxoids, which are inactivated forms of the poisons which work like vaccines to prevent the poisons' deadly effects. But those toxoids are losing potency, Henchal said. USAMRIID hopes to have vaccines against two botulinum toxins in production by the end of the year, he said.

**The U.S. military assumes that North Korea, as well as Iraq, has samples of the smallpox virus, and it's possible the two countries have exchanged information on that and other biological weapons, Henchal said. He said "it's a bit of a fantasy" to assume that the only smallpox samples in the world are the two publicly declared samples in the United States and Russia.**

**"It's clear from intelligence that the genie is out of the bottle," Henchal said of smallpox [\(UCLA, 2003\)](#).**

**Title:** South Korea Begins Anti-Chemical Weapons Training

**Date:** May 13, 2010

**Source:** [Bio Prep Watch](#)

**Abstract:** The Yonhap News has reported that South Korea this week began its annual anti-chemical weapons training program event in conjunction with several other Asian nations.

The program, which is the only one of its kind in Asia according to South Korea's Ministry of Defense, will train officials from 18 Asian countries in methods for dealing with certain terrorism scenarios, including CBRN attacks, according to Yonhap News.

South Korea began first began offering the course to officials annually in 2005. The courses are jointly conducted by South Korean officials and the Organization for the Prohibition of Chemical Weapons, Yonhap News reports.

Twenty-three officials from 18 countries will attend the training program. Yonhap News says that the nations of Jordan, Malaysia and Uzbekistan will be represented as well as others.

The training program will offer courses in dealing with attacks involving chemical weapons, methods for detecting chemical warfare agents and decontaminating chemical warfare agents, Yonhap News reports.

South Korea has become all too familiar with dealing with chemical weapons threats in recent times. Neighboring North Korea is believed to have a stockpile of chemical and biological weapons, and has pursued nuclear weaponry, Yonhap News reports. North Korea has not yet signed an anti-chemical weapons pact either [\(Bio Prep Watch, 2010\)](#).

**Title:** South Korea Prepares For Bioattack

**Date:** June 16, 2010

**Source:** [Bio Prep Watch](#)

**Abstract:** Tensions continued to mount Tuesday between North and South Korea when a nationwide civil defense drill was held in South Korea.

The defense drill was the first nationwide drill since 1989 aimed at handling possible chemical, biological and radiological attacks, officials with the National Emergency Management Agency told the Associated Press.

Both North and South Korea have exchanged hostile words since the recent sinking of a South Korean warship. However, Seoul officials told the AP they do not believe the renewed hostilities will lead to all-out war.

"Now, North Korea is maintaining a considerably strengthened vigilance posture and as you know it's been issuing many threats and statements through various channels," South Korean Defense Minister Kim Tae-young told the National Assembly on Tuesday, the AP reports. "But there have been no serious military activities at the border and in rear areas."

Meanwhile, the U.N. Security Council on Monday that it was "gravely concerned" about further hostilities and encouraged both sides not to engage in any hostile acts.

South Korea has taken punitive measures against North Korea, including trade restrictions, since the warship Cheonan was sunk in March, killing 46 sailors.

North Korea has denied sinking the warship and has warned that retaliation would trigger war, the AP reports.

"We are just a victim," Pak Tok Hun, North Korea's deputy U.N. ambassador, told reporters "So we'd like to make our position clear."

North and South Korea are still technically at war because the 1950-53 Korean War ended in an armistice, not a peace treaty, according to the AP report ([Bio Prep Watch, 2010](#)).

**Title:** South Korea Discusses Bioterror Response Plan

**Date:** October 13, 2010

**Source:** [Bio Prep Watch](#)

**Abstract:** While meeting with the U.S. Secretary of Defense Robert Gates, South Korea's defense minister, Kim Tae-Young, discussed the country's reaction to a potential North Korean attack using biological weapons.

Kim addressed the issue of weapons of mass destruction to reporters covering the two-day 42nd annual security meeting of the U.S. and South Korea's defense officials, GovExec.com reported.

"We are currently in the process of coordinating the details of immediate response in the case of a biological threat from North Korea," Kim said, according to GovExec.com. "We cannot eliminate the possibility of a situation of instability in North Korea that would influence the security of both [U.S and South Korean] governments. It is the responsibility of both governments to prepare for all possible contingencies."

Gates was adamant about the U.S. response.

"North Korea's provocations and aggressions will not be tolerated," Gates said, according to the GovExec.com report.

The bilateral meeting took place shortly after reports from North Korea on Friday confirmed that Kim Jong-Il will be succeeded by one of his three sons, Kim Jong-Un.

"We cannot eliminate the possibility of a situation of instability in North Korea that would influence the security of both [U.S and South Korean] governments," Kim said, GovExec.com reports. "It is the responsibility of both governments to prepare for all possible contingencies ([Bio Prep Watch, 2010](#)).

**Title:** South Korea Runs CBRN Drills

**Date:** December 17, 2010

**Source:** [Bio Prep Watch](#)

**Abstract:** In Paju, South Korea, dozens of residents recently evacuated to underground parking lots and wore gas masks as part of a mass evacuation drill against chemical, biological and radiological attacks from nearby North Korea.

Rescue workers in Paju also conducted casualty simulation drills, bringing wounded residents pretending to be infected with chemical agents to local hospitals, according to WXYZ.com.

The drills came alongside new diplomatic pressure from the United States and regional powers towards North Korea. New Mexico's Gov. Bill Richardson was scheduled to stop in China on his way to North Korea this week. He has acted as a diplomatic troubleshooter with the rogue nation and has made several visits in the past.

Chinese State Councilor Dai Bingguo, China's lead foreign policy official, recently returned from North Korea and is scheduled to hold talks with U.S. Deputy Secretary of State James Steinberg in Beijing, WXYZ.com reports. China is being pressured by the United States to try to get North Korea to abandon its dangerous behavior.

Meanwhile, evacuation drills are being held across South Korea in the wake of the North Korean shelling of Yeonpyeong Island, a disputed island near the border. In the artillery duel that followed, four South Koreans were killed. Casualties in the north are unknown.

In Seoul, residents stopped their cars and ran to underground shelters in the country's largest ever evacuation drill, ending any previous indifference South Koreans may have had about a potential attack by Pyongyang.

"We will need these evacuation plans and skills sooner or later in case war breaks out, and I think war can happen any time," Han Yoo-jin said, according to WXYZ.com ([Bio Prep Watch, 2010](#)).

**Title:** South Korea Claims North Korea Possesses Mass Chemical, Biological Weapons

**Date:** December 31, 2010

**Source:** [Bio Prep Watch](#)

**Abstract:** In a recently published defense white paper, South Korea claimed that North Korea is in possession of and continues to develop chemical, biological and nuclear weapons.

According to the white paper, North Korea has 2,500 to 5,000 tons of various chemical weapons and has extracted approximately 40 kilograms of plutonium by reprocessing spent fuel rods from a 5 MW nuclear reactor it has run since the 1980s.

Additionally, according to the paper's details as reported by English.Chosun.com, the North has increased the number of its special forces troops by 20,000 over the past two years, reaching a total of approximately 200,000, mostly deployed in a light infantry division under an Army Corps that is stationed near the frontline. A light infantry regiment has also been added to an Army division nearby.

The force of 200,000 is reportedly ready to carry out combined operations aimed at attacking major South Korean facilities, assassinating important people and infiltrating the South by using a network of underground tunnels.

A 2006 defense white paper estimated the North's special forces to number approximately 120,000. By 2008, that number had increased to 160,000, English.Chosun.com reports. Currently, they account for 17 percent of the total number of North Korea's 1.19 million soldiers ([Bio Prep Watch, 2010](#)).

**Title:** South Korea, U.S. Armies Demonstrate Bioweapons Response

**Date:** March 3, 2011

**Source:** [Bio Prep Watch](#)

**Abstract:** South Korean and U.S. soldiers participated in a training exercise this week that simulated the detection and disposal of North Korean chemical, biological, radiological and nuclear weapons as part of military exercises between the two countries.

North Korea has described these exercises as a rehearsal for invasion while Seoul and Washington say that the simulations are purely for defensive reasons, the AFP reports. The U.S. has had a military alliance with South Korea dating back to the Korean War.

"North Koreans have threatened to use weapons of mass destruction," Brigadier-General Chuck Taylor said, according to AFP. "This exercise helps us to deter based upon our readiness, and if deterrence fails, to help prevail in any kind of threats and environment."

An expert estimation believes that Pyongyang, North Korea, may have enough plutonium to build six to eight small atomic weapons, though they are unsure if it is capable of mounting these atomic warheads on missiles, according to the AFP.

According to estimates by South Korea's defense ministry, North Korea has an estimated 2,500 to 5,000 tons of chemical weapons, which might consist of mustard gas, blood agents, nerve agents and phosgene, among others. They are also suspected to have biological weapons capability.

The annual drills, known as the Key Resolve/Foal Eagle drills, started on Monday and involve 12,300 U.S. troops and close to 200,000 South Korean service members, including reserves ([Bio Prep Watch, 2011](#)).

**Title:** U.S. And South Korea Begin Discussing Bioterrorism Exercise

**Date:** May 31, 2011

**Source:** [Bio Prep Watch](#)

**Abstract:** Military officers from the United States and South Korea recently held discussions regarding participation in the first-ever joint exercise aimed at testing their ability to cope with bioterrorist activities.

Despite holding annual exercises aimed against a possible invasion by North Korean forces, the two countries have never conducted a joint exercise solely for the purposes of dealing with the threat of bioterrorism, according to YonhapNews.co.kr.

The three day discussions, called Able Response 2011, began last week among senior defense officials from the two nations, including Andrew Weber, the U.S. assistant to the secretary of defense for nuclear, chemical and biological defense programs.

"In the wake of this week's discussions, South Korea and the U.S. plan to develop ways to hold a joint exercise against bioterrorism," Yang Young-mo, a senior official at Seoul's defense ministry, said, according to YonhapNews.co.kr.

The move, according to Yang, does not indicate that the United States and South Korea believe the bioterrorism threat posed by North Korea is growing. The two nations agreed to hold the discussions last year.

Tensions on the Korean peninsula remain high following two North Korean attacks against South Korea last year, when a total of 50 South Koreans were killed, including two civilians ([Bio Prep Watch, 2011](#)).

**Title:** U.S., South Korea To Practice Detection Of Bioweapons

**Date:** August 8, 2011

**Source:** [Bio Prep Watch](#)

**Abstract:** The United States and South Korea will form a joint taskforce to practice the detection and elimination of North Korea's weapons of mass destruction during an annual joint military exercise later this month.

The allied forces will use computer simulations to find the hidden locations of WMDs, including missiles, nuclear warheads, and biological and chemical weapons, and then dispose of them, the Korea Herald reports. The taskforce would then be sent to a certain area where they would participate in a WMD elimination exercise.

"The allies will form the joint taskforce and conduct virtual and actual drills during the Ulchi Freedom Guardian scheduled to take place from Aug. 16-29," a South Korean official told local media, according to the Korea Herald.

The U.S. Army will send the 20th Support Command while the South Korean Army will dispatch troops that specialize in handling WMDs.

Since it was established in October 2004, the 20th Support Command, based out of Maryland, has been involved in a series of WMD removal operations in conflict zones like Iraq.

Some military observers have claimed that South Korea should prepare itself to conduct WMD elimination operations as it attempts to take steps to retake wartime operational control from the U.S. in December 2015.

"In case of an emergency on the peninsula, the troops from the U.S. 20th Support Command could come late or could not be deployed here for some unexpected reason," a military official said, according to the Korea Herald. "So, there appears to be the need for us to establish our own unit, possibly a brigade-level one."

According to a South Korean defense white paper published in December, North Korea has 2,500 to 5,000 tons of chemical weapons. North Korea is also presumed to have obtained around 40 kilograms of plutonium after reprocessing spent fuel rods four times ([Bio Prep Watch, 2011](#)).



**Title:** South Korea's Smallpox Vaccine Stockpile Spoils

**Date:** September 8, 2011

**Source:** [Bio Prep Watch](#)

**Abstract:** Approximately one million doses of smallpox vaccine out of South Korea's stockpile of seven million have reportedly spoiled.

The doses, for use in case of a biological attack from North Korea, were recently found unfit for use and will have to be destroyed, according to Chosun.com.

The spoiled doses were produced by South Korean domestic pharmaceutical companies in 2009 and have yet to reach their expiration date. Another 4.59 million doses purchased from 2003 and 2008 have reached their expiration date but are currently not being eliminated from the stockpile.

According to data from the Korea Food and Drug Administration that was recently released by Lee Jae-Sun, a lawmaker from the Liberty Forward Party, a series of animal tests conducted on the doses produced in 2009 failed.

All of the guinea pigs used in the toxicity tests died after being injected with doses from the batch, Chosun.com reports. The KFDA said the high toxicity of the batch has made the doses unfit for human use and they have asked the Korean Centers for Disease Control and Prevention to destroy them.

Seoul acquired 980,000 doses of antibiotics to treat bubonic plague in 2001. They were destroyed after passing their expiration date and have yet to be replaced, according to KoreaHerald.com ([Bio Prep Watch, 2011](#)).

**Title:** Expert Details Joint U.S.-South Korea Bioattack Exercise

**Date:** September 19, 2011

**Source:** [Bio Prep Watch](#)

**Abstract:** The United States and South Korea held a joint exercise in May to counter potential biological attacks by North Korea, according to a ruling party member.

Kim Hak-song of the Grand National Party said that the anti-biological war drill was held at the South Korea-U.S. Combined Forces Command and the Korea Institute for Defense Analyses on May 17 through May 27 and was attended by senior officials from both countries' related agencies, the Korea Herald reports.

The exercise was presided over by the U.S., which tried to warn Seoul of Pyongyang's biological weapons, which pose threats to peace in Northeast Asia, Kim said. According to Kim, Seoul opposed the exercise, citing public anxiety and negative economic impact.

The drill was aimed at coping with North Korea's asymmetrical attacks with radiation leakage and biological weapons. North Korea is believed to have 13 types of weaponized stocks of biochemicals, including cholera, typhoid and anthrax.

Military and political heavyweights from both countries, including Gen. Walter Sharp, who was the then-commander of U.S. forces in Korea, participated in a seminar held at KIDA on the last day of the drill.

"South Korea found that it has been hardly prepared to counter North Korea's biological attacks," Kim said, according to the Korea Herald. "The defense ministry should come up with measures against biological warfare."

According to a study, a bomb containing one kilogram of anthrax could kill up to 11,000 people in a city

that has a population density of 14,500 per square kilometer. Seoul's density rose to 17,240 per square kilometer in 2010 ([Bio Prep Watch, 2011](#)).

**Title:** S. Korean Military Vulnerable To N. Korea's Biological Attacks

**Date:** September 25, 2011

**Source:** [Korean Times](#)

**Abstract:** The military is vulnerable to North Korea's biological attacks, due to lack of adequate equipment, an opposition lawmaker insisted on Sunday.

Rep. Shin Hak-yong of the main opposition Democratic Party said that the military currently owns scores of anti-biological vehicles capable of detecting only four kinds of biological agents, though the North has 13 kinds of biological agents, including anthrax bacterium, smallpox virus and cholera.

The anti-biological military vehicles are antiquated, as they were introduced here ahead of the 2002 World Cup finals co-hosted with Japan, the lawmaker claimed.

He noted that the military has commissioned a local private firm to develop an advanced biological toxin detector capable of monitoring 10 kinds of biological agents in two minutes, but its deployment is scheduled for 2013 at the earliest.

Shin said the military is planning to deploy the new anti-biological detector at the nation's major airports, ports and military facilities.

"Our military's defense has been excessively focused on preparedness for North Korea's chemical attacks, rather than for its biological attacks," said Shin, calling for greater efforts to expand defense against biological warfare ([Korean Times, 2011](#)).

**Title:** South Korea Vulnerable To North Korean Bioattack

**Date:** September 27, 2011

**Source:** [Bio Prep Watch](#)

**Abstract:** South Korea remains particularly vulnerable to an attack by North Korea using biological weapons because of it lacks proper equipment, a South Korean opposition lawmaker recently declared.

Democratic Party Rep. Shin Hak-yong said that the South's military currently uses vehicle-based biological weapons sensors that are only capable of detecting four kinds of biological agents, despite the fact that North Korea possesses at least 13 types of agents, according to YonhapNews.co.kr.

"We have particular concerns with the activities of North Korea...in the biological weapons context, but also because of their...support for terrorism and their lack of compliance with international obligations," Assistant Secretary of State John C. Rood said in 2009, PopularMechanics.com reports.

The lawmaker said that the vehicles are antiquated. They were originally introduced into service in 2002, ahead of the 2002 World Cup finals South Korea co-hosted with Japan.

Shin said that South Korean military planners have commissioned a local firm to produce a new type of biological weapons detector capable of identifying 10 types of agents in a span of two minutes, but it is not scheduled for deployment until 2013 at the earliest.

The military has plans to place the new sensors at major airports, ports and military facilities.

"Our military's defense has been excessively focused on preparedness for North Korea's chemical attacks, rather than for its biological attacks," Shin said, YonhapNews.co.kr reports ([Bio Prep Watch, 2011](#)).

**Title:** South Korea Developing Bioweapon Defenses

**Date:** October 10, 2011

**Source:** [Bio Prep Watch](#)

**Abstract:** According to South Korea's defense minister, the country is researching and developing defensive measures against possible biological and chemical attacks from North Korea.

During an annual parliamentary audit, Kim Kwan-jin, the country's defense minister, said that while South Korea does not yet have vaccines against those types of offenses, they will be put in place soon, Yonhap News Agency reports.

"Since the project costs a lot of money, we haven't settled on the exact date on when we can develop vaccines," Kim said, according to Yonhap News Agency. "But once they're developed, there should be no major problem."

Kim said that U.S. forces in Korea have vaccines against anthrax and that South Korean health authorities have similar vaccines and the capability of developing their own vaccines.

Han Min-koo, the chairman of the joint chiefs of staff, said that U.S. troops and South Korea have engaged in joint identification and detection exercises and will cooperate with each other during contingencies. The defense ministry estimates that North Korea has up to 5,000 tons of chemical weapons and is capable of growing cholera, smallpox and anthrax.

Han addressed concerns that South Korea's Guided Weapons Defense Command may be vulnerable to missiles from North Korea, saying that the unit's armory and ammunition chamber will be well protected.

"Developments of mid-range surface-to-air missiles (M-SAM) and long-range surface-to-air missiles (L-SAM), which will be used in missile defense, have been included in the mid-term defense plans," Han said, according to Yonhap News Agency. "I think they may take five to 10 years to develop" ([Bio Prep Watch](#)).

**Title:** U.S., South Korea Examine North Korean Bioterror Threat

**Date:** November 15, 2011

**Source:** [Bio Prep Watch](#)

**Abstract:** Military officials from the U.S. and South Korea met in operations centers over the past two weeks to examine in great detail how they would respond to a biological or chemical attack from North Korea.

Many details of the computer-based Warpath III exercise are classified. The exercise gave 1,000 service members from eight South Korean and American brigades experience in how the alliance would react with the "full spectrum" of its equipment and manpower in the event the North made good on threats it has made over the years, Stars and Stripes reports.

"I think it would be irresponsible not to take that threat seriously," Lt. Col. Joe Scrocca, a 2ID spokesman said, according to Stars and Stripes. "If we don't practice, we will not be ready if they use those weapons. We're practicing for a real-world threat on the peninsula."

While North Korea's developing nuclear weapons program has made more headlines in recent years, those familiar with the North say its biological and chemical capabilities would be major elements of any all-out attack on the South. A 2007 Popular Mechanics investigative report stated that, according to South

Korean intelligence agencies, defectors and other sources, North Korea has built “one of the world’s most extensive biochemical warfare programs,” according to Stars and Stripes.

In September, Shin Hak-yong, a South Korean lawmaker, called for greater efforts to expand the South's defense against potential biological warfare, according to the Yonhap News Agency.

“Our job is to be ready for whatever comes,” Scrocca said, Stars and Stripes reports. “We’re just about the only ones in the Army doing this full-spectrum-type stuff against all possible type threats. This is all computer-based ... but we’re working on the strategies that would be used in a full spectrum of operations. We’re practicing the identification, detection and defense against chemical-biological weapons — How would we be able to detect (chemical-biological weapons)? What would happen once they are detected? How would we decontaminate soldiers and equipment if that happened?” ([Bio Prep Watch, 2011](#)).

**Title:** South Korea Seeks To Increase Bioweapon, WMD Defense

**Date:** February 13, 2012

**Source:** [Bio Prep Watch](#)

**Abstract:** Military officials for the defense ministry of South Korea said on Thursday that the country plans to undergo restructuring in an effort to strengthen the military’s defense against cyber warfare and weapons of mass destruction.

Under the proposed changes, the ministry’s department of non-proliferation would be renamed the department of WMD response. Officials working in that department would form the country’s defense policy against potential WMD attacks from North Korea, providing the necessary guidelines for successful defense, [Yonhap News Agency](#) reports.

This newly-named department would also oversee nuclear policies, missile defense, response to chemical and biological weapons, and non-proliferation. Another change would see the information protection team renamed to the cyber protection policy team. This team would come up with a South Korean response to the cyber warfare threats of North Korea.

“North Korea has continuously developed missiles, nuclear weapons and chemical and biological weapons,” an official for the defense ministry said, according to [Yonhap News Agency](#). “We’re also aware of actual cyber attacks by North Korea. We need to develop policies to actively respond to such instances, and to strengthen roles and functions for relevant departments, accordingly.”

Under the proposed change, the ministry would increase the number of civil servants employed there from 621 to 634 ([Bio Prep Watch, 2012](#)).

**Title:** South Korea Begins Military Drills Despite Threat From North Korea

**Date:** February 20, 2012

**Source:** [Fox News](#)

**Abstract:** South Korea conducted live-fire military drills near its disputed sea boundary with North Korea on Monday despite Pyongyang's threat to respond with a "merciless" attack -- a threat it did not immediately make good on.

Analysts said North Korea was unlikely to respond with more than words because it is focusing on internal stability two months after the death of leader Kim Jong Il. North Korea is also days away from its first nuclear disarmament talks with the U.S. since Kim's death.

Washington and North Korea's neighbors are closely watching how Kim Jong Un, Kim Jong Il's son and successor, navigates strained ties with rival South Korea and a long-running standoff over the country's

nuclear weapons programs. In another potential point of tension, U.S. forces will be conducting annual military exercises with South Korea over the next few months.

South Korea's drills took place Monday in an area of the Yellow Sea that was the target of a North Korean artillery attack in 2010 that killed four South Koreans and raised fears of a wider conflict. North Korea didn't threaten similar South Korean firing drills in the area in January, but it called the latest exercise a "premeditated military provocation" and warned it would retaliate for an attack on its territory.

A North Korean officer said in an interview Sunday with an Associated Press staffer in Pyongyang that North Koreans would respond to any provocation with "merciless retaliatory strikes."

North Korea is fully prepared for a "total war," and the drills will lead to a "complete collapse" of ties between the Koreas, the North's Committee for the Peaceful Reunification of Korea said in a statement carried Monday by the official Korean Central News Agency.

Such rhetoric has been typical of North Korean officials in the past.

Later Monday, South Korean troops on five islands near the disputed sea boundary fired artillery into waters southward, away from nearby North Korea, a Defense Ministry official said on condition of anonymity, citing department rules. South Korea reported no action by North Korea following the drills, which ended after about two hours.

North Korea's military maintained increased vigilance during Monday's drills, though Seoul saw nothing suspicious, a South Korean Joint Chiefs of Staff officer said on condition of anonymity, citing department rules.

South Korean military officials said they were ready to repel any attack. Residents on the front-line islands were asked to go to underground shelters before the drills started, according to South Korea's Defense Ministry and Joint Chiefs of Staff.

Analysts said the threats allow Pyongyang to show its anger over what it sees as a violation of its territory, but that an immediate attack was unlikely during what is a delicate time for inter-Korean and U.S.-North Korean relations, and for internal North Korean politics.

"South Korea's military would have immediately responded this time, and that's something that North Korea can't afford" during its transfer of power to Kim Jong Un, said Yoo Ho-yeol, a professor at Korea University in South Korea.

The North's threat appeared aimed at mustering internal support or could be the result of top military officers showing their loyalty to Kim Jong Un, Yoo said.

The North knows that raising tensions ahead of nuclear talks with the United States won't be advantageous, said Cheong Seong-chang, an analyst at the private Sejong Institute in South Korea.

The Korean Peninsula has been technically at war for about 60 years. The maritime line separating the countries was drawn by the U.S.-led U.N. Command without Pyongyang's consent at the close of the 1950-53 Korean War, which ended with a truce, not a peace treaty. North Korea routinely argues that the line should run farther south.

Relations between the Koreas plummeted following the 2010 shelling of front-line Yeonpyeong Island, seven miles (11 kilometers) from North Korean shores, and a deadly warship sinking blamed on Pyongyang. North Korea has flatly denied its involvement in the sinking, which killed 46 South Korean sailors.

Kim Jong Un's handling of North Korea's military and diplomacy will come into sharper focus in the next several weeks.

The United States and North Korea will have important nuclear disarmament talks Thursday -- the third round of bilateral talks since last summer and the first since Kim Jong Il's Dec. 17 death. They are aimed at restarting six-nation aid-for-disarmament negotiations on North Korea's nuclear program.

The North pulled out of those negotiations in early 2009 but has said it is willing to restart the six-party talks, which also include China, Japan, Russia and South Korea. But the U.S. and its allies are demanding that the North first demonstrate its sincerity in ending its nuclear weapons program.

Additionally, a series of military exercises between the United States and its ally Seoul will extend over more than two months. Seoul and Washington say their long-planned annual drills are defensive in nature, but North Korea calls them preparation for an invasion.

South Korea began joint anti-submarine drills Monday with the United States, but the training site is farther south from the disputed sea boundary, South Korean military officials said. About 28,500 U.S. troops are stationed in South Korea as what U.S. and South Korean officials call deterrence against North Korean aggression.

South Korean and U.S. troops will start 12 days of largely computer-simulated war games next week, and two months of field training drills in early March.

Early Monday, the powerful Political Bureau of the Central Committee of North Korea's ruling Workers' Party announced it would convene a special political conference in mid-April to "glorify" the late leader and to rally around his son.

The last time such a conference was held was in September 2010, when Kim Jong Un was named to a high-ranking party military post in the first public confirmation that he was being groomed to succeed his father.

The conference could wrap up the North's power succession process, analysts said, with Kim Jong Un possibly promoted to general secretary of the Workers' Party, the ruling party's top job and one of the country's highest positions ([Fox News, 2012](#)).

**Title:** South Korea Releases Bioterrorism Response Guidelines

**Date:** March 5, 2012

**Source:** [Bio Prep Watch](#)

**Abstract:** According to a ruling party lawmaker, the defense ministry of South Korea has dispensed guidelines for responding to alleged bioterrorism threats posed by the Democratic People's Republic of Korea.

The defense ministry sent out the 130 page guidelines on the recommended responses to bioterrorism and the successive medical support to all military units. The guidelines are the first of their kind to be created by South Korea's defense ministry, [Xinhua](#) reports.

The guidelines offer detailed explanation on 13 bioterrorism agents that the DPRK is believed to have large amounts of, including smallpox, plague and anthrax.

"There is an urgent need to develop additional vaccines against bioterrorism," Song Young-sun, a lawmaker of the ruling Saenuri Party, said, according to [Xinhua](#).

The U.S. and South Korea have conducted joint drills since 2010 aimed at identifying, detecting and neutralizing biological and chemical weapons that the DPRK allegedly possesses.

“North Korea’s biological agents are asymmetrical weapons that can cause overwhelming chaos and damage, and we need to quickly develop additional vaccines,” Song Young-sun said, according to [Yonhap News](#). “Under the new North Korean leadership of Kim Jong-un, things could change suddenly on the peninsula. We have to be fully prepared for bioterrorism and other sorts of threats” ([Bio Prep Watch, 2012](#)).

**Title:** South Korea Not Prepared For North Korea’s Bioweapons Capability

**Date:** March 13, 2012

**Source:** [Bio Prep Watch](#)

**Abstract:** When compared with the biological warfare defenses of the United States, South Korea’s capabilities to deal with the smallpox virus fall well short despite North Korea’s biological weapons capacity.

In a defense white paper, the Ministry of National Defense said that North Korea has biological capabilities, including the ability to synthesize the smallpox virus. The United States sees South Korea as one of the most likely places to see a return of the deadly virus, the [Korea Herald](#) reports.

Smallpox is estimated to have killed more than 300 million people during the 20th century. The only treatment is to receive a vaccination within 72 hours of being infected.

While South Korea began stockpiling smallpox vaccines in 2002, tests showed that of the seven million doses, 1.06 million were unfit for use and 4.59 million doses had exceeded the recommended storage duration. The country has no other project for smallpox vaccine stockpiling in the future. In comparison, the U.S. smallpox vaccination program covers its entire population.

“As the Korean military’s bio-chemical defense capabilities have been focused on chemical warfare, preparations for biological warfare have been neglected,” Shin Hak-yong, a representative with the Democratic Unity Party, said, according to the [Korea Herald \(Bio Prep Watch, 2012\)](#).



# Bio Terror Bible

## EXPOSING THE COMING BIO-TERROR PANDEMIC

**BIOTERRORBIBLE.COM:** Despite the fact that the United States and its European Union allies have been researching, planning and drilling for a major bio-terror attack and the subsequent pandemic, the nations of [Egypt](#), [Iran](#), [Iraq](#), [Libya](#), [North Korea](#) and [Syria](#) have been quietly set up over the last decade as potential bio-terror scapegoats. Based on the evidence available, it appears that the U.S., [Israel](#) and [South Korea](#) may be the future victims of major false-flag bio-terror attacks.

While the world is distracted by the "Arab Spring" in Syria, the country has been quietly set up as a bio-terror state that will likely be scapegoated in the upcoming war of bio-terror. Based on recent news and events, Syria will likely be scapegoated in a future false-flag bio-terror attack on the state of Israel.

**Title:** Chemical And Biological Weapons In The Middle East

**Date:** April 16, 2002

**Source:** [Carnegie Endowment](#)

**Abstract:** Raging violence between Israelis and Palestinians has raised fears of a wider war in the region. For background on the possible use of weapons of mass destruction in future conflicts, we provide summaries on the chemical and biological weapon capabilities of countries in the Middle East adapted from a forthcoming Carnegie study, [Deadly Arsenals: Tracking Weapons of Mass Destruction \(June 2002\)](#). Next week's analysis will assess regional missile arsenals.

### Israel's Chemical and Biological Weapon Capabilities

Israel possesses advanced chemical and biological weapons capabilities, although it is not known what type or how many offensive agents it currently has. Israel is believed to have had sophisticated chemical and biological weapons programs for several decades which are centered at the Israel Institute for Biological Research (IIBR) at Ness Ziona, some 10 kilometers south of Tel Aviv. There, Israel reportedly has conducted advanced research on both chemical and biological warfare.

Lacking authoritative information, non-Israeli publications have made many claims about Israel's CBW capabilities, from the trivial to the most sensationalist. The government of Israel, as part of its traditional deliberate ambiguity policy, has neither confirmed nor denied those reports. Acknowledging the difficulties in assessing Israel's CBW programs and capabilities, Avner Cohen recently characterized Israel's capabilities in these fields in the following way: "A near-consensus exists among experts-based on anecdotal evidence and intelligence leaks-that Israel developed, produced, stockpiled, and maybe even deployed chemical weapons at some point in its history." As to biological weapons, however, Cohen appears more cautious and tentative: "It would be logical-given the experience with Iraq-that Israel has acquired expertise in most aspects of weaponization, with the possible exception of testing. Although it is probable that Israel has maintained some sort of production capability, it is highly doubtful that Israel engages in the ongoing production or stockpiling of BW agents."

A 1990 DIA study reported that Israel had an operational chemical warfare testing facility. In an oblique Israeli reference, the authoritative Middle East Military Balance produced by the Jaffe Center notes, "The chemical and biological capabilities of Syria, Iraq and Iran are matched, according to foreign sources, by Israel's possession of a wide range of such weapons." Israel has signed but not yet ratified the Chemical Weapons Convention and is not a party to the Biological Weapons Convention.

## **Iraq's Chemical and Biological Weapon Capabilities**

The absence of UN monitoring since 1998 has aroused concerns that Iraq again may have produced some biological warfare agents. Iraq currently maintains numerous science and medical facilities furnished with dual-use equipment where potential BW-related work could easily take place. According to UN estimates, Iraq possesses the technology and expertise to reconstitute an offensive biological weapons program within a few weeks or months. Iraq's continual refusal to disclose any details about its biological weapons program have lead U.S. officials to conclude that Baghdad maintains an active program, in spite of Iraq's ratification of the BWC in 1991. "The United States strongly suspects that Iraq has taken advantage of three years of no UN inspections to improve all phases of its offensive BW program. The existence of Iraq's program is beyond dispute, in complete contravention of the BWC." In the absence of further monitoring, the current status of the Iraqi chemical weapons program is also unknown. Iraq maintains the expertise to resume chemical agent production within a few weeks or months. However, to attain former levels of production, Iraq would need significant amounts of foreign assistance.

## **Iran's Chemical and Biological Weapon Capabilities**

Although Iran is a member of the Biological Weapons Convention, U.S. intelligence reports claim that Iran currently maintains an offensive biological weapons program. The Iranian program is believed to include active research and development, agent production and weaponization.

In May 1998, after acceding to the Chemical Weapons Convention, Tehran acknowledged past Iranian involvement in chemical weapons development and production. Like the Iranian BW program, the chemical weapons program began in the 1980's during the war with Iraq. Officials claimed that the Iranian CW program was dismantled at the war's end. U.S. threat assessments, however, contend that Iran's chemical weapons program remains intact. It is believed that Iran possesses a stockpile of weaponized blood gases, and blister and pulmonary agents.

## **Egypt, Syria, Libya and Sudan's Chemical and Biological Weapon Capabilities**

There is considerable evidence that *Egypt* started a biological weapon research program in the early 1960s that produced weaponized agents. In 1996, U.S. officials reported that Egypt had developed biological warfare agents by 1972 and that "there is no evidence to indicate that Egypt has eliminated this capability and it remains likely that the Egyptian capability to conduct biological warfare continues to exist." Currently, Egyptian officials assert that Egypt never developed, produced or stockpiled biological weapons. *Syria* has a biotechnical infrastructure capable of supporting limited agent development but has not begun a major effort to produce biological agents or to put them into weapons, according to official U.S. assessments. *Libya* is also believed to have a program, but it has not advanced beyond basic research and development. *Sudan* is not believed to have a biological weapon program, but U.S. officials have repeatedly warned of Sudanese interest in developing a program.

*Egypt* was the first country in the Middle East to obtain chemical weapons and the first to use them. It reportedly employed phosgene and mustard gas against Yemeni royalist forces in the mid-1960s. It is believed to still have a research program and has never reported the destruction of any of its chemical agents or weapons. Like Egypt, *Syria* has not signed the Chemical Weapons Convention and U.S. officials believe it has a significant stockpile of the nerve agent sarin. A 1990 intelligence assessment reported that Syria had weaponized these chemicals in 500-kilogram aerial bombs and warheads for its Scud-B missiles. Libya once had a substantial chemical weapons stockpile. It produced at least 100 metric tons of blister and nerve agents before it closed its Rabta plant in 1990. It may still have some chemical weapons and is suspected of trying to re-establish its offensive chemical weapon capability and an indigenous production capability for weapons. *Sudan* is also believed to have an active interest in acquiring the capability to produce chemical agents, but is not believed to have done so yet. Libya is not a member of the CWC; Sudan is ([Carnegie Endowment, 2002](#)).

**Title:** Arms Scientists Said To Have Fled To Syria

**Date:** April 12, 2003

**Source:** [UCLA](#)

**Abstract:** Some of Iraq's top weapons scientists already have fled their country and are in Syria, from where they may seek political safety in France, administration sources said yesterday.

The officials said among those believed to have made it to Syria are [Huda Salih Mahdi Ammash](#) and [Rihab Taha](#), both top scientists in Iraq's biological-weapons program. The administration sources said there are intelligence reports that one, or both, made it to Damascus.

Mrs. Taha is a British-trained microbiologist, who led Iraq's drive to cultivate and weaponize deadly anthrax. Nicknamed "Dr. Germ," she is believed to hold vast knowledge concerning all of ousted Iraqi dictator Saddam Hussein's development of weapons of mass destruction.

Mrs. Ammash has been nicknamed "Mrs. Anthrax" by Western reporters. She has been photographed at Saddam's Cabinet meetings, and at a meeting with his son, Qusai, who ran most of Iraq's military and security organizations.

The two women are notable not only for their expertise in weaponizing germs, but also because they both attained senior positions among the male-dominated Ba'ath Party.

Mrs. Ammash's picture and name were listed yesterday by the U.S. Central Command as one of 55 most-wanted Iraqis for possible war-crimes charges. Mrs. Taha was not listed, although she is wanted for questioning.

They are of great potential value to American weapons inspectors who want leads on where Saddam has hidden his weapons of mass destruction.

One administration official, speaking on the condition of anonymity, said there are intelligence reports that Iraqi weapons scientists are seeking safety in France. Paris aided Saddam's nuclear-weapons program, helped build Baghdad's air-defense network and vehemently opposed the ongoing war that toppled the dictator.

U.S. officials declined to put a number on how many Iraqi weapons scientists have entered Syria, but estimated it is fewer than 10 at this point.

Allied forces set up checkpoints early in the war at crucial highway intersections. But military officials say it is impossible to stop every car and search it.

There have been two days of intense firefights between U.S. troops and Iraqi forces in the town of Qa'im, which lies just 20 miles from the Syrian border and is a key juncture in the escape route from Baghdad to Damascus.

During the inspection regime by the United Nations that ended before the war started March 19, inspectors failed to gain unfettered access to any Iraqi weapons scientists except one biological-warfare researcher.

Reports that Iraqi scientists have left Baghdad for Syria comes as the U.S. Central Command announced yesterday a most-wanted list of 55 Ba'ath Party leaders. The "wanted posters" came in the form of a deck of cards — this one with 55 cards, each showing a picture of an Iraqi fugitive. Saddam, who may have been killed in a Monday air strike, is the ace of spades.

The current government in Syria, like Saddam's regime, was founded as a hard-line dictatorship. Since the war started, Syria has purportedly come to Baghdad's aid in several ways, including shipping night-vision military equipment and allowing suicidal non-Iraqi Arabs to travel through Syria to Iraq to attack the allies.

Now, Syria is providing a haven to Iraqi Ba'athists, including some weapons experts. The exodus began with the family members of Saddam's regime. But as Army soldiers and the Marines got closer to Baghdad last week, regime figures started showing up in Syria.

Defense Secretary Donald H. Rumsfeld has warned Syria several times publicly to stop helping Saddam's defeated regime and did so again yesterday.

"They have allowed people to come out of that country into their country and either stay or transit. None of these things are helpful," he said.

Mrs. Taha is married to Iraq's oil minister, Lt. Gen. Amir Rashid Mohammed Ubaydi. During the U.N. inspections regime of the 1990s, inspectors interviewed Mrs. Taha frequently. A loyal Ba'athist, she often responded angrily, and in one instance threw furniture.

Gen. Ubaydi is on the most-wanted list of 55.

Mrs. Taha ran Iraq's supersecret biological-warfare program at a research lab in the town of Hakam beginning in the mid-1980s.

Many senior Iraqi ministers, generals and Ba'ath Party members suddenly disappeared on Monday from Baghdad two days before the city fell to the U.S.-led coalition. The vanishing act came hours after a U.S. Air Force B-1B dropped four 2,000-pound bombs on a building in Baghdad suspected of holding Saddam, his sons, Uday and Qusai, and other officials.

The target was a safe house for the Iraqi Intelligence Service in the western Mansur neighborhood of Baghdad, behind the popular al Saa restaurant.

"There were two places. One was a restaurant, and one was a house nearby," Mr. Rumsfeld said yesterday. "And the question is, who was in what, if anybody? And the answer is, do we have ground truth there? And the answer is no."

The four satellite-guided bombs destroyed a row of buildings, and left a deep crater.

Gen. Richard B. Myers, Joint Chiefs of Staff chairman, said U.S. forces will eventually examine the bombing site located in the Ba'ath Party stronghold. But for now, occupying troops have more important missions.

"I think our priorities now would not be to be digging in rubble," said Gen. Myers.

The CIA received human intelligence that Saddam went into the building and did not come out before the bombs destroyed it ([UCLA, 2003](#)).

**Title:** U.S. Report Finds Active Biological Weapons Programs In Iran, North Korea, Russia And Syria

**Date:** September 7, 2005

**Source:** [NTI](#)

**Abstract:** The U.S. State Department has found that Iran, North Korea, Russia and Syria are maintaining biological weapons programs, the Associated Press reported last week (see [GSN](#), March 29).

The State Department also found that China still has “some elements” of a biological weapons program, while experts failed to agree on Cuba’s bioweapons production capacity, AP reported.

The findings were outlined in the State Department’s “Adherence to and Compliance with Arms Control, Nonproliferation, and Disarmament Agreements and Commitments” report. The congressionally mandated report, covering the two-year period ending in December 2004, details individual country’s WMD capabilities and missile proliferation efforts, according to AP.

According to the report: Based on available intelligence, Iran is believed to have an offensive biological weapons program; North Korea has a “dedicated, national-level effort to develop a BW capability; Russia “continues to maintain” a weapons program; and Syria would be in violation of the Biological Weapons Convention if it was a member.

China “maintains some elements of an offensive BW capability,” while Cuba has at least a “limited offensive BW research and development effort,” the report found (George Gedda, Associated Press/[Baltimore Sun](#), Aug. 30).

China rejected the report’s findings, according to *Voice of America*.

“These statements are far from the truth, and are irresponsible,” said Zhang Yan, director general of the Chinese Foreign Ministry’s arms control department. “We hope that the U.S. side will stop such erroneous practices, and we also express our strong dissatisfaction” (Luis Ramirez, [Voice of America](#), Sept. 1).

Russia has also challenged statements made in the report regarding its weapons programs, RIA Novosti reported last week.

“Those are not new accusations,” the Russian Foreign Ministry said in a statement. “The Russian Foreign Ministry has had to comment on similar points in other ‘research papers’ that put Russia in a group of countries violating nonproliferation agreements without providing any evidence many times before.”

The Foreign Ministry said the report presents “a one-sided and distorted picture of the implementation of the Strategic Arms Reduction Treaty.”

Russia said the State Department offered no evidence that it has failed to honor its Chemical Weapons Convention and Biological Weapons Convention commitments ([NTI, 2005](#)).

**Title:** Syria Ready With Bio-Terror If U.S. Hits Iran: Damascus Reportedly Hiding WMD Smong Commercial Pharmaceuticals

**Date:** March 5, 2007

**Source:** [WND](#)

**Abstract:** An American biodefense analyst living in Europe says if the U.S. invades Iran to halt its nuclear ambitions, Syria is ready to respond with weapons of mass destruction – specifically biological weapons.

“Syria is positioned to launch a biological attack on Israel or Europe should the U.S. attack Iran,” Jill Bellamy-Dekker told WND. “The Syrians are embedding their biological weapons program into their commercial pharmaceuticals business and their veterinary vaccine-research facilities. The intelligence service oversees Syria’s ‘bio-farm’ program and the Ministry of Defense is well interfaced into the effort.”

Bellamy-Decker currently directs the Public Health Preparedness program for the European Homeland Security Association under the French High Committee for Civil Defense.

She anticipates a variation of smallpox is the biological agent Syria would utilize.

"The Syrians are also working on orthopox viruses that are related to smallpox," Bellamy-Decker said, "and it's a good way to get around international treaties against offensive biological weapons development. They work on camelpox as a cover for smallpox."

According to the Center for Infectious Disease Research & Policy (CIDRAP) at the University of Minnesota, [camelpox is a virus closely related to smallpox, that causes a "severe and economically important disease in camels," but rarely, if ever, causes the disease in humans.](#)

Bellamy-Decker also told WND the North Koreans were working closely with the Syrians on their biological weapons program.

"The Syrians have made some recent acquisitions in regard to their smallpox program from the DPRK," she explained. "Right before the recent Lebanon war, the Syrians had a crash program in cryptosporidium."

According to the Washington State Department of Health, [cryptosporidium is a one-celled parasite that causes a gastrointestinal illness with symptoms of diarrhea, abdominal cramps, headaches, nausea, vomiting, and a low-grade fever. The symptoms can last for weeks and may result in weight loss and dehydration.](#)

"Because cryptosporidium is impervious to chlorine," Bellamy-Decker continued, "you could infect the water supply by the bucket full of cryptosporidium, if you know where to get it. The resulting illness would put down a lot of civilians and military who might oppose you going into their country."

"The Syrians have a modus operandi of covert operations and deniability," she stressed, "so biological weapons are absolutely perfect for them."

WND asked Bellamy-Decker if the Syrians have any history of having used biological weapons.

"I believe they are testing biological weapons right now, in Sudan, in the conflict in Darfur," she answered. "There is credible information about flyover activity in Darfur, where little parachutes have been dropped down on the population. This is consistent with dispersal methods in bioweapons attacks. I've also seen evidence of bodies that have been recovered from Darfur that look as if they had been exposed to biological weapons."

[President Mahmoud Ahmadinejad of Iran met with Sudanese President Omar al-Bashir in Khartoum Feb. 28](#) to exchange expressions of support and solidarity.

"The Syrians now consider biological weapons as part of their arsenal," Bellamy-Decker said. "The Syrian military is also beginning to plan the eventual integration of biological weapons in its tactical and strategic arsenals."

She referenced an April 2000 article published by Syrian defense minister General Mustafa Talas, titled "Biological (Germ) Warfare: A New and Effective Method in Modern Warfare." The article was republished in a Farsi translation in Tehran.

"All indications suggest that Syria's ultimate objective is to mount biological warheads on all varieties of the long-range surface-to-surface missiles in its possession," Bellamy-Decker maintained. "This is a goal that can probably be achieved within a few years, and it may already have been realized in part."



She argued that instead of producing large quantities of bioweapons agents, Syria is seeking to develop a smaller, but high-quality arsenal, which it can deliver accurately against military and civilian targets.

When asked how Syria might be expected to retaliate against Israel or Europe if the U.S. attacked Iran, she responded, "Syria has most likely forward-deployed some of their covert operatives. Smallpox does not need to be weaponized. Aerosol release is the way to go."

Bellamy-Decker explained the methodology of a terrorist bio-attack:

So with a good primary aerosol release in an airport in Israel or Europe and you could get 100 index cases. If you've made the strain sufficiently virulent, you could have a ratio of 1 to 13 for infectivity, where the normal ratio is 1 to 3. If every index case infects 13 other people, you unfortunately have a great first hit.

"A terrorist bio-attack could go global," she noted. "A good biological hit will spread rapidly with international travel. Smallpox is a better weapon than anthrax. Smallpox has been field-tested, it is highly stable, and highly communicable, especially if you look at some of the strains the Russians manipulated. Syria probably retained some of [its] smallpox strains from the last outbreak back in 1972."

Another risk is the possibility Syria's military might give bioweapons to terrorists.

"We are close to seeing a breakthrough where Syria could provide biological weapons to some of the terrorist groups they work with, like Hezbollah in Lebanon," Bellamy-Decker argued. "The Syrians believe they can vaccinate themselves and they are working within the Syrian military. They're certainly not worried about releasing these biological weapons in a military setting, or even if civilians were infected as well, as long as they are vaccinated. I think it is a real threat."

Bellamy-Decker is presenting a paper at this week's [Intelligence Summit](#) in St. Petersburg, Fla. It is expected to focus on the sophisticated state of development of the Syrian bioweapons program.

"The Syrians have developed a rather remarkable bioweapons capability that has gone under the radar of U.S. intelligence," she said. "U.S. intelligence continues to insist that the Syrian capability is not highly developed. The Syrian program mirrors how the Russians have developed their program, as well as Iraq under Saddam Hussein, North Korea, and Iran. The emphasis in the Syrian program is on latent potential and outbreak capability."

Bellamy-Decker explained we should not expect to find stockpiles of biological weapons.

"Stockpiles are just not how biological weapons are done," she said. "With biological weapons, it is not the quantity, but the quality that counts. If you can produce a virulent, communicable strain, then you have a great biological weapon and it doesn't matter how much of it you have, it depends on what the weapon looks like."

Bellamy-Decker also referenced a [paper she had co-authored for the European Homeland Security Association \(EHSA\) titled, "Public Health Security and Preparedness."](#)

This paper is intended to be used as part of a new initiative EHSA is launching in Brussels to hold a quarterly bioterrorism forum bringing together national and international experts with high-level decision-makers "to discuss the threat posed by deliberate disease and the appropriate preparedness and response mechanisms vitally needed to address this threat" ([WND, 2007](#)).



**Title:** Mysterious Plague Outbreak Among Syrian Army

**Date:** July 6, 2010

**Source:** [Bio Prep Watch](#)

**Abstract:** An outbreak of plague, which is considered a potential bioweapon, among the Syrian military may be raising more questions than answers.

Syrian President Bashar al-Assad recently ordered the shutdown of all Syrian military exercises due to a plague that currently affects a large number of military personnel, according to Examiner.com.

The Syrian president has told Syrian news sources that food and drinking water in military bases, coupled with one of the country's worst droughts in over 40 years, are responsible for the outbreak of plague.

Hundreds of thousands of Syrians are experiencing food shortages, nearly 60,000 small livestock owners have lost all their animals and 50,000 others have lost 50 to 60 percent of their cattle.

The infectious bacterium *Yersinia pestis* causes the infectious disease plague, which is commonly found worldwide in rats and other rodents. Fleas often serve as common vectors of plague. There are three forms of human plague – bubonic, septicemic and pneumonic.

Humans may also be infected by direct contact with an infected animal, through inhalation and, if it is pneumonic plague, by person to person contact.

Drinking water, food and a heat wave are not common causes of plague, Examiner.com says, unless they have increased the contact between humans and plague carriers.

Because of this, the article says, questions should be raised about the true cause of the Syrian army plague ([Bio Prep Watch, 2010](#)).

**Title:** Nations Of Concern: Syria

**Date:** July 15, 2011

**Source:** [Wiley](#)

**Abstract:** The article discusses Syria's biological weapons capability, its support to terrorism, and finally the possibility that Syria might provide biological weapons-related materials or information to terrorist groups. Based on the available information, the article concludes that Syria does not possess an offensive biological weapons capability even though it may possess the technical wherewithal to develop, produce, and deploy biological weapons. The article also concludes that in spite of its support to terrorism in the region, Syria has not transferred any biological weapons-related information or material to terrorist groups and is highly unlikely to do so in the future ([Wiley, 2011](#)).

**Title:** Experts Worried Syrian Chemical Weapons Could Fall Into Terrorists' Hands

**Date:** August 30, 2011

**Source:** [Bio Prep Watch](#)

**Abstract:** As the political turmoil continues to increase in Syria, U.S. officials are closely monitoring the stockpile of weapons in the country, particularly its arsenal of deadly chemical gases and delivery systems.

According to a report in the Wall Street Journal, American officials are deeply concerned that political dissidents or terrorist organizations may take advantage of the instability in Syria to acquire some of the nation's weapons of mass destruction. Officials do not believe any weapon sites have yet been compromised, Business Insider reports.

The officials do fear, however, that the Syrian government could lose control of its chemical cache if the country descends even further into political disarray or even into a full-blown civil war.

The chemical stockpile in Syria is believed to include a large amount of mustard gas, Sarin gas – the nerve agent used in the 1995 Tokyo subway attacks that killed 13 and sickened over 1,000 – as well as the missile systems required to deliver those chemical weapons.

Privately, the U.S. has worried about the extent of Syria's cache of chemical weapons since at least 2008, when a secret state department cable warned about the mounting threat of the country's large stockpile and potential ties to terrorist groups, Business Insider reports. Those concerns have increased in recent months as the government of Syria has teetered on the brink of collapse.

The United Nations estimates that more than 2,200 people have been killed in the country as a result of a government crackdown on protesters, leading to a number of foreign governments, including the U.S., to call for Syrian President Assad to step down.

The Obama administration has expressed similar concerns about weapons going missing in Libya, where rebel forces ousted long-time leader Muammar Qaddafi last week ([Bio Prep Watch, 2011](#)).

**Title:** Syria's 'Serious Chemical And Biological Threat'

**Date:** September 2, 2011

**Source:** [BBC](#)

**Abstract:** Scientists have warned that Syria could be developing chemical and biological weapons to add to their already substantial stockpile.

Professor Christine Gosden of the Department of Molecular and Clinical Cancer at the University of Liverpool, and Dan Plesch, of the School of Oriental and African Studies, discuss the "serious problem" of such weapons in the hands of a "failing state" ([BBC, 2012](#)).

**Title:** Syrian 'Chemical, Biological' Weapons Concern Israel

**Date:** January 17, 2012

**Source:** [YNet](#)

**Abstract:** IDF's planning division head says chemical, biological weapons still flowing into Syria, wonders 'what will be transferred to Hezbollah?' [Israel](#) has serious concerns about what will happen to "huge stockpiles" of chemical and biological weapons in [Syria](#) when the Assad regime collapses, a senior military official said on Tuesday.

Major-General Amir Eshel, head of the Israeli military's planning division, said the working assumption was the regime of President Bashar [Assad](#) would eventually fall.

"The question is when, not if. And the big question is what's going to come the day after," he said.

"The immediate concern is the huge stockpiles of chemicals, biologicals (weapons), strategic capabilities that are still going into Syria, mainly from eastern Europe," Eshel said.

"That's a major concern because I don't know who is going to own those the day after. Up till now, what has been transferred to Hezbollah? What will be transferred to [Hezbollah](#)? What will be divided between those factions inside Syria? What is that going to create?

"We are talking about huge stockpiles," he said.

The regime has spearheaded a bloody crackdown on pro-democracy activists seeking to overthrow Assad, who has vowed to remain in power, raising the specter of civil war between Syria's many religious sects if he steps down.

Eshel said the threat of civil war was a real possibility if Assad clung to power.

"If Assad will adopt this Yemenite model and leave, it might prevent a civil war," he said, referring to an agreement that saw Yemen's former president Ali Abdullah Saleh agree in November to leave power.

"But if he won't leave of his own will, we might get into civil war," he said. "If there will be a civil war, it might be a disaster."

Eshel also warned that Syria faces bankruptcy, which could create new instability.

"I think the major challenge the Syrians will face in a few months, is bankruptcy. The reserves will be zero, and this is going to create, I think, internal turmoil. We can expect refugees in many countries."

On January 10, Israel's Chief of Staff Lieutenant General Benny [Gantz](#) told MPs that the military was preparing for the possibility of an influx of Syrian refugees, particularly on the Golan Heights ([YNet, 2012](#)).

**Title:** Hezbollah May Obtain Syria's Non-Conventional Weapons

**Date:** January 18, 2012

**Source:** [YouTube](#)

**Title:** Concerns Continue To Mount About Syrian Bioweapons

**Date:** January 20, 2012

**Source:** [Bio Prep Watch](#)

**Abstract:** Worries continue to mount over the potential that the vast stockpile of chemical weapons in Syria could fall into the hands of militants as the days of Syrian President Bashar Al-Assad look increasingly numbered.

While the size and quality of the chemical arsenal in Syria is not known, experts are fairly certain that Damascus operates a comprehensive weapons program encompassing both production and delivery capabilities, [AINA](#) reports.

"We are talking about huge stockpiles," Major-General Amir Eshel, the head of the Israeli military planning division, said, according to [AINA](#). "That's a major concern because I don't know who is going to own those the day after. Up till now, what has been transferred to Hezbollah? What will be transferred to Hezbollah? What will be divided between those factions inside Syria?"

There were similar concerns about the chemical weapons arsenal of Libya under the regime of Muammar Qaddafi. Syria's chemical weapons stockpile is thought to be much bigger and more sophisticated.

"Syria has never signed the Chemical Weapons Convention and has been indifferent over the years to our consistent overtures to open a discussion on the issue," Luhan said, according to [AINA](#). "We're monitoring events in Syria closely ... and hope whatever situation subsequently develops from the turmoil will create more favorable circumstances for joining the convention."

Experts believe that the chemical weapons stockpile includes mustard gas, sarin and possibly VX nerve agent. If Syria has biological weapon capabilities, they are more shrouded in mystery. Analysts fear that

Al-Assad might transfer some of the arsenal to his allies or use chemical weapons against its own people. A chaotic end to his reign could also enable rebels, arms dealers and foreign militant groups to raid the depots ([Bio Prep Watch, 2012](#)).

**Title:** Biological Weapons In Syria And Bioterrorism In USA

**Date:** January 21, 2012

**Source:** [PBS](#)

**Title:** Israeli Officials: Terrorists May Get Syria's Weapons

**Date:** February 7, 2012

**Source:** [Haaretz](#)

**Abstract:** With violence mounting, the growing threat to President Bashar Assad's regime is raising concern in Israel that weapons from Syria's military could fall into the hands of terrorist groups, defense officials told Haaretz on Monday.

Following the bloody weekend assault on Homs by Assad's forces, Israeli defense sources said large amounts of weapons could be transferred to Hezbollah, in Lebanon, or to other organizations.

The weapons include advanced SA missiles, high-trajectory long-range rockets and missiles, and biological and chemical weapons, the officials said.

Speaking last week at the Herzliya Conference, Defense Minister Ehud Barak said: "It is difficult to predict exactly what will happen in Syria. We're watching for attempts to pass advanced weapons systems that could edge the delicate balance in Lebanon to Hezbollah."

Incoming Israel Air Force chief Maj. Gen. Amir Eshel told foreign journalists in Jerusalem last month that, as far as Assad's fall is concerned, "the question is when, not if. And the big question is what will happen the following day."

Eshel said Israel's immediate concern is Syria's huge cache of chemical and biological weapons - coming mainly from East European states - and into whose hands it will fall.

"What has been passed on to Hezbollah so far? What will be passed on in the future? What will be divided between the two factions in Syria?" he asked.

Israel has been warning for several years that Syria may provide Hezbollah with advanced weapons systems. The foreign media reported that Hezbollah has maintained training bases and arsenals in Syria, near the Lebanon border, since 2008. Arab media reported Syria had moved Scud missiles to Hezbollah camps in Lebanon and that advanced SA missiles had been set up in the mountains of Lebanon.

Other reports, unconfirmed by Israel, said Israel considered attacking convoys carrying weapons from Syria to Lebanon on several occasions in recent years.

However, the concern is greater now because Assad's forces seem to be losing their grip on the state. This could result in passing weapons to Hezbollah, or in radical Sunni factions taking over the arsenals, the officials said.

After Muammar Gadhafi's regime collapsed in Libya last year, the army's caches were looted and SA missiles and rockets found their way to various terror organizations - from militias in east Africa, to Hamas and Islamic Jihad in the Gaza Strip, officials said ([Haaretz, 2012](#)).

**Title:** Hizbullah Chemical War Threat to Israel If Assad Falls

**Date:** February 7, 2012

**Source:** [Israel National News](#)

**Abstract:** The expected fall of Syrian President Bashar Assad's regime may be Hizbullah's gain of chemical and biological weapons that could be used against Israel, officials fear.

The latest concerns, reported by foreign news services, come three weeks after former Labor party Defense Minister Binyamin Ben-Eliezer warned, "We are talking in terms of thousands of missiles that might move to Hizbullah and might endanger the whole Middle East."

He told a news conference organized by the Israel Project that Syrian's arsenal includes biological and chemical weapons.

Lebanese sources have reported that Hizbullah has been increasing its smuggling of weapons from Syria.

Defense officials told the *Associated Press* this week that they are worried Hizbullah will obtain Syria's S-125 anti-aircraft missiles, which could down surveillance flights Israel conducts over southern Lebanon. The terrorist organization has created a "state within a state" in the area.

In 2000, then-Prime Minister Ehud Barak suddenly pulled all military personnel out of the "security zone" in southern Lebanon, from where terrorists shot missiles on northern Israel. Hizbullah easily filled the vacuum of power. With the absence of Israeli intelligence, it stockpiled 20,000 missiles until launching the Second Lebanon War against Israel in the summer of 2006.

An Israel intelligence official said last week that Israel now faces 200,000 missiles on all fronts ([Israel National News, 2012](#)).

**Title:** Israel Warns Against Syrian Bioweapons Falling Into Hezbollah's Hands

**Date:** February 8, 2012

**Source:** [Bio Prep Watch](#)

**Abstract:** Israel recently announced that it considers the threat of Syria's weapons of mass destruction falling into the wrong hands to be equal to the threat posed by Iran's nuclear weapons development.

The violent crackdown on Syrian civilian protestors has entered its eleventh month, and the Israeli intelligence community now considers the fall of Bashar al-Assad's government all but inevitable, according to the [Telegraph](#).

Al-Assad's massive weapons stockpile includes chemical and biological weapons, surface-to-air missiles and high-trajectory long-range rockets – all considered threats to Israeli security. The weapons are currently under the care of government forces.

With Assad reportedly losing his grip on power, the danger grows that his weapons, including deadly chemical agents like sarin and VX, will fall into the hands of Sunni extremists or the Tehran-backed militant Shiite group Hezbollah, the [Telegraph](#) reports.

Israel Hayom, a newspaper closely aligned with Prime Minister Benjamin Netanyahu, recently quoted a high-ranking Israeli defense official who warned Syria that any transfer of WMDs to Lebanon would be tantamount to a declaration of war by the government in Beirut. The official added that Israel would act in order to prevent such a move.

Incoming Israeli Air Force Chief Major General Amir Eshel said that the unrest in Syria could precipitate a conflict on Israel's northern border.

"The question is when, not if [Assad will fall]. And the big question is what will happen the following day," Eshel said, the [Telegraph](#) reports. "What has been passed on to Hezbollah so far? What will be passed on in the future? What will be divided between the two factions in Syria?" ([Bio Prep Watch, 2012](#)).

**Title:** Assad Forces Mull Use Of Chemical Weapons In Homs, Opposition Says

**Date:** February 9, 2012

**Source:** [Haaretz](#)

**Abstract:** Opposition figures claim government stockpiling chemical weapons and distributing gas masks to soldiers near Homs; 130 people reportedly killed on Thursday as government intensifies crackdown.

Syria's military has begun stockpiling chemical weapons and equipping its soldiers with gas masks near the city of Homs, opposition sources reported on Thursday.

Opposition activists said they had received reports that the Syrian army had transferred a significant quantity of grenades and mortars containing chemical agents to a school building in Homs.

The opposition also reported that gas masks were being distributed to soldiers at roadblocks.

Homs has become the focal point of violent confrontations between insurgents and the country's military in recent days, and opposition figures are concerned that the moves could signal the regime's intention to use chemical weapons against its citizens.

News agencies reported over 130 killed in Syria on Thursday, as Bashar Assad's government intensified its crackdown on an expanding uprising against his regime.

Demonstrations were reported on Thursday in Aleppo, Syria's second largest city, which had previously not seen large-scale protests against the government.

Meanwhile, an opposition website reported that an armored brigade of the Syrian military was headed toward the city of Zabadani, which has been held for the past ten days by the Free Syrian Army, the opposition's armed wing. The site speculated that the brigade would attempt to retake the city over the next two days.

Opposition sources said the ferocity of attacks by government forces against the cities of Homs, Idlib and Daraa had reached unprecedented levels of intensity over the past two days, with hospitals and clinics bombed and doctors arrested.

British Prime Minister David Cameron on Thursday said there was a need to continue to maintain pressure on Syria's government over its bloody crackdown on the country's opposition.

"Clearly what we are seeing on our television screens is completely unacceptable," Cameron told a news conference in Stockholm. "It really is appalling to see the destruction of Homs... It is quite clear that this is a regime that is hell-bent on killing, murdering and maiming its own citizens."

Cameron added that there was a need to "take the toughest response we can" against Syria.

Arab League foreign ministers are scheduled to meet in Riyadh, Saudi Arabia on Saturday to discuss the organization's next steps on the crisis. The Arab League suspended its monitoring mission to Syria in late January due to the rising violence.

Approximately 6,000-7,000 people have died thus far in the 11-month uprising, which has become increasingly militarized in recent months ([Haaretz, 2012](#)).

**Title:** U.S. Steps Up Watch Of Syria Chemical Weapons

**Date:** February 15, 2012

**Source:** [Wall Street Journal](#)

**Abstract:** The U.S. and some Mideast allies are intensifying surveillance of Syria's chemical and biological depots amid fears that the weapons could go loose if unrest escalates out of control.

The U.S. is using satellites and other surveillance equipment to monitor suspected chemical and biological weapons storage sites in Syria, military officials said, reflecting Washington's concerns about a growing proliferation threat.

Officials say, however, that they have seen no evidence so far to suggest that any of the stockpiles are in immediate danger of being overrun by antiregime forces or Islamist militants, which they believe are currently incapable of conducting raids of the necessary sophistication. Facilities where stocks of nerve agents and mustard gas are stored are guarded by regime loyalists and were built to withstand attack, U.S. officials believe.

Lightly armed rebel forces have so far relied on hit-and-run tactics. But the number of defections from the Syrian military is on the rise, providing rebels with more capability.

U.S. officials said they believe the Syrian regime has strong reasons to secure their weapons stockpiles. "Most countries that have [chemical weapons] stocks view it as a strategic, not tactical, tool—and strategic tools are usually pretty well protected," a U.S. official said.

The Obama administration has intensified coordination with Syria's neighbors, particularly Iraq, Lebanon and Jordan, to guard against the potential of Syrian weapons of mass destruction moving outside its borders, U.S. and Arab officials said.

The U.S.-led effort underlines Washington's concern about the increasing violence in Syria and the lack of options to address it after China and Russia this month vetoed a United Nations Security Council resolution calling for President Bashar al-Assad to step aside.

Activists on Tuesday reported some of the heaviest shelling of Homs yet in the 11th day of a siege that activist groups say has left hundreds of Syrians dead. Along with battles between troops and defectors around Hama, in which five government soldiers were killed, 20 civilians were killed by government across Syria on Tuesday, the U.K.-based Syrian Observatory for Human Rights reported. Another opposition group, the Local Coordination Committees, reported 40 people killed.

Arab states continued to prepare a new U.N. General Assembly resolution that would ramp up diplomatic pressure on the Assad regime. The Arab League on Sunday passed its own Syria resolution, proposing a joint peacekeeping mission with the U.N. and vowing to support the Syrian opposition politically and materially. Some Arab diplomats interpreted that wording as indication that Arab states were readying to arm opposition forces.

U.S. military leaders believe they need a clearer picture of the array of rebel forces on the ground before considering taking any steps to aid any of the groups with equipment. Potential options include providing nonlethal communications gear to the rebels, officials said.

At a Senate hearing Tuesday, the chairman of the Joint Chiefs of Staff, Gen. Martin Dempsey, highlighted the gap in U.S. intelligence about Mr. Assad's opponents. "We don't have as clear an understanding of



the nature of the opposition. We are working with the intelligence community to develop it," Gen. Dempsey said.

It took the U.S. months to assess the opposition in Libya. U.S. military officials said the situation is even more complicated in Syria, where Mr. Assad commands heavily armored brigades, sophisticated air defenses, thousands of rockets and chemical weapons.

"You thought Libya was hard," a U.S. military official said of any potential intervention.

Pointing to the threat posed by Syria's chemical and biological weapons stocks, Gen. Dempsey said: "We are watching the trend lines on their military to make sure they are still under control of the regime."

Gen. Dempsey said the Free Syrian Army currently is the centerpiece of the opposition and is "for the most part" made up of fighters from Syria, but he added: "We also know that other regional actors are providing support and that complicates the situation."

Intelligence agencies are working to understand the makeup of the opposition. The effort appears to be similar to the one in Libya in the early phase of that conflict. Some U.S. officials suspect al Qaeda militants may have been behind a recent series of bombings in Syria. Officials say some Sunni militants have entered Syria from neighboring Iraq. The U.S. believes at least some of the arms being used by rebels in Syria were supplied by Sunni tribes in Iraq.

Gen. Dempsey didn't confirm reports about al Qaeda's involvement but said the group's presence in Syria shouldn't be discounted. "All of the players in the region, it seems, have a stake in this. Those who would like to foment a Sunni-Shia standoff, and you know who they are, are all weighing in in Syria," he said.

The U.S. and its allies have long monitored Syria's chemical weapons stockpile.

"Syria is a country of significant proliferation concern, so we monitor its chemical weapons activities very closely," White House National Security Council spokesman Tommy Vietor said. "We will continue to work closely with like-minded countries to impede proliferation to Syria's chemical weapons program."

Separately, Gen. Dempsey said that on a trip to Egypt over the weekend, he tossed out his planned agenda for meetings and told his counterparts, including the country's military ruler, Field Marshal Hussein Tantawi, that they had to resolve U.S. complaints over the treatment of pro-democracy groups and detained Americans.

"I am convinced that potentially they were underestimating the impact of this on our relationship," he said. "When I left there, there was no doubt that they understood the seriousness of it."

Egypt is pursuing charges that more than 40 people, including 16 Americans, violated Egyptian laws through the activities of pro-democracy groups, including organizations funded by Congress ([Wall Street Journal, 2012](#)).

**Title:** U.N. Concerned That Syria Could Have Chemical Weapons

**Date:** March 5, 2012

**Source:** [Bio Prep Watch](#)

**Abstract:** Ban Ki-moon, the secretary-general of the United Nations, and Ahmet Üzümcü, the director-general of the Organization for the Prohibition of Chemical Weapons, have warned that Syria may have chemical weapons.

General Martin Dempsey, the chairman of the U.S. military's Joint Chiefs of Staff, said last week that Syria has an integrated air defense system and biological and chemical weapons, [Reuters](#) reports.

In the last 11 months, a crackdown on pro-democracy protestors in the country has led to the deaths of over 7,500 civilians at the hands of Syrian security forces.

"On Syria, the secretary-general and the director-general noted with concern the reports on the possible existence of chemical weapons in the country," Martin Nesirky, a U.N. spokesperson said, according to [Reuters](#). "Those concerns are entirely understandable."

According to Jeffrey Feltman, the U.S. assistant secretary of state, Washington is also concerned that Syria may have weapons of mass destruction.

"This is a topic that's being discussed actively with Syria's neighbors and with our allies in Europe and elsewhere," Feltman said, according to [Reuters](#). "We don't have any indication at this point that these stockpiles have fallen out of the control of the Syrian government, but it's one of the reasons why a managed transition is so important. We're watching this. We're watching it carefully."

The OPCW monitors compliance with the anti-chemical weapons convention, of which Syria is not a signatory ([Bio Prep Watch, 2012](#)).

**Title:** General Warns Of Syrian Bioweapons, Iran Threat

**Date:** March 6, 2012

**Source:** [CBS News](#)

**Abstract:** The top U.S. commander in the Middle East will warn Congress on Tuesday against efforts to scale back the Navy's presence in the embattled region, saying threats from Iran and elsewhere will require more ships and maritime missile defense capabilities.

Marine Gen. James Mattis, head of U.S. Central Command, also said Syria has a "substantial" chemical and biological weapons capability and thousands of shoulder-launched missiles. Until now, the U.S. military has largely declined to describe the expanse of weapons that President Bashar Assad's regime has at its disposal.

Mattis laid out his concerns in testimony prepared for Senate and House Armed Services Committee hearings this week. He and Navy Adm. William McRaven, head of U.S. Special Operations Command, are testifying before the Senate panel Tuesday. The testimony was obtained by The Associated Press.

Mattis' comments come as the Obama administration meets with Israeli leaders this week to discuss the escalating Iranian threat and the possibility of a pre-emptive strike by Israel.

Against a backdrop of roughly \$500 billion in Pentagon budget cuts over the next decade, Mattis said the U.S. must use its Navy and special operations forces to maintain a smaller but still strong military presence in the Middle East as the wars in Iran and Afghanistan end.

"The stacked Iranian threats ... of ballistic missiles, long-range rockets, mines, small boats, cruise missiles and submarines demand stronger naval presence and capability to protect vital sea lines of communication," Mattis said.

At the same time, he described a deteriorating situation in Syria, fueled in part by Iran. The prospects of a civil war are rising in Syria, he said, but the "options available to address the situation are extremely challenging."

Some members of Congress have called for U.S. and international military action against the Assad

regime to stem a brutal offensive against the Syrian people. But the Obama administration and other international leaders have opposed military intervention and instead have pushed instead for increased sanctions.

U.S. officials argue that unlike the military campaign in Libya last year that ousted Moammar Gadhafi, a military campaign in Syria would be far more difficult, would not get the backing of the U.N. Security Council and would be hampered by a less coordinated opposition force ([CBS News, 2012](#)).

**Title:** Leaked Email: Pentagon Admits Plan To Direct Terror Attacks Inside Syria

**Date:** March 6, 2012

**Source:** [Infowars](#)

**Abstract:** A shocking email leaked as part of the Wikileaks Stratfor data dump reveals that the Pentagon is planning to direct terror attacks and assassinations inside Syria in a bid to topple President Bashar al-Assad. (Infowars, 2012).

[The email](#), written by Reva Bhalla, Stratfor's Director of Analysis, contains details of a December 6 Pentagon meeting attended by members of the USAF strategic studies group along with four military officers at the Lieutenant Colonel level, "including one French and one British representative."

Bhalla was told by the military officials that, despite official claims to the contrary, foreign troops from NATO powers were already on the ground in Syria.

"After a couple hours of talking, they said without saying that SOF teams (presumably from US, UK, France, Jordan, Turkey) are already on the ground focused on recce [reconnaissance] missions and training opposition forces," states the email.

Bhalla goes on to describe how the mission of the undercover commandoes is hypothetically to "commit guerrilla attacks, assassination campaigns, try to break the back of the Alawite forces [Assad's support base], elicit collapse from within."

In other words, the Pentagon, along with other NATO powers, have already directed Special Forces troops stationed inside Syria to carry out terrorist attacks and assassinations in an effort to topple President Bashar al-Assad.

The email states that such actions should be ready within a 2-3 month time period. Bhalla describes how a destabilization campaign was favorable to air strikes because unlike Libya, "Syrian air defenses are a lot more robust and are much denser."

Some would argue that far from merely planning such attacks, the United States and other NATO powers are already using the Al-Qaeda- affiliated terrorists [airlifted out of Libya into Syria](#) to do the job for them. These terrorists have been blamed for bloody attacks that have killed both Syrian regime officials and innocent civilians, [including a bombing last month](#) in Syria's second city of Aleppo which killed 28 people.

[Footage has also emerged](#) of western-looking troops carrying out indiscriminate attacks using rocket-propelled grenade launchers.

Carrying out terrorist attacks to destabilize governments is not a conspiracy theory, it is a widely acknowledged form of covert warfare. [Only last month NBC News reported](#) that Israel was paying terror groups to carry out bombings and assassinations in Iran in a bid to weaken the regime in Tehran.

Reports of foreign troops entering Syria have been circulating for months.

[Last month Israeli intelligence outfit DebkaFile revealed](#) that British Special Forces were inside Syria “operating with rebel forces under cover in the Syrian city of Homs just 162 kilometers from Damascus.”

According to the report, the foreign units are not engaging in direct combat but are acting in an advisory capacity, while also relaying requests for arms outside of the country.

[According to Egyptian security officials](#), United States, Saudi Arabia and Jordan are also providing arms and training for Syrian rebels, dovetailing with [former FBI translator Sibel Edmonds' report](#) that hundreds of NATO and US troops arrived on the Jordanian and Syrian border back in December for the purpose of training militants to overthrow President Bashar al-Assad.

NATO member Turkey is also reportedly arming terrorist groups to aid rebel fighters. Leaders of the Free Syria Army have also bragged about the claim that [France and the United States have provided them with weapons](#) and anti-aircraft missiles.

[As we reported last week](#), during a BBC interview U.S. Secretary of State Hillary Clinton admitted that the United States and Al-Qaeda were on the same side when it came to achieving regime change in Syria.

Just as in Libya, where the overthrow of Gaddafi was [achieved through the use of Al-Qaeda groups](#), NATO and the United States are once again turning to terrorists as a means of achieving their geopolitical objectives in the region.

Indeed, [as we reported back in November](#), some of the same Al-Qaeda terrorists who fought U.S. troops in Iraq were airlifted into Syria to aid rebels. Al Qaeda leader Ayman al-Zawahri's has [also publicly expressed support](#) for Syrian rebel forces ([Infowars, 2012](#)).

**Title:** Top U.S. Commander Says Syria Has Substantial Bioweapon Capability

**Date:** March 7, 2012

**Source:** [Bio Prep Watch](#)

**Abstract:** According to the top U.S. commander in the Middle East, Syria has a “substantial” capability for biological and chemical weapons and an effort to scale back naval presence in the area could spell trouble.

Marine General James Mattis, the head of U.S. Central Command, said that threats from Iran and other countries in the region require more ships and maritime missile defense capabilities as opposed to fewer. Mattis and Navy Admiral William McRaven testified before the Senate and House Armed Services Committee on Tuesday, [Associated Press](#) reports.

Mattis said that despite the \$500 billion worth of Pentagon budget cuts in the next decade, the U.S. must use its special operations and its Navy to maintain a smaller but still strong military presence in the Middle East.

“The stacked Iranian threats...of ballistic missiles, long-range rockets, mines, small boats, cruise missiles and submarines demand stronger naval presence and capability to protect vital sea lines of communication,” Mattis said, according to [Associated Press](#). “(In addition), options available to address the situation (in Syria) are extremely challenging.”

Some members of Congress have called for military action by the U.S. and internationally against the Assad regime to stop the brutal attacks against the Syrian people. Obama's administration and other leaders around the world have thus far opposed military intervention and have recommended increasing sanctions ([Bio Prep Watch, 2012](#)).

**Title:** Panetta, Dempsey Warn Of Syria's Bioweapons

**Date:** March 9, 2012

**Source:** [Bio Prep Watch](#)

**Abstract:** Top U.S. military officials spoke on Wednesday about Syria's extensive biological and chemical weapons stockpile and its sophisticated air defenses as a strategic reality check to the demand for U.S. military action.

Defense Secretary Leon Panetta and Army Gen. Martin Dempsey said that they would be ready if the order is made but that the situation is currently too complicated to quickly jump into action. While Republican Sen. John McCain has called for the president to launch airstrikes against President Bashar Assad, few colleagues in Congress have expressed interest in such a tactic, [Associated Press](#) reports.

"The fundamental issue that is before us is whether or not the United States will go in and act unilaterally in that part of the world, and engage in another war in the Muslim world unilaterally," Panetta said, according to [Associated Press](#). "Or whether or not we will work with others in determining what action we take."

Panetta said that the situation is dissimilar to what the U.S. faced in Libya because Syria's air defenses are five times more sophisticated and its biological and chemical weapons stockpile is 100 times larger. In addition, attacks could lead to many unintended deaths.

"We also need to be alert to extremists," Dempsey said, according to [Associated Press](#). "(In addition to other hostile actors, including Iran which) has been exploiting the situation and expanding its support to the regime. And we need to be especially alert to the fate of Syria's chemical and biological weapons. They need to stay exactly where they are."

President Obama is currently relying on sanctions and international diplomatic isolation to pressure Assad's regime into handing over power. The House's Foreign Affairs Committee unanimously approved harder sanctions on Syria targeting its energy sector along with strengthening current penalties ([Bio Prep Watch, 2012](#)).

# Bio & Terror Bible

## EXPOSING THE COMING BIO-TERROR PANDEMIC

**BIOTERRORBIBLE.COM:** The following news reports are in respect to bio-terror related technology which was released within the calendar year of 2002. Over the last 5 years, a [pandemic blog](#), a pandemic [Facebook application](#), multiple [bio-terror sniffing phone](#) applications, and a bio-terror [first responder iPhone application](#) have all been invented. All that is currently missing from the pandemic equation is the made for TV bio-terror attack.

**Title:** Early-Warning Bioterror Research Puts Pittsburgh On Bush's Itinerary

**Date:** February 5, 2002

**Source:** [UCLA](#)

**Abstract:** In the event of a bioterrorism attack, early detection could save thousands of lives.

That realization has set off a stampede to develop technology for early-warning systems, as well as to snare funds earmarked in the president's budget for the fight against bioterrorism. President Bush, visiting here to push for increased funding for homeland security, will inspect a system under development for 2-1/2 years at the University of Pittsburgh.

The system, which can set off a beeper if there is a surge in respiratory distress and skin rashes in dozens of hospitals in western Pennsylvania, is being installed in Utah ahead of the Winter Olympics. Olympic officials, sensitive to bioterrorism risks, already have installed monitors to check the air for potentially dangerous substances.

The nation's inability to respond quickly to biological weapons was highlighted by the anthrax attacks last fall, in which officials seemed to respond slowly to confirmed cases of infection, even as deaths were reported. Up until then, most Americans had never heard of anthrax or considered the threat of bioterrorism urgent. But reports of random individuals dying of anthrax exposure created a near hysteria over what the administration was doing to counter and prepare for further threats.

Hospitals, for the most part, can detect an increase of certain ailments. The problem is pinpointing trends early and notifying health officials. Doctors in general are expected to notify the health department when they see public-health threats. But that doesn't always happen, or it often happens belatedly. And in the case of bioterrorist attacks, quick response is critical.

Researchers at the University of Pittsburgh developed a computer-surveillance method for about 25 hospitals that represent more than half of the emergency-room visits in Allegheny County and a third of such visits in a 13-county area of western Pennsylvania.

The National Library of Medicine, the Agency for Healthcare Research and Quality, and the Centers for Disease Control and Prevention, have together provided \$700,000 in direct and indirect funding to develop the system. It monitors new cases, looking for unusual increases in flu-like symptoms, respiratory illnesses, diarrhea, skin rashes, paralysis, encephalitis and hemorrhage. A graph showing the incidence of each symptom is updated constantly and can be displayed on a computer screen. The trend line

should be roughly steady. If not, an alert is automatically sent. Another click of a button can show a map with the number of incidences reported within each patient's zip code.

The system identifies patients early in the disease process and then uses "brute-force computer power to find any interesting patterns among the sick individuals that would suggest that an unusual outbreak is occurring," said Dr. Michael Wagner, who developed the program, in testimony before Congress in November. By sorting patients with certain symptoms by zip code, the system can quickly pinpoint where an attack may have occurred. It doesn't require hospitals to make a special report; rather, it mines hospital computer records for relevant cases.

Speed is critical. "For an hour lost, the number of deaths can be in the hundreds or thousands. This tight coupling between detection and response is vital to stemming the numbers of illnesses and death that can occur using slower methods of detection," according to Dr. Wagner.

The University of Pittsburgh isn't the only place such technology is being developed. New Mexico has a touch-screen system installed at seven hospitals, in which staff members can enter incidences of flu-like illnesses, hepatitis and respiratory distress. The goal is to identify and link clusters of outbreaks. Boston, under a five-year \$1 million grant from the CDC, has developed an electronic system for monitoring all emergency-room and acute-care facilities and reporting real-time data to the health department. On a national level, the CDC itself has been implementing an electronic disease-surveillance system, linking the country's testing laboratories with the agency.

For such technology to be useful, hospitals need computerized records. "A lot of hospitals really aren't ready to have their data mined; they're still using paper records," said Dr. Tara O'Toole, director of the Johns Hopkins Center for Civilian Biodefense Strategies. "And the ones least ready are the ones you most want -- the big hospitals in urban areas."

Success depends on quick action after notification of an outbreak. Moreover, privacy is expected to be a huge concern if systems are allowed to transmit patient information widely. The system that Pittsburgh is developing gathers only limited data such as age, gender and zip code, but not patients' names and birth dates ([UCLA, 2002](#)).

**Title:** Filtering Out Bioterrorism

**Date:** June 20, 2002

**Source:** [UCLA](#)

**Abstract:** Invention: A Hopkins scientist has early success with his device, designed to remove anthrax spores, viruses and bacteria from the air.

The first place Richard S. Potember went in his quest to kill anthrax was to the dump.

The chemist at the Johns Hopkins University Applied Physics Laboratory in Laurel had mapped a system that could fit in an air conditioner or heater and that would destroy anthrax spores, viruses and bacteria in building vents.

Rather than buy a new air conditioner or heater, Potember rooted through the back of an air-conditioning store until he found a dirty, broken heating unit that fit his needs.

"Why build something expensive when you can find something cheap?" he said.

Early results show that Potember's invention, which eliminates foreign objects with ozone and ultraviolet light, has the potential to kill 100 percent of the viruses and bacteria that a terrorist might dump into a building vent.



The machine also kills or filters out more than 99 percent of spores that resemble anthrax in early tests.

Now Potember is preparing to move into a new lab modeled after an office building to test his machine in a real-world environment. If that research goes well, the device could be available commercially within a year and fill a gaping hole in homeland security.

Although he is not aware of the specifics of Potember's project, Bruce Clements, the associate director of the Center for the Study of Bioterrorism and Emerging Infections at St. Louis University, says technology that protects against airborne threats is "absolutely critical and needs to be developed, especially for high-risk buildings."

Potember began working on the project nearly a year ago with three objectives: He wanted the system to be simple, lethal and cheap.

"If it's supposed to protect the public, regular people have to be able to use it," he said.

A self-professed tinkerer who will strip down his old toasters for spare parts, Potember began fiddling in his lab amid piles of screws, discarded machines and charts.

"Some scientists need to be behind a desk, writing code," he said, standing in the middle of the cramped space that looks more like a pack rat's garage than a high-tech lab. "I need to be in the lab."

After several months of planning and building, Potember came up with a device that is made entirely from commercially available materials and is relatively straightforward.

Air runs through a filter before entering a chamber, where it is doused with ozone, high intensity UV light and water, a combination that has proved effective in early testing.

Although ozone is toxic, it has a relatively short life span and decays into oxygen within 30 minutes.

Potember estimates that it would cost \$5,000 to assemble a machine, although that could rise or fall depending on the size of the structure it serves.

Despite his advances, Potember worked in relative anonymity until fall. But when anthrax was discovered in post offices and government buildings, the frightening incidents showed how simple it is to distribute the deadly spores. Many security experts speculated about how easy it would be for a terrorist to dump biological weapons into building vents, where they would be circulated.

Potember was inundated with calls from air-conditioning contractors and others who were aware of his work because of earlier research contacts.

The anthrax attacks "showed that [more effective] technology had to be developed," said Kevin Holland, a spokesman for the 4,000-member Air Conditioning Contractors of America.

Now officials at the Hopkins lab hope Potember will prove to be the man with the answer. Because of the attention on bioterrorism, lab managers have put his project on the fast track.

Potember will be moving his experiment into a lab with a ventilation system to see if the system works on a larger scale. The lab is also equipped with three office cubicles so Potember can see how particles are distributed.

Potember applied for a patent on his device in February, and lab officials are negotiating with a number of companies who might manufacture the devices to market commercially.

"It looks like it's a real killer [of spores and viruses] and it's not expensive, so all those things together make it pretty darn interesting," said John Bacon, a manager for technology transfer at the lab.

Although much of the push behind the machine is based on its potential to fight bioterrorism, Potember and others believe it also could play an important role in hospitals by cutting down on potentially deadly airborne diseases.

While workers put the finishing touches on Potember's lab, he is eagerly awaiting a chance to put his machine to the test. Walking through the room, he put his hand on a duct and said with a smile: "It's time to see what this thing can really do" ([UCLA, 2002](#)).

# Bio Terror Bible

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**Title:** Technology Transfer Debate In The Biodiversity To Consider Impediments Such As Export Controls

**Date:** February 21, 2004

**Source:** [Sunshine Project](#)

**Abstract:** Governments meeting in Kuala Lumpur today decided to begin discussions on technology transfer that include consideration of obstacles that are imposed by developed countries, such as export controls. Early this morning, Parties to the nearly-universal\* Convention on Biological Diversity established a Programme of Work on Technology Transfer and Cooperation that includes consideration of systems that "present obstacles that impede transfer of relevant technologies from developed countries", a reference to, among other impediments, the Australia Group, the controversial "informal arrangement" by which developed countries, citing non-proliferation concerns, deny transfers of microbiological production and safety equipment and knowledge to many developing countries.

Developing countries and non-governmental organizations worked over the course of the last two weeks to insert export control studies into the decision. Earlier this week at the meeting's Ministerial Segment, a joint statement by dozens of NGOs attending the meeting called for government action to reform Australia Group export controls. As initially tabled, the decision was heavily biased against developing countries and in favor of rich ones and the biotechnology industry, which generally aims to export biotechnological products - not technology - to developing countries. Through cooperation between Asian, African, and Latin American countries together with NGOs, elements were added to the decision that corrected some of the imbalances.

Under the Programme of Work, the Secretariat of the Biodiversity Convention, working with a regionally-balanced group of experts, will prepare informational and technical studies of developed country obstacles to technology transfer, such as export controls. The decision also provides for the participation of international organizations in this process, which should enable the participation of NGOs. The results of these studies will be presented for political consideration at future meetings of the Convention, beginning with its 8th Conference of the Parties in Brazil in 2006.

Sunshine Project-US Director Edward Hammond, in Kuala Lumpur, is cautiously optimistic about the decision. The key objective of the Biodiversity Convention's work should be implementing a system of multilaterally-facilitated, safe technology transfer that ensures that the objectives of both the Biological Weapons Convention and the CBD are upheld. "The CBD and Biological Weapons Convention contain parallel obligations for developed countries to transfer biological technologies to the developing world," says Hammond, "Yet, in neither case, have developed countries fulfilled their obligations. We are hopeful that in-depth consideration of export controls by the CBD will result in strides forward that will enable safe, multilaterally-facilitated technology transfer consistent with the objectives of both Conventions. That will simultaneously enhance international security and provide for the conservation and sustainable use of

biodiversity, and a fair sharing of benefits arising from its use. The replacement of the Australia Group with a treaty-based mechanism that, unlike the present regime, enjoys the support of the developing world will, in turn, enable efforts to strengthen the Biological Weapons Convention."

\* The Convention on Biological Diversity (CBD) is almost universal. The only major non-parties are the United States and Iraq, along with the much smaller states of Andorra, Brunei, and the Vatican ([Sunshine Project, 2004](#)).

**Title:** Bio-Terror Hope For Bug Buster

**Date:** May 4, 2004

**Source:** [BBC](#)

**Abstract :** A new bug-busting device which could help combat bio-terrorism may bring hundreds of jobs to Wales.

Bioantigen, of Port Talbot, and its German partners have developed the Biowirlwind, which they claim kills all known diseases living in water.

It was put to the test at its official launch in the town on Tuesday.

Its makers say it has attracted interest from the Ministry of Defence as well as leading scientists from around the world.

Steve Law, of Bioantigen, said all microbes could be killed by passing water and air through a vortex in a steel cube at extremely high pressures.

The possibility of using the device if terrorists managed to contaminate water supplies or infect cooling towers at targets such as airports is being investigated.

If it finds a market Mr Law hopes it will lead to a huge expansion of the company, which currently has a workforce of 13.

"It's brand new technology but we like to think it's lo-tech rather than hi-tech," he said.

"In the centre of the cube is what we call the combustion chamber - that's where a vortex action takes place.

"Just using air and water at very high pressures we believe we can inactivate, in theory, any microbe on the planet.

"The main problems in terms of threats like bio-terrorism would perhaps be putting something bad into a stored water system or if it were put into a cooling tower and it then spread into the atmosphere.

"Our machine can treat the problem at source and make sure water stays fresh, clean and bug free.

"We've had calls in from America, Korea, China, in fact virtually every country you can imagine."

The company has grown rapidly, and further expansion would be inevitable, according to its founder, if the new device found a market.

"At the moment we have gone from a very small company - just me - to having 13 people since Christmas," said Mr Law ([BBC, 2004](#)).

# Bio Terror Bible

## EXPOSING THE COMING BIO-TERROR PANDEMIC

**BIOTERRORBIBLE.COM:** The following news reports are in respect to bio-terror related technology which was released within the calendar year of 2006. Over the last 5 years, a [pandemic blog](#), a pandemic [Facebook application](#), multiple [bio-terror sniffing phone](#) applications, and a bio-terror [first responder iPhone application](#) have all been invented. All that is currently missing from the pandemic equation is the made for TV bio-terror attack.

**Title:** Isonics To Develop Decontamination Method For Hospitals And Bioterror Attacks

**Date:** January 18, 2006

**Source:** [Homeland Security News Wire](#)

**Abstract:** Isonics, and energetic and innovative company, joins with others to develop a an effective decontamination solution for bioterror attacks; the good thing is that the solution will also help hospitals keep themselves free of infectious contamination, and give former Soviet weapon scientist a productive line of work

It is not enough to try and deter a bioterror attack and plan for the immediate rescue and treatment of those affected. There is still the problem of offering an effective and environmentally safe way to decontaminate the buildings and areas subject to the attack. Golden, Colorado-based Isonics Corporation (NASDAQ: ISON) is eager to offer such a solution. The company will participate in the U.S. Department of Energy National Nuclear Security Administration's (NNSA) Global Initiatives for Proliferation Prevention (GIPP) program. The company has entered into a two-year, \$2 million Cooperative Research and Development Agreement (CRADA) with Battelle Memorial Institute as operator of DoE's Pacific Northwest National Laboratory (PNNL). Isonics, Battelle, and the Russian State Scientific Center Research Institute of Highly Pure Biopreparations (IHPBP) will collaborate in developing and commercializing an environmentally safe system comprising a chemical agent and an aerosol-based delivery method which can decontaminate microbial and fungal cells, spores, and viruses. IHPBP has already successfully demonstrated the efficacy of the proposed system and technology.

James Alexander, Isonics' chairman and CEO, correctly pointed out that "the healthcare industry and EPA do not have the ability to effectively respond to a biological catastrophe in this country. Most of the effort appears to be directed to the needs of deterrence, detection and response to an event. There has been little reference to the planning and technologies needed for recovery — specifically advancements in remediation methodologies." The decontamination technology to be developed holds significant promise as a long-term solution to a national problem. The key: To create an effective technology which will allow for rapid, inexpensive, and environmentally safe remediation of buildings which have been contaminated by a biological agent, allowing for a speedy return to a state of normalcy. Decontamination is relevant not only in the event of a bioterror attack. Hospitals engage in a daily struggle to control infectious diseases. Isonics intends to focus on this existing market need for decontamination of patient rooms, operating theaters, medical equipment, and furniture. The market is not small, consisting of more than 5,000 hospitals and nearly one million beds in the U.S. healthcare system. Isonics believes that the same technology which will prove efficacious in hospitals will then be available and ready to serve in what it calls "less routine" biological decontamination missions ([Homeland Security News Wire, 2006](#)).

# Bio Terror Bible

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**Title:** HHS Launches Blog On Pandemic Preparedness

**Date:** May 22, 2007

**Source:** [CIDRAP](#)

**Abstract:** To encourage the public to join discussions on pandemic influenza preparedness, the US Department of Health and Human Services (HHS) today launched a 5-week blog on the topic in conjunction with a Jun 13 leadership forum.

The "Pandemic Flu Leadership Blog," hosted on the government's Pandemicflu.gov Web site, features writings by a group of 13 experts from public health, medicine, disaster preparedness, government, business, communications, and online media, according to HHS. The public is invited to comment on the contributors' entries.

The invited contributors will address five weekly themes over the course of the blog, which is to run through Jun 27. The topics include the need to prepare, leadership roles, convincing people to prepare, results of the leadership forum, and steps for moving forward. The blog will include live posts from the Jun 13 forum.

One of the blog contributors is HHS Secretary Mike Leavitt. In his first post, he wrote that the Jun 13 leadership forum is designed to bring together influential leaders from business, faith, civic, and healthcare communities to discuss how to help Americans better prepare for an influenza pandemic.

"Leaders from every sector have a role to play in communicating the critical need for preparation at home, within the workplace, and in our communities," Leavitt wrote.

HHS launched the blog to extend the value of the 1-day leadership conference, he said. "While the comments made on this blog may not always represent the views of the Department of Health and Human Services, we think there is value to having an open dialogue about this very important issue," he stated.

Greg Dworkin, MD, one of the editors of the FluWiki, an interactive pandemic planning Web site, is also a contributor to the HHS blog and has been invited to take part in the leadership forum. He told CIDRAP News that the blog is an innovative way to enlist public comments and bring different together groups that don't often have opportunities to interact.

"This won't provide all the answers; it is a communications experiment and should be seen as such—a small step rather than 'the solution'," said Dworkin, who is chief of pediatric pulmonology at Danbury Hospital in Danbury, Conn. "But anything that gets people communicating with each other on this topic is worth trying and worth supporting."

Some other contributors to the HHS blog are Georges C. Benjamin, MD, executive director of the American Public Health Association; Michael Coston, former paramedic and author of the "Avian Flu Diary" blog; Ann M. Beauchesne, head of the US Chamber of Commerce's homeland security division; and Pierre Omidyar, founder and chairman of eBay ([CIDRAP, 2007](#)).



# Bio Terror Bible

## EXPOSING THE COMING BIO-TERROR PANDEMIC

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**Title:** HHS Includes Online Services In Pandemic Communication Drill

**Date:** May 19, 2008

**Source:** [CIDRAP](#)

**Abstract:** The US Department of Health and Human Services (HHS) recently held a tabletop exercise to assess how it could best work with the news media—including blogs and other online-only information sources—to get status updates and vital health information to the American people during an influenza pandemic.

The session was held on Mar 17 at HHS headquarters in Washington, DC. Representatives from online avian-flu information services such as Avian Flu Diary, FluTrackers, FluWiki, WebMD, and CIDRAP News participated in the exercise along with those from several national media organizations, including ABC News, National Public Radio, and Reuters.

The exercise was the second time HHS has reached out to blogs. In May 2007, the department featured posts from bloggers such as Michael Coston of Avian Flu Diary and Greg Dworkin, MD, of FluWiki in a 5-week pandemic preparedness blog series. HHS Secretary Mike Leavitt hosts his own blog on the HHS Web site. He is the first cabinet secretary to use the online forum, according to HHS.

Bloggers were also included in a 1-day leadership conference that HHS hosted to engage community leaders in talking about local preparedness efforts and seek input on how to tailor HHS's own resource materials.

"We recognize that during a pandemic information could be life-saving. As more and more people turn to the Internet for information and news, blogs have emerged as an important and influential communications tool," HHS said in its invitation to attend the tabletop exercise.

Federal officials at the table included HHS Secretary Leavitt and representatives from the Centers for Disease Control and Prevention (CDC), Department of State, Department of Homeland Security, and the Coast Guard.

Representatives from state health departments and healthcare facilities also took part in the exercise, because they will also be fielding questions from the media and online sources throughout an influenza pandemic, and especially at the beginning.

Details about the pandemic exercise were off the record, but the scenario featured intensified activity overseas that prompted the World Health Organization to raise its pandemic alert stage. The situation then progressed to one suspected H5N1 case in the United States, which led to dozens of cases in major cities on both coasts.

At several points during the exercise, moderator Forrest Sawyer, a former news anchor with ABC and NBC who now runs his own media production and strategy company, Freefall Productions, asked the news media and online outlets to predict what their headlines would be and what information they would need from HHS, CDC, and other agencies.

During the exercise the communications officials from HHS floated the idea of "embedding" some of their staff in media organizations to ease access to official information during a pandemic. The agency also said its media access policies now treat reputable blogs and other reputable online services the same as traditional media organizations.

Stephanie Marshall, director of pandemic communications at HHS, told CIDRAP News that because growing numbers of people are going to online sources for news and information, "It's important for the government to understand how best to work with bloggers and other online journalists to distribute information. The exercise and the insights offered by the participating bloggers will help us improve and refine our existing pandemic communications plan" ([CIDRAP, 2008](#)).

# Bio Terror Bible

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**Title:** Danish Firm Gets U.S. Contract For Freeze-Dried Smallpox Vaccine

**Date:** November 19, 2009

**Source:** [Bio Prep Watch](#)

**Abstract:** The United States will pay the Danish biotechnology firm Bavarian Nordic as much as \$40 million to adopt its smallpox vaccine so that it can be freeze-dried.

The contract, which will fund preclinical and clinical studies on efforts to create a freeze-dried version of Bavarian Nordic's Imvamune vaccine, will also be used to validate the new freeze-dried manufacturing process.

Freeze-dried vaccines can potentially be kept longer than those in a liquid form that must be frozen for storage, Bavarian Nordic said. The freeze-drying process also allows for the government to overcome the challenges it faces from cold-chain logistics and storage.

The freeze-drying development activities will be researched in tandem with licensure activities for the current liquid form of Imvamune.

While smallpox is no longer found in the world, it has been identified as a top bioterrorism threat.

Thirty-three percent of the funding will go to fund the first year of the project with an option of additional funding if certain pre-determined technical milestones are met.

"We are excited about receiving yet another contract from the US Government in support for the development of an advanced freeze-dried version of our Imvamune smallpox vaccine," Anders Hedegaard, president and CEO of Bavarian Nordic, said. "It clearly demonstrates the continued commitment from the U.S. government to support the development of advanced medical countermeasures and it strengthens our confidence that the option to procure up to an additional 60 million doses of Imvamune under the ongoing RFP-3 contract will be exercised" ([Bio Prep Watch, 2009](#)).

# Bio Terror Bible

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**Title:** Cell Phones That Protect Against Deadly Chemicals? Why Not?

**Date:** April 9, 2010

**Source:** [Physorg](#)

**Abstract:** Do you carry a cell phone? Today, chances are it's called a "smartphone" and it came with a three-to-five megapixel lens built-in -- not to mention an MP3 player, GPS or even a bar code scanner. This 'Swiss-Army-knife' trend represents the natural progression of technology -- as chips become smaller/more advanced, cell phones absorb new functions.

What if, in the future, new functions on our cell phones could also protect us from toxic chemicals?

Homeland Security's Science and Technology Directorate (S&T)'s *Cell-All* is such an initiative. *Cell-All* aims to equip cell phones with a sensor capable of detecting deadly chemicals. The technology is ingenious. A chip costing less than a dollar is embedded in a cell phone and programmed to either alert the cell phone carrier to the presence of toxic chemicals in the air, and/or a central station that can monitor how many alerts in an area are being received. One might be a false positive. Hundreds might indicate the need for evacuation.

"Our goal is to create a lightweight, cost-effective, power-efficient solution," says Stephen Dennis, *Cell-All*'s program manager.

How would this wizardry work? Just as antivirus software bides its time in the background and springs to life when it spies suspicious activity, so *Cell-All* would regularly sniff the surrounding air for certain volatile chemical compounds.

When a threat is sensed, an alert ensues in one of two ways. For personal safety issues such as a chlorine gas leak, a warning is sounded; the user can choose a vibration, noise, text message or phone call. For catastrophes such as a sarin gas attack, details—including time, location and the compound—are phoned home to an emergency operations center. While the first warning is beamed to individuals, the second warning works best with crowds. And that's where the genius of *Cell-All* lies—in crowd sourcing human safety.

Currently, if a person suspects that something is amiss, he might dial 9-1-1, though behavioral science tells us that it's easier to do nothing. And, as is often the case when someone phones in an emergency, the caller may be difficult to understand, diminishing the quality of information that's relayed to first responders. An even worse scenario: the person may not even be aware of the danger, like the South Carolina woman who last year drove into a colorless, odorless, and poisonous ammonia cloud.

In contrast, anywhere a chemical threat breaks out—a mall, a bus, subway or office—*Cell-All* will alert the authorities automatically. Detection, identification, and notification all take place in less than 60 seconds. Because the data are delivered digitally, *Cell-All* reduces the chance of human error. And by activating alerts from many people at once, *Cell-All* cleverly avoids the long-standing problem of false positives. The end result: emergency responders can get to the scene sooner and cover a larger area—essentially anywhere people are, casting a wider net than stationary sensors can.

And the privacy issue? Does this always-on surveillance mean that the government can track your precise whereabouts whenever it wants? To the contrary, *Cell-All* will operate only on an opt-in basis and will transmit data anonymously.

"Privacy is as important as technology," says Dennis. "After all, for *Cell-All* to succeed, people must be comfortable enough to turn it on in the first place."

For years, the idea of a handheld weapons of mass destruction detector has engaged engineers. In 2007, S&T called upon the private sector to develop concepts of operations. Today, thanks to increasingly successful prototype demonstrations, the Directorate is actively funding the next step in R&D—a proof of principle—to see if the concept is workable.

To this end, three teams from Qualcomm, the National Aeronautics and Space Administration (NASA), and Rhevision Technology are perfecting their specific area of expertise. Qualcomm engineers specialize in miniaturization and know how to shepherd a product to market. Scientists from the Center for Nanotechnology at NASA's Ames Research Center have experience with chemical sensing on low-powered platforms, such as the International Space Station. And technologists from Rhevision have developed an artificial nose—a piece of porous silicon that changes colors in the presence of certain molecules, which can be read spectrographically.

Similarly, S&T is pursuing what's known as cooperative research and development agreements with four cell phone manufacturers: Qualcomm, LG, Apple and Samsung. These written agreements, which bring together a private company and a government agency for a specific project, often accelerate the commercialization of technology developed for government purposes. As a result, Dennis hopes to have 40 prototypes in about a year, the first of which will sniff out carbon monoxide and fire.

To be sure, *Cell-All*'s commercialization may take several years. Yet the goal seems eminently achievable: Just as Gates once envisioned a computer on every desk in every home, so Dennis envisions a chemical sensor in every cell phone in every pocket, purse or belt holster.

And if it's not already the case, says Dennis, "Our smartphones may soon be smarter than we are" ([Physorg, 2010](#)).

**Title:** Homeland Security Wants Cellphones To Sniff for Bio Agents

**Date:** April 12, 2010

**Source:** [Wired](#)

**Abstract:** Your cellphone can already tell you where to find the nearest Starbucks or the most convenient subway station. But it might soon be smart enough to alert you to a toxic threat during your morning commute or coffee break, thanks to a new plan from the Department of Homeland Security.

The last time we heard about cellphones and terrorism, it was an [appeal from the NYPD to shut off cell communication](#) during an attack. Now, Homeland Security's [Science and Technology Directorate](#) want to use cellphones to detect the very threats that might be coordinated using wireless chit-chat. Their new program, called Cell-All, would embed inexpensive, chemical-sniffing microchips into cellular telephones. If a dangerous level of air-based toxin is detected, the phone would issue a warning ring (or vibration) to alert the owner and send a message to a centralized military monitoring station.

And, since the vast majority of Americans carry cellphones wherever they go, the program would use aggregated reports of toxin detection within a small area. If hundreds of cellphones in one location start flooding the alert system, the military knows they've got a serious threat to contend with. [Detection, transmission and analysis would take around 60 seconds](#), according to a press release from the Directorate.

Given that terrorist attacks are usually launched in highly populated areas — subways, malls, office buildings — the idea of crowdsourcing the detection of toxic terror threats makes a lot of sense, and using a built-in cellphone app would give the military the ability to detect threats in every corner of the country.

Except that, for now, the program's manager is describing the initiative as "opt-in."

"Privacy is as important as technology," Stephen Dennis said. "After all, for Cell-All to succeed, people must be comfortable enough to turn it on in the first place."

That's good news for privacy zealots and conspiracy theorists, but bad news for the program's potential effectiveness, given that crowdsourced intelligence depends on knowing that there's a crowd to be sourced in the first place.

The Directorate is already in research-and-development talks with Apple, IG, Qualcomm and Samsung, and anticipate having 40 different cellphone prototypes within a year ([Wired, 2010](#)).

**Title:** Idaho Technology Launches Training Kit For Its Biothreat Detection System

**Date:** September 14, 2010

**Source:** [Bio Prep Watch](#)

**Abstract:** Idaho Technology, Inc. recently launched a new training kit for its RAZOR EX BioThreat Detection System.

The Razor Stimulant Training Kit – SIM 10 – intends to provide functional training for RAZOR and RAZOR Ex operators. The SIM 10 Kit has the same format as The 10 Target Screen Kit so it can be used with minimal adjustment.

SIM 10 contains assays for yeast and *Bacillus globigii*, which are frequently used as powder or anthrax stimulants in training exercises.

The training kit allows RAZOR trainees to practice sample collection and preparation, including pouch loading and RAZOR or RAZOR EX operation, and data analysis.

The RAZOR EX system is a portable bioagent detection system that uses PCR technology. It weighs 11 pounds and operates with freeze-dried reagents. It can have results ready in approximately 30 minutes.

Since it requires minimal preparation, the RAZOR EX system can be used in multiple environments by the military, hazmat, first responders or private security. It can detect 10 Centers for Disease Control Category A and B agents, including anthrax, brucella, *C. botulinum*, coxiella, *E. coli* 0157, tularemia, ricin, salmonella, smallpox and plague.

"First responders are called upon frequently to respond to white powder threats, and they need the best equipment with proper training to effectively respond and make good, timely decisions," Rachel Jones, Idaho Technology's vice-president of marketing and sales, said. "The SIM 10 Kit provides the training they need to make these decisions in response to credible biological threats" ([Bio Prep Watch, 2010](#)).

# Bio & Terror Bible

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**Title:** Video Game Aids Border Patrol In Fighting Bioterror

**Date:** April 12, 2011

**Source:** [Bio Prep Watch](#)

**Abstract:** Sandia National Laboratories has designed a new video game that is intended to help the U.S.-Mexico border patrol make fast and effective decisions on a day-to-day basis.

The Border High Level Models game, which is targeted at Department of Homeland Security personnel and other agencies, simulates the daily activities encountered when patrolling the border, KOAT.com reports.

One focus of the simulation is to prepare the learner how to detect and handle a potentially dangerous situation involving bioterrorist weapons.

"We're concerned about people trying to smuggle nuclear, chemical and biological weapons across the border," Sandia Labs senior staff member Brian Hart said, according to KOAT.com.

The game, which cost roughly \$800,000 to develop, features a vast and realistic environment. A total of 64-square miles of border terrain is displayed at a time by the game. The simulation includes topography specific to the region, like the seasonally dry river or creek bed known as arroyos.

According to the U.S. Customs and Border Protection, there were approximately 404,365 illegal alien apprehensions from Mexico recorded during the 2010 fiscal year, KOAT.com reports.

Sandia National Laboratories is a government-owned, contractor-operated facility that has been developing science-based technologies that support U.S. national security since 1949 ([Bio Prep Watch, 2011](#)).

**Title:** Every Bug, Every Gas, Right Now: Air Force Wants Instant WMD Detector

**Date:** August 3, 2011

**Source:** [Wired](#)

**Abstract:** Spurred by the anthrax hysteria of 2001, the U.S. government has thrown billions of dollars into developing new equipment and technologies to detect chemical and biological warfare agents. Now the Air Force has a plan that, if it actually works, would render all those billions obsolete.

A new solicitation from the service describes the [need for "nanoparticle-based sensors"](#) that can be deployed in biological environments for the real-time detection of agents of interest." In other words, the



Air Force wants an instant, *in vivo* detector for every single toxic chemical and nasty germ on the face of the earth — from smallpox to nerve agents.

The chemical detection part is only slightly less wild than the rest of the proposal. Currently, the military has a variety of ways to detect and identify chemical agents, from [stationary detectors that monitor the air for toxic clouds](#) at a distance, or [handheld devices that travel with a soldier](#) and give off a warning in the event of a chemical exposure.

But detecting biological agents is another feat entirely — living organisms are orders of magnitude more complex, constantly changing, and take much longer to identify. Typical lab tests can take hours (if not days) to analyze, process, and confirm a specific biological agent, and that's only if the lab knows exactly what antigen it's looking for.

This sensor, therefore, seems beyond any reasonable stretch of the imagination. It would pack all existing chemical-agent-detecting capabilities into a tiny cell. It would solve the hugely daunting problem of identifying not just one, but hundreds of dangerous biological organisms (many of which look indistinguishable from harmless germs). And most significantly, it would do this all in real time ([Wired, 2011](#)).

**Title:** Facebook Application To Simulate Spread Of Virus

**Date:** September 6, 2011

**Source:** [Bio Prep Watch](#)

**Abstract:** A Facebook application developed in a lab at Israel's Tel Aviv University that simulates the spread of a virus may serve as a strong indicator of how infections spread among populations.

The app, called PiggyDemic, allows users to "infect" their friends with a simulated virus or become infected themselves. The resulting patterns may allow researchers to gather information on how a virus mutates, how it spreads through human interaction and the amount of people it infects, Health Care IT News reports.

Gal Almogy and Nir Ben-Tal of the Department of Biochemistry and Molecular Biology at TAU's George S. Wise Faculty of Life Sciences developed the app. Scientists currently use mathematical algorithms to determine which virus will spread and how, but the system assumes a virus has equal distribution across populations, which does not take into account patterns of social interaction.

"HIV is concentrated in Africa; certain types of flu are widespread in North America and Asia," Almogy said, according to Health Care IT News. "Adding the element of human interaction, and looking at the social networks we belong to, is critical for investigating viral interaction."

Because Facebook's digital interactions simulate in-person interactions, the site is an ideal tool for such an undertaking, according to Almogy.

Once the app is added to a user's account, PiggyDemic follows the user's newsfeed to determine the people with which they interact, according to Health Care IT News. The researchers follow these interactions using network visualization software, which creates a more accurate model of viral dynamics. Almogy said that improving this model is vital for developing public health policy.

"People who have this software can report if they are actually ill," Almogy said, according to Health Care IT News. "If we know who their friends are and the sequence of the infecting virus, we can figure out which virus they have and how it passes from one person to another" ([Bio Prep Watch, 2011](#)).

**Title:** PharmaJet, AMRIID Cooperating On Needle-Free Smallpox Vaccine

**Date:** December 8, 2011

**Source:** [Bio Prep Watch](#)

**Abstract:** PharmaJet, Inc., and the U.S. Army Medical Research Institute of Infectious Diseases have signed a cooperative research and development agreement to combine PharmaJet's needle-free jet injection delivery system and USAMRIID's candidate gene-based smallpox vaccine.

The USAMRIID vaccine, patented under the name 4pox, is a combination of genes that, when delivered together, can provide protection from orthopoxviruses like the monkeypox and vaccinia viruses when used in animal models.

Led by USAMRIID's Dr. Jay Hooper, four different co-delivered immunogens will be tested for immune responses using a PharmaJet needle-free intradermal delivery system.

The test will compare new data with existing data that has been produced by PharmaJet and alternative devices.

"PharmaJet is very pleased to continue to work with USAMRIID," Linda McAllister, the acting CEO of PharmaJet, said. "We are very excited about the potential for our needle-free, jet injection, intradermal technology to contribute to the efficacy of this important new class of DNA-based vaccines.

The field of gene-based molecular vaccines continues to search for effective, practical and safe delivery technologies, and the 4pox gene-based vaccine has already been evaluated in preclinical models using muscle and skin electroporation and gene gun technology. PharmaJet's needle-free technology may also be evaluated for other DNA vaccines of military importance, which could be added in addendums to the current CRADA ([Bio Prep Watch, 2011](#)).

# Bio Terror Bible

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**Title:** The Center For Biosecurity Launces First Responder iPhone App

**Date:** January 20, 2012

**Source:** [Bio Prep Watch](#)

**Abstract:** The Center for Biosecurity recently announced the launch of its Clinicians' Biosecurity Resource app for the iPhone.

The CBR was designed to give physicians the critical information needed to recognize the signs and symptoms of illnesses caused by six potential biological warfare agents, including anthrax, botulism, Hemorrhagic fever viruses, plague, Variola and tularemia, according to [UPMC-CBN.org](#).

The center, a nonprofit research organization funded by the University of Pittsburgh Medical Center, is providing the app free of charge through Apple's iTunes App Store.

In the case of a biological weapons attack, rapid diagnosis and treatment would be essential. The CBR is intended to guide physicians who need to manage the care of patients who might have been exposed to deadly pathogens but may not have specialized in infectious diseases.

The CBR will be reviewed biannually and updated to ensure that each profile remains current and accurate. It is not intended to replace clinical guidance and the center urges clinicians to consult with the necessary agencies or specialists before making decisions about the individual treatments, [UPMC-CBN.org](#) reports.

Each pathogen profile includes links to guidelines from the U.S. Centers for Disease Control and Prevention, as well as other major authorities. **The profiles also contain a history of offensive weapons research into each agent** ([Bio Prep Watch, 2012](#)).

**Title:** DTRA Issues Request For Handheld Biothreat Detector

**Date:** January 23, 2012

**Source:** [Bio Prep Watch](#)

**Abstract:** The U.S. Defense Threat Reduction Agency issued a request on Wednesday for information on the development of a handheld device that could be used by front-line soldiers to identify and characterize biothreats and disease agents.

The information request, released by the agency's Joint Program Manager – Transformational Medical Technologies division, is meant to protect deployed military forces from emerging infectious diseases and biological warfare agents that could result from bioterrorism attacks.

The request is seeking information on existing technologies, including pathogen identification and characterization, chemical agent identification and sample preparation prior to analysis on a handheld device in an end-to-end, integrated system. Officials are only interested in technologies that have already been developed to the stage of a working prototype.

The prototype should be lightweight, easy-to-use and should include a handheld bio-identification system that will help those on the front-line to identify and characterize pathogens found in a sample. Military officials deem the importance of identifying bio-warfare and infectious disease agents above that of identifying chemical agents and biological toxins.

The component that prepares the samples must be combined with the handheld bio-identifier and must be reliable for front-line operations of the military. The process from the beginning to the end of analysis should take less than one hour ([Bio Prep Watch, 2012](#)).

**Title:** U.S. Testing New Rapid Response Vaccine-Delivery Platform

**Date:** February 16, 2012

**Source:** [Bio Prep Watch](#)

**Abstract:** Health officials in the United States are currently testing a new vaccine-delivery platform developed by the Halifax, Nova Scotia-based Immunovaccine, Inc.

The DepoVax vaccine-delivery platform is intended for use in rapid response to a bioterrorist event involving either civilians or the military, according to [TheChronicleHerald.ca](#).

"Our platform seems to enhance the effectiveness of some vaccines that could be used to counter bioterrorism events," Marc Mansour, Immunovaccine's chief science officer, said, [TheChronicleHerald.ca](#) reports. "The challenge for military or civil authorities is to have a particular vaccine take effect as quickly as possible."

Mansour said that DepoVax has the ability to generate an immune response rapidly.

The U.S. National Institute of Allergy and Infectious Diseases plans to include the vaccine-delivery platform in additional testing slated to begin this spring. DepoVax will be one of several vaccines and vaccine boosters to be included in the round of non-human primate tests.

Immunovaccine recently announced that DepoVax could serve to advance the development of next generation vaccines that could be used against the deadliest of biological agents, including anthrax and Marburg virus.

"This collaboration is consistent with Immunovaccine's strategy for leveraging DepoVax to enhance the immunogenicity of even the best vaccine antigen candidates in as little as a single dose," John Trizzino, the chief executive officer at Immunovaccine, said, [TheChronicleHerald.ca](#) reports ([Bio Prep Watch, 2012](#)).

**Title:** PositiveID To Debut New Biosensor

**Date:** February 23, 2012

**Source:** [Bio Prep Watch](#)

**Abstract:** A subsidiary of PositiveID Corporation, a medical device and diagnostic developer, announced on Tuesday that it will present its Microfluidics-based Bioagent Autonomous Networked Detector system at a biodefense research meeting in February in Washington D.C.

MicroFluidic Systems will present the M-BAND system at the 10th Annual American Society for Microbiology Biodefense and Emerging Diseases Research Meeting, which will be held at the Omni Shoreham Hotel between February 26 and February 29. The company will jointly exhibit the system with Hamilton Sundstrand and the Boeing Company.

M-BAND was developed by MFS under a contract with the Department of Homeland Security. The detector is an early warning system that is built to detect the intentional release of biological agents that have been aerosolized. The system runs autonomously for as many as 30 days while analyzing air continuously for the detection of toxins, viruses and bacteria. The device, used typically in high-traffic areas, can provide results in as little as three hours.

The results from instruments in the M-BAND system are reported in real time via a secure wireless network to give an up to date and accurate status. The system can be used to detect for RNA-based organisms, DNA-based pathogens, toxins or all three simultaneously.

During the conference, approximately 1,000 decision makers and leaders in the biodefense fields will discuss the critical research necessary to shape the future of biodefense ([Bio Prep Watch, 2012](#)).

# Bio Terror Bible

## EXPOSING THE COMING BIO-TERROR PANDEMIC

**BIOTERRORBIBLE.COM:** [Starting in 1939](#), there have been [21 books](#), both fiction and non-fiction, dealing with the topics of bio-terror and pandemics. Although these books have been sporadic over the last 50+ years, they have intensified over the last 10.

**Title:** Pale Horse, Pale Rider

**Date:** 2012

**Source:** [Wikipedia](#)

**Abstract:** Pale Horse, Pale Rider ([ISBN 0-15-170755-3](#)) is a collection of three short novels by American author [Katherine Anne Porter](#) published in 1939.

While these three short novels "Old Mortality," "[Noon Wine](#)" and the eponymous "Pale Horse, Pale Rider," have been described as [novellas](#), Ms Porter referred to them as short novels. Ms Porter, in the preface "Go Little Book . . ." to "The Collected Stories of Katherine Anne Porter," abjured the word "novella," calling it a "slack, boneless, affected word that we do not need to describe anything." She went on to say "Please call my works by their right names: we have four that cover every division: short stories, long stories, short novels, novels."

The title story "Pale Horse, Pale Rider" is about the relationship between a newspaper woman, Miranda, and a soldier, Adam, during the [influenza epidemic of 1918](#). In the course of the narrative, Miranda becomes sick and delirious, but recovers, only to find that Adam has died of the disease, which he likely caught while tending to her. The story is set in [Denver, Colorado](#). Porter herself lived for a time in Denver, where she wrote reviews for the [Rocky Mountain News](#) and was stricken with the influenza.

The historian [Alfred Crosby](#) considered Pale Horse, Pale Rider to be such an exceptional depiction of the suffering caused by the influenza that he dedicated his book about the 1918 epidemic to Porter. The author [Robert Penn Warren](#) said "Pale Horse, Pale Rider" was "at the top level, you know, in that collection of the world's short novels." The book also includes the stories "[Noon Wine](#)" and "Old Mortality." The title is Biblical, coming from Revelations 6:1-8. There the Four Horsemen of the Apocalypse were respectively: Conquest on a white horse; War on a red horse; Famine on a black horse; and Death mounted on a pale horse.

### Theme

Porter herself said that the title story was about the pale rider death who takes away an entire era, as illustrated in the ironic last line: "Now there would be time for everything" ([Wikipedia, 2012](#)).

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**Title:** Earth Abides

**Date:** 2012

**Source:** [Wikipedia](#)

**Abstract:** Earth Abides is a 1949 [post-apocalyptic science fiction](#) novel by American writer [George R. Stewart](#). It tells the story of the fall of civilization from deadly disease and its rebirth. Beginning in the [United States](#) in the 1940s, it deals with Isherwood "Ish" Williams, Emma, and the community they founded. The survivors live off the remains of the old world, while learning to adapt to the new. Along the way they are forced to make tough decisions and choose what kind of civilization they will rebuild.

Earth Abides won the inaugural [International Fantasy Award](#) in 1951. It was included in [Locus Magazine's](#) list of best All Time Science Fiction in 1987 and 1998 and was a nominee to be entered into the [Prometheus Hall Of Fame](#). In November 1950, it was adapted for the [CBS](#) radio program [Escape](#) as a two-part drama starring [John Dehner](#).

The book earned much praise from [James Sallis](#), writing in 2003 in the [Boston Globe](#):

This is a book, mind you, that I'd place not only among the greatest science fiction but among our very best novels. Each time I read it, I'm profoundly affected, affected in a way only the greatest art — [Ulysses](#), [Matisse](#) or [Beethoven](#) symphonies, say — affects me. Epic in sweep, centering on the person of Isherwood Williams, Earth Abides proves a kind of antihistory, relating the story of humankind backwards, from ever-more-abstract civilization to stone-age primitivism. Everything passes — everything. Writers' reputations. The ripe experience of a book in which we find ourselves immersed. Star systems, worlds, states, individual lives. Humankind. Few of us get to read our own eulogies, but here is mankind's. Making Earth Abides a novel for which words like elegiac and transcendent come easily to mind, a novel bearing, in critic [Adam-Troy Castro](#)'s words, "a great dark beauty."

### Plot Introduction

Earth Abides begins in the United States during the 1940s, set largely in the [Berkeley, California](#) area, within sight of the [San Francisco – Oakland Bay Bridge](#). Most of the Earth's population has perished from a virulent airborne disease. Isherwood "Ish" Williams, who had been temporarily living in a solitary California mountain cabin, is one of the survivors of the [pandemic](#). He emerges from his scientific studies in the mountains to find his entire world barren of people. Isherwood explores the empty world and then settles down with a handful of survivors to begin the process of restoring the human race and civilization.



## Plot Summary

### "Part I: World Without End"

While working on his graduate studies in biology in the mountains, Ish is bitten by a [rattlesnake](#). As he heals from the bite, he gets sick with a disease that looks like [measles](#). He recovers and makes his way back to civilization, only to discover that most people died from the same disease. He goes to his home in Berkeley. As he travels, he observes the world in the light of [ecology](#), watching it adapt to the loss of humans. In the city near his home Ish meets few human survivors — a man drinking himself to death, a couple who seem to have lost their sanity, and a teenage girl who flees from him as someone dangerous. He comes across a dog, friendly and eager to join him. The dog, now named Princess, swiftly adopts Ish as her new master and sticks by him for much of the book. Wondering if his observations are typical of humanity in general, he sets out on a cross country tour, traveling all the way to New York City and back, scavenging for food and fuel. As he travels, he finds small pockets of survivors, but he doubts that they will survive the loss of civilization.

He returns to his home in California, and finds a woman, Emma (Em), living nearby. They agree to consider themselves married and have children. They are joined by other survivors. Over time the electricity fails and the comforts of civilization recede. As the children grow, Ish tries to instill basic academics, teaching reading, arithmetic and geography.

#### "Quick Years"

During this period of time, Ish and Em meet many other people such as Ezra, George, and many others. This section goes all the way to the end of Year 21. The community, within this time period, started to call the years by events that happened in the Year. Many children were born in these years and within them was Joey, Ish's favorite son. Joey is Ish's favorite son because not only is Joey very similar to Ish, but Ish believes that Joey is the key to the future.

### "Part II: The Year 22"

#### Chapters 1-5

Twenty-two years later, the community flourishes. The younger generation adapts easily to the more primitive world. They come to have a better grasp of the natural world than the adults, and when running water fails, the younger generation comes to the rescue, knowing where flowing streams may be found. The children see no need for structured academics and Ish isn't a natural teacher. Only one child, his son Joey, seems to be able to grasp and use academic skills. Ish increasingly sees Joey as the future leader and brains of the community.

Ish turns his attention from ecology to his newly forming society. One thing that he notices is that the children are becoming very [superstitious](#). One day Ish asks for his [hammer](#), an antique miner's tool found in the mountains, which he habitually carries around, and finds the children are afraid to touch it. It is a symbol for them of the old times. The long-dead Americans are now like gods—and Ish is too.

Ish becomes disturbed at his community's lack of ambition to learn and work. He tries to motivate them so often with speeches that the kids think this is simply his line, safe to be ignored. In an attempt to motivate them, Ish mentions the idea of a cross country exploration, and his son Robert and another boy Richard start out in a [jeep](#).

#### Chapters 6-11

Robert and Richard return from their trip. They explored east across the country until they met impassable roads near [Toledo, Ohio](#). They reported meeting two societies in their travels, including an unwelcoming religious group in Los Angeles and an agrarian society, likely of American Indians, living in Pueblo ruins near [Albuquerque, New Mexico](#). They brought back a man named Charlie, who

gives Ish a bad feeling. Soon it is obvious that Charlie is after Evie, a girl the community regards as outside the acceptable gene pool—she has an adult body and the mind of a small child. Ish confronts Charlie and is intimidated; he feels alone and lost about what to do. Em takes control, calling a meeting of the adults. Ish isn't alone—they are a tribe. Under Em's insistence, the tribe's four adults vote on Charlie's fate. Em insists that they cannot wait until harm is done, that they have responsibility to protect their children. They unanimously vote to execute him.

The incident with Charlie makes Ish reflect that he is really not a nation builder, but he keeps trying. He begins practical lessons, such as planting [corn](#). Then, [typhoid fever](#) erupts among them, perhaps carried by Charlie. Joey dies of typhoid, and this devastates Ish. With Joey gone, Ish decides teaching academic topics will be a fruitless effort. He worries what will become of his people when [ammunition](#) and [matches](#) are gone. He decides instead to teach his people to survive. He begins by inspiring the children to build [bows and arrows](#).

### "Quick Years"

The years flow by. Ish's lessons begin to take — and the community begins to grow corn and make and play with bows and arrows. Ish presides at meetings, his hammer a [symbol of his status](#). He is given respect, but his ideas are ignored by the younger men. The Tribe merges with another nearby group. The "Americans" (those born before the Great Disaster) die off, until only Ezra and Ish are left, two old men. After Ezra dies, Ish becomes a sort of god, the last American, to whom the young men go to demand answers.

### "Part III: The Last American"

Ish spends most of his elderly life in a fog, unaware of the world. Superstition has set in; the tribe has reverted to a primitive lifestyle, hunting with dogs (the descendants of Ish's first dog) and bow and arrow. Occasionally the fog in his mind lifts. During one such time, he finds himself aware of his great-grandson Jack, who stands before him. Jack shows him that the bow and arrow have become more reliable than the [gun](#), whose [cartridges](#) don't always work. The children of the world are taking the toys of their youth and improving them on their own. During his last lucid moments, Ish realizes that the former civilization is now totally gone. But he also wonders if the new world is that much worse off than the old world, and finds himself hoping that the new world will not rebuild civilization and its mistakes.

### Characters

Isherwood Williams (Ish) is a [graduate student](#) at Berkeley, studying the [ecology](#) of an area in the mountains, somewhere in California. As an ecologist, one who studies the relationships of living things to one another and to their [environment](#), he is an ideal person to understand just what happens to the world when humans are abruptly removed from the picture. Isherwood thinks of himself as a loner—not the kind of person to become a leader of people—but that is precisely what happens to him. After he survives the Great Disaster, he spends some time observing the world without humans. Beyond initial shock, he doesn't seem to miss them too much. He comes to be a leader, mainly because he is the only surviving [intellectual](#) in his area. He realizes his weaknesses with people, however, and comes to rely on the talents of those around him, especially his wife Em.

Emma (Em) is a woman who Isherwood meets in his hometown. The author may have been taking a chance with this character, who is [African-American](#),<sup>[5]</sup> while Isherwood is white; when the book was written, [interracial marriages](#) were heavily discouraged in American society. Isherwood does marry her, and race isn't important to the couple's relationship. Rather, the couple become partners in their marriage and in their leadership of the community. Em becomes the community's mother, letting it grow as it will, but stepping in to help when no one else is filling the leadership role. She is the one who rallies the community when an outsider, Charlie, threatens it. It is she who brings up the idea that the community cannot wait until their children are harmed, that the value of protecting the children

trumps the value of justice. She is the one who showed no fear when the community was stricken by [typhoid fever](#). She was the adult while others panicked, and Ish thought of her as the "Mother of Nations".

Princess is a [beagle](#) that "adopts" Ish. She plays a role in introducing Ish to Em, and helping him to overcome his fears. Her descendants also play an important part in the development of the tribe.

Ezra met Emma and Ish while traveling. They liked him, but feared the complications of a [love triangle](#), so they encouraged him to leave. He returned with Molly and Jean, his [wives](#). Ish values Ezra as a good judge of people, saying "Ezra knew people, Ezra liked people."

Molly is the older of Ezra's two wives, about 35 when Ish and Em meet her.

Jean is "a younger woman," and one of Ezra's two wives.

Evie is a "half grown girl" who Ezra found living "in squalor and solitude." She appears to have little mind left, if she ever had one, and everyone cares for her. The tribe has a rule, that as the children grow no one will marry her—she wouldn't understand, and her mental condition could possibly be hereditary.

George and Maurine are an older couple found by Ezra while traveling. George is a carpenter. George could be said to be "dull" and Maurine as "stupid". George becomes the fix-it man for the Tribe.

Joey is the son of Ish and Em. Of all the children in the Tribe, he is the only one that truly understands the academic skills that Ish tries to teach — geometry, reading, geography. He dies during the typhoid fever outbreak.

Jack is Ish's great-grandson. Jack is confident and possibly a leader. Ish sees something of Joey in him. As Ish dies, he gives Jack his hammer.

## Major Themes

### Biological Controls on Population

On the title page Stewart immediately starts with the theme, quoting [Ecclesiastes](#) 1:4 — "Men go and come, but earth abides." For the first half of *Earth Abides*, George R. Stewart concentrates on a major theme for the book, that humans have no privileged place in nature and are not immune to nature's built-in [population controls](#). The main character, an ecologist, states it plainly, "When anything gets too numerous it's likely to get hit by some plague".

On the first page Stewart tells readers how contagion could bring the end very quickly for mankind: "If a killing type of virus strain should suddenly arise by [mutation](#)...it could, because of the rapid transportation in which we indulge nowadays, be carried to the far corners of the earth and cause the deaths of millions of people." W.M. Stanley, in *Chemical and Engineering News*, December 22, 1947.

Within a few pages he makes it clear that basic biology applies to humans too: "Some zoologists have even suggested a biological law: that the number of individuals in a species never remains constant, but always rises and falls—the higher the animal and the slower its breeding-rate, the longer its period of fluctuation[...].As for man, there is littler reason to think that he can in the long run escape the fate of other creatures, and if there is a biological law of flux and reflux, his situation is now a highly perilous one....Biologically, man has for too long a time been rolling an uninterrupted run of sevens."

Population size subjects world to artificial selection

Reviewer [Noel Perrin](#) has pointed out that George R. Stewart had written two books before this, in which the main character was not a person, but "a natural force." In [Storm](#) the main character is weather, and in [Fire](#), a [forest fire](#) takes center stage.

In the same way, Stewart centers the first half of [Earth Abides](#) on the forces of [natural selection](#). Perrin said: The original goal, I suspect, was simply to imagine as accurately as possible what would happen to the land mass of North America if human activity abruptly ceased. First, Stewart swept the country more or less clean of humanity, using a plague as a broom...An immense series of changes now begins.

In freeing the landscape from humans, half of the book is devoted to looking at how the world would change in their absence. Stewart chose to make his main human character an [ecologist](#), and sends him on a cross country tour, to see what the world is like without people. As animals and plants no longer have humans taking care of them or controlling them, they are free to breed uncontrolled and to prey upon one another. The main character sees that some have been under humans so long that they are helpless in the face of change, while others are still able to adapt and survive. Stewart shows that humans have routinely influenced the lives of almost every plant and animal around them. Numbers allow human-diversity, shape customs

Another theme of the book is what happens to human skills as the population decreases. Reviewer [Lionel Shriver](#) points out this theme in an article about literature which features human extinction: But as Stewart tracks three post-plague generations, he vividly demonstrates that advanced civilisation depends on numbers. Reduce the race to the size of a small town and how many residents will remember how to make [plastic](#)? The last Americans plunder [canned goods](#) (with little respect for [sell-by dates](#)), and [literacy](#) atrophies; electrical and water systems break down. At length, the community reverts to its hunter-gatherer forebears.

### **Loss of Reading**

Stewart uses the second half of his book to show that, if humans are reduced to low numbers, it will be difficult for them to continue civilization as we know it. Reading becomes a casualty. The society is so small that the death of one member—a little boy named Joey—seems likely to determine for many generations to come whether the emerging society will or won't be literate...As Ish thinks of it, each new baby is a candle lit against the dark.

And like a candle, a child living in primitive conditions can easily be snuffed by the environment.

In the struggle to survive, [natural selection](#) culls humans whose culture isn't survival oriented; if skills and customs don't work in the new situation, these die out, or those holding them do. Children adapt naturally to the new situation, and immediately useful customs and skills are more interesting to them than reading and writing. The information in [libraries](#) is useless within a generation.

### **Social Customs**

One custom that Stewart predicts could die out is [racism](#). When there are fewer partners to choose from, mankind will not be able to afford to be too choosy in picking one's partner.

Another issue he brings up is how law and order will function, when the lawmakers, courts and enforcers are all gone. Even laws won't be immune to the pressure to survive. One of the characters in the book point out, "What laws?" when they have to determine the fate of an outsider. Stewart shows how people may come to worry about potential harm rather than justice when dealing with outsiders.

### **Biblical Theme: Replenishing the Earth**

Having explored the [depopulated](#) Earth, Stewart shifts his thematic focus in part 2 and 3, from the biological theme of population crash to a biblical theme of populating the world.

A 1949 book review says that *Earth Abides* parallels two biblical stories that shows mankind spreading out and populating the world: ...the dual themes are as old as [Genesis](#)...Not a [flood](#) but a swift and deadly new disease wipes out all but a few of the human race. Ish (for "Isherwood") is the Noah of this "Great Disaster." As material civilization begins to crumble, Ish gradually devolves into a kind of Adam who, inevitably, finds his Eve, Em (For "Emma"), a level-headed lady with Negro blood, and nature takes its time-worn course. Em is hailed by Ish as "The Mother of Nations."

Stewart, who specialized in meanings of names, chose names in [Hebrew](#) that have appropriate meanings for the biblical theme; this couple who restart the human tribe are symbolically man and mother. In Stewart's day, most Hebrew dictionaries stated that Ish means "man" (although a more accurate English equivalent is "participant"), and Em means "mother". Both terms figure prominently in the biblical story of Adam and Eve: Ish in Genesis 2:23, and Em in Genesis 3:20.

In addition to the [Hebraic](#) names in *Earth Abides*, the story also has a symbol in common with biblical tradition—the snake. Ish encounters a rattlesnake; before this event he is part of a larger civilization. After it bites him, his world changes, just as the snake changes Adam's world in the Genesis story. Adam loses paradise, and Ish finds civilization dead.

Aside from the biblical origin of Ish, there is another tale of the fall of civilization that George R. Stewart could have taken account of, the story of [Ishi](#), the last of his tribe, who lived at Berkeley, where Stewart later taught. Ish is very similar to [Ishi](#), and it also means "man", in the language of a man whose whole tribe was dead. Ishi's story parallels the Genesis and *Earth Abides* stories, telling of one who has to adapt to a changed world ([Wikipedia, 2012](#)).

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**Title:** I Am Legend

**Date:** 2012

**Source:** [Wikipedia](#)

**Abstract:** I Am Legend is a 1954 horror fiction novel by American writer [Richard Matheson](#). It was influential in the development of the [zombie genre](#) and in popularizing the concept of a worldwide [apocalypse](#) due to [disease](#). The novel was a success and was adapted to film as [The Last Man on Earth](#) in 1964, as [The Omega Man](#) in 1971, and as [I Am Legend](#) in 2007, along with a [direct to video](#) 2007 production capitalizing on that film, [I Am Omega](#). The novel was also the inspiration behind the 1968 film [Night of the Living Dead](#).

### Plot

The main character is Robert Neville, apparently the sole survivor of a [pandemic](#) whose symptoms resemble [vampirism](#). The narrative details Neville's daily life in [Los Angeles](#) as he attempts to comprehend, research, and possibly cure the disease, to which he is [immune](#). Neville's past is revealed through [flashbacks](#).

After bouts of [depression](#) and [alcoholism](#), Neville obtains books and other research materials from a library, and through painstaking research discovers the root of the vampiric disease in a strain of [bacteria](#) capable of infecting both deceased and living hosts.

After three years, Neville sees an apparently uninfected woman, Ruth, abroad in the daylight, and captures her. Having become accustomed to her, Neville becomes suspicious of Ruth and notices that she is upset when he speaks of killing vampires, on grounds that if her story of survival was true, she would have become hardened to the act. One night Neville is startled awake and finds Ruth about to leave. Suspicious, he questions her motives, but relates the trauma of his past, whereupon they comfort each other. Ruth reluctantly allows him a blood sample but knocks him senseless when he realizes she is infected. When he wakes, Neville discovers a note stating that the infected have slowly overcome their disease until they can spend short periods of time in sunlight and are attempting to rebuild society; but fear and hate Neville who has destroyed some of their people along with the true vampires (dead bodies animated by the germ) during his daytime excursions against the latter. Ruth warns Neville that her people will attempt to capture him, and that he should leave his house and escape; but Neville disregards Ruth's warning and is captured.

Neville wakes in a prison where he is visited by Ruth, who informs him that she is a ranking member of the new society but, unlike the others, does not resent him. She acknowledges the need for Neville's execution, and gives him pills, claiming they will "make it easier". Badly injured, Neville accepts his fate and asks Ruth not to let this society become heartless. Ruth kisses him and leaves.

Neville goes to his prison window and sees all the infected waiting for his execution. Judging by their reactions to the sight of him, he comprehends their point of view, having hitherto seen the destruction of the infected survivors as a moral imperative to be pursued for his own and mankind's survival, and realizes that even as vampires were legend in pre-infection times, he, a remnant of old humanity, is legend to the new race born of the infection. He therefore remarks to himself as he dies: "[I am] a new [superstition](#) entering the unassailable fortress of forever. I am legend" ([Wikipedia, 2012](#)).



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**Title:** The Andromeda Strain

**Date:** 2012

**Source:** [Wikipedia](#)

**Abstract:** The Andromeda Strain (1969), by [Michael Crichton](#), is a [techno-thriller](#) novel documenting the efforts of a team of scientists investigating a deadly [extraterrestrial](#) microorganism that rapidly and fatally clots human blood, while in other people inducing insanity. The Andromeda Strain appeared in the [The New York Times Best Seller list](#), establishing Michael Crichton as a [genre](#) writer.

### Plot Summary

When a military [satellite](#) returns to Earth, a recovery team is dispatched to retrieve it; during a live radio communication with their base, the team members suddenly die. Aerial surveillance reveals that everyone in [Piedmont, Arizona](#), the town closest to where the satellite landed, is apparently dead. The base commander suspects the satellite returned with an extraterrestrial organism and recommends activating Wildfire, the government-sponsored team that counters [extraterrestrial](#) biological infestation.

The Wildfire scientific team studying the unknown strain is composed of Dr. Jeremy Stone, [bacteriologist](#) specialist; Dr. Peter Leavitt, disease [pathology](#); Dr. Charles Burton, [infection vectors](#) specialist; and Dr. Mark Hall, M.D., surgeon, [biochemistry](#) and [pH](#) specialist. Hall is the "odd man", since he is the only one without a spouse. The Robertson Odd Man Hypothesis<sup>[1]</sup> states that unmarried men are capable of carrying out the best, most dispassionate decisions during crises and he is given the only key that can disarm the [self-destruct mechanism](#). A fifth scientist, Dr. Christian Kirke, [electrolytes](#) specialist, was unavailable for duty because of [appendicitis](#).

The scientists believe the satellite, which was actually designed to capture upper-atmosphere microorganisms for bio-weapon exploitation, returned with a deadly microorganism that kills by nearly instantaneous [disseminated intravascular coagulation](#) (lethal blood clotting). Upon investigating the town, the Wildfire team discovers that the residents either died in mid-stride or went "quietly nuts" and committed bizarre suicides. Two Piedmont inhabitants, the sick, [Sterno](#)-addicted, geriatric Peter Jackson; and the constantly bawling infant, Jamie Ritter, are biologic opposites who somehow survived the organism.

The man, infant, and satellite are taken to the secret underground Wildfire laboratory, a secure facility equipped with every known capacity for protection against a biological element escaping into the atmosphere, including a nuclear weapon to incinerate the facility if necessary. Wildfire is hidden in a remote area near the fictional town of Flatrock, [Nevada](#), sixty miles from [Las Vegas](#) using a sort of [purloined letter approach](#), by locating it in the sub-basements of a legitimate [Department of Agriculture](#) research station.

Further investigation determines that the bizarre deaths were caused by a crystal-structured, extraterrestrial microbe on a meteor that crashed into the satellite, knocking it from orbit. The microbe contains [chemical elements](#) required for terrestrial life and appears to have a crystalline structure, but lacks [DNA](#), [RNA](#), [proteins](#), and [amino acids](#), yet it directly transforms matter to energy and vice versa.



The microbe, code named "Andromeda", mutates with each growth cycle, changing its biologic properties. The scientists learn that Andromeda grows only within a narrow [pH](#) range; in a too-acid or too-basic growth medium, it will not multiply — Andromeda's pH range is 7.39–7.43, like that of [human blood](#). That is why Jackson and Ritter survived: both had abnormal blood pH. However, by the time the scientists realize that, Andromeda's current mutation degrades the plastic shield and escapes its containment. Trapped in an Andromeda-contaminated laboratory, Dr. Burton demands that Stone inject him with [Kalocin](#) ("the universal antibiotic"); Stone refuses, arguing it would render Burton too vulnerable to infection by other harmful bacteria. Burton survives because Andromeda has already mutated to nonlethal form.

The mutated Andromeda attacks the [neoprene](#) door and hatch seals within the Wildfire complex, racing to the upper levels and the surface. The self-destruct atomic bomb is automatically armed when it detects a containment breach, triggering its detonation countdown to incinerate all exobiological diseases. As the bomb arms, the scientists realize that given Andromeda's ability to generate matter directly from energy, the organism would feed, reproduce, and ultimately benefit from an [atomic explosion](#).

To halt the atomic detonation, Dr. Hall must insert his special key to an emergency substation anywhere in Wildfire. Unfortunately, he is trapped in an unfinished section with no substation. He must navigate Wildfire's obstacle course of automatic defenses to reach a working substation on an upper level. He barely disarms the bomb in time. Andromeda eventually mutates to a benign form and is suspected to have migrated to the upper atmosphere, where the oxygen content is lower, better suiting Andromeda's growth.

The novel's epilogue reveals that a manned spacecraft, *Andros V*, was incinerated during atmospheric re-entry, presumably because Andromeda Strain ate the plastic heat shield of *Andros V* and caused it to burn up.

### **Odd-Man Hypothesis**

The "Odd-Man Hypothesis" is a fictional [hypothesis](#) articulated in the novel's story and named in the film. In the novel, the Odd-Man explanation is a page in a [RAND Corporation](#) report of the results of test series wherein different people (married, unmarried men and women) were to make command decisions in nuclear and biological wars and chemical crises. This is in the film:

***Results of testing confirm the Odd-Man Hypothesis, that an unmarried male should carry out command decisions involving thermonuclear destruct contexts.***

The Odd-Man Hypothesis states that unmarried men are better able to execute the best, most dispassionate decisions in crises—in this case, to disarm the nuclear weapon intended to prevent the escape of organisms from the laboratory in the event the auto-destruct sequence is initiated.

Statistics follow, *Group: Index of Effectiveness*: 0.343 for married men, 0.824 for single, male scientists, et cetera; then each scientist's command decision effectiveness index: Stone 0.687, Burton 0.543, Kirke 0.614, Leavitt 0.601, and Hall 0.899; thus, Dr. Hall is given the key to halt the Wildfire Laboratory's automated self-destruction, should it become necessary. Moreover, considering Hall's knowledge of [electrolytes](#) (a field in which Kirke also specializes), Leavitt admits that the Odd-Man Hypothesis is essentially why Hall was drafted to the Wildfire team.

In the book, Stone admits the Odd-Man Hypothesis was essentially a complicated work of fiction created to justify handing over a nuclear weapon to private individuals (the Wildfire team).

In both book and film, Hall is briefed on the Hypothesis after his arrival at Wildfire. In the film, he is criticized for failure to read the material ahead of time, while in the book, his copy of the briefing materials has the Hypothesis pages removed.

This fabrication of scientific documentation (numbers, charts, etc.) is part of the [false document literary technique](#) ([Wikipedia, 2012](#)).

# Bio Terror Bible

## EXPOSING THE COMING BIO-TERROR PANDEMIC

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**Title:** The Last Canadian

**Date:** 2012

**Source:** [Wikipedia](#)

**Abstract:** The Last Canadian is a 1974 [science fiction](#) novel by [William C. Heine](#) about the adventures of Eugene Arnprior after [North America](#) is devastated by a plague. The U.S. release of the novel was titled Death Wind.

### Plot Introduction

The President had fled the White House. Now safely concealed in a secret war room - a shelter safe against everything but a direct hit by an atomic bomb, its air thoroughly washed and filtered, its communications systems locally and remotely controlled - the President sat watching his country die.

A virulent and deadly disease had spread across the American continent, homo sapiens had become an endangered species. Gene Arnprior had survived the lethal virus, but could he survive the sinister society it had created?

### Explanation of Title

Eugene Arnprior had just received in the mail a notice of his [Canadian](#) citizenship when the plague struck. So he considered himself The Last Canadian.

### Film Adaptations

The Last Canadian was adapted onto film as [The Patriot](#) (1998) starring [Steven Seagal](#) ([Wikipedia, 2012](#)).

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**Title:** The Stand

**Date:** 2012

**Source:** [Wikipedia](#)

**Abstract:** The Stand is a [post-apocalyptic horror/fantasy novel](#) by [American author Stephen King](#). It demonstrates the scenario in his earlier short story, [Night Surf](#). The novel was originally published in 1978 and was later re-released in 1990 as The Stand: The Complete & Uncut Edition; King restored some text originally cut for brevity, added and revised sections, changed the [setting](#) of the story from 1980 (which in turn was changed to 1985 for the original paperback release in 1980) to 1990, and updated a few [pop culture](#) references accordingly. The Stand was nominated for the [World Fantasy Award for Best Novel](#) in 1979, and was adapted into both a [television miniseries](#) for ABC and a [graphic novel](#) published by [Marvel Comics](#).

The book is dedicated to King's wife, [Tabitha](#): "For Tabby: This dark chest of wonders."

### Plot Summary

#### "Captain Trips"

The novel is divided into three parts, or books. The first is titled "Captain Trips" and takes place over nineteen days, with the escape and spread of a human-made superflu ([influenza](#)) [virus](#) known formally as "Project Blue", but most commonly as "Captain Trips". The virus is developed at a [U.S. Army](#) base, where it is accidentally released. While the base tries to shut down before any infected person can escape, a security malfunction allows a guard and his family to sneak out. Unfortunately, they are already infected, and set off a [pandemic](#) that kills an estimated 99.4% of the world's human population, as well as that of domesticated animals, such as horses and dogs.

King outlines the total breakdown and destruction of society through widespread violence, the failure of [martial law](#) to contain the outbreak, and eventually the death of virtually the entire population. The human toll is also dealt with, as the few survivors must care for their families and friends, dealing with confusion and grief as their loved ones succumb to the flu.

The expanded edition opens with a prologue titled "The Circle Opens" that offers greater detail into the circumstances surrounding the development of the virus and the security breach that allowed its escape from the secret laboratory compound where it was created.

#### "On the Border"

Intertwining cross-country odysseys are undertaken by a small number of survivors in three parties, which are drawn together by both circumstances and their shared dreams of a 108-year-old woman from [Hemingford Home, Nebraska](#), whom they see as a refuge and a representation of good in the

struggle of good versus evil. This woman, Abigail Freemantle, or "Mother Abigail", becomes the spiritual leader for the survivors. Mother Abigail directs them to [Boulder, Colorado](#), where they struggle to re-establish a [democratic](#) society.

Meanwhile, another group of survivors are drawn to [Las Vegas, Nevada](#) by [Randall Flagg](#), an evil being with supernatural powers; he exists in the story to represent the opposite influence of Mother Abigail. Flagg's governance is brutally [tyrannical](#), using [crucifixion](#), [dismemberment](#) and other forms of [torture](#) to quell dissent. Flagg's group is able to quickly reorganize their society, restore power to Las Vegas, and rebuild the city with the many technical professionals who have migrated there. Flagg's group launches a weapons program, searching the country for suitable arms.

In Boulder, the democratic society of the "Free Zone" is beset with problems: Mother Abigail, feeling that she has become prideful due to her pleasure at being a public figure, disappears into the wilderness on a journey of spiritual reconciliation. Meanwhile, one of the survivors builds a [dynamite](#) bomb in response to feelings of disconnection and unrequited love, while another survivor crudely rigs it to destroy the Free Zone's leadership. Shortly before the explosion, Mother Abigail returns, much to the relief of the survivors.

### **"The Stand"**

The stage is now set for the final confrontation as the two camps become aware of one another, and each recognizes the other as a threat to its survival, leading to the "stand" of good against evil. There is no pitched battle, however. Instead, at Mother Abigail's dying behest, Stu, Larry, Ralph and Glen set off on foot towards Las Vegas on an expedition to confront Randall Flagg. Stu breaks his leg en route and drops out. He encourages the others to leave without him, telling them that God will provide for him. Glen, Ralph, and Larry soon encounter Flagg's men, who take them prisoner. When Glen rejects an opportunity to be spared if he kneels and begs Flagg for his life, he is shot on Flagg's order by one of his men. Flagg gathers his entire collective to witness the execution of the other two, but before it can take place, Trashcan Man arrives with a [nuclear warhead](#) and a giant glowing hand—"The Hand of God"—detonates the bomb, destroying Flagg's followers and the two remaining prisoners.

Stu, with the aid of Glen Bateman's dog "Kojak" (formerly "Big Steve") and Tom Cullen, survives injury, illness, and a harsh Rocky Mountain winter. The three of them arrive back in Boulder soon after the birth of Fran's baby. Although the baby falls ill with the superflu, she is able to fight it off. In the end, Stu and Fran decide to return to Maine, and the original edition of the novel ends with the two of them questioning whether the human race can learn from its mistakes. The answer, given in the last line, is ambiguous: "I don't know."

The expanded edition follows this with a brief [coda](#) called "The Circle Closes", which leaves a darker impression and fits in with King's ongoing "wheel of [ka](#)" theme. Randall Flagg, using the alias "Russell Faraday", wakes up on a beach somewhere in the South Pacific, having escaped the atomic blast in Vegas by using his dark magic (although Flagg does not remember how he got to the beach or what his real name is, and it is suggested that he does not even remember the events in America), and begins recruiting adherents among a preliterate, dark-skinned people, who worship him as some sort of god.

### **Background**

In his non-fiction book [Danse Macabre](#), Stephen King writes about the origins of The Stand at some length. One source was [Patty Hearst](#)'s case. The original idea was to create a novel about the episode because "it seemed that only a novel might really succeed in explaining all the contradictions".

The author also mentions [George R. Stewart](#)'s novel [Earth Abides](#), which describes the odyssey of one of the last human survivors after the population is decimated by a plague, as one of the main inspirations:

With my Patty Hearst book, I never found the right way in . . . and during that entire six-week period, something else was nagging very quietly at the back of my mind. It was a news story I had read about an accidental CBW spill in Utah. ( . . . ) This article called up memories of a novel called *Earth Abides*, by George R. Stewart.

( . . . ) and one day while sitting at my typewriter, ( . . . ) I wrote—just to write something: The world comes to an end but everybody in the SLA is somehow immune. Snake bit them. I looked at that for a while and then typed: No more gas shortages. That was sort of cheerful, in a horrible sort of way.

The Stand was also planned by King as an epic [The Lord of the Rings](#)-type story in a contemporary American setting:

For a long time—ten years, at least—I had wanted to write a fantasy epic like [The Lord of the Rings](#), only with an American setting. I just couldn't figure out how to do it. Then . . . after my wife and kids and I moved to Boulder, Colorado, I saw a [60 Minutes](#) segment on CBW (chemical-biological warfare). I never forgot the gruesome footage of the test mice shuddering, convulsing, and dying, all in twenty seconds or less. That got me remembering a chemical spill in Utah, that [killed a bunch of sheep](#) (these were canisters on their way to some burial ground; they fell off the truck and ruptured). I remembered a news reporter saying, 'If the winds had been blowing the other way, there was [Salt Lake City](#).' This incident later served as the basis of a movie called [Rage](#), starring [George C. Scott](#), but before it was released, I was deep into *The Stand*, finally writing my American fantasy epic, set in a plague-decimated USA. Only instead of a hobbit, my hero was a Texan named Stu Redman, and instead of a Dark Lord, my villain was a ruthless drifter and supernatural madman named [Randall Flagg](#). The land of [Mordor](#) ('where the shadows lie,' according to [Tolkien](#)) was played by Las Vegas.

King nearly abandoned *The Stand* due to [writers' block](#). Eventually, he reached the conclusion that the heroes were becoming too complacent, and were beginning to repeat all the same mistakes of their old society. In an attempt to resolve this, he added the part of the storyline where Harold and Nadine construct a bomb which explodes in a Free Zone committee meeting, killing Nick Andros, Chad Norris, and Susan Stern. Later, Mother Abigail explains on her deathbed that God permitted the bombing because He was dissatisfied with the heroes' focus on petty politics, and not on the ultimate quest of destroying Flagg. When telling this story, King sardonically observed that the bomb saved the book, and that he only had to kill half of the core cast in order to do this.

### **The Complete & Uncut Edition**

In 1990, a new unabridged edition of *The Stand* was published, billed as "The Complete & Uncut Edition". Published in hardcover by Doubleday in May 1990, this became the longest book in Stephen King's oeuvre at 1152 pages. When the novel was originally published in 1978, Doubleday believed the readers would be averse to such a long book, and *The Stand* would be a bigger seller if it was much shorter, and Stephen King cut approximately 500 pages (around 150,000 words) from the original manuscript. This edition reinstates the deleted pages, as well as updates the setting from the 1980s to the 1990s. This new edition features a new preface by Stephen King, and illustrations by [Bernie Wrightson](#). Additionally, Doubleday published a deluxe edition of *The Stand: The Complete & Uncut Edition*, limited to 1,250 numbered copies and 52 lettered copies. This edition, known as the "Coffin Box" edition due to the book being housed in a wooden case, was signed by Stephen King and Bernie Wrightson ([Wikipedia, 2012](#)).

# Bio & Terror Bible

## EXPOSING THE COMING BIO-TERROR PANDEMIC

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**Title:** The Hot Zone

**Date:** 2012

**Source:** [Wikipedia](#)

**Abstract:** The Hot Zone is a [best-selling](#) 1994 [non-fiction](#) bio-thriller by [Richard Preston](#) about the origins and incidents involving [viral hemorrhagic fevers](#), particularly [ebolaviruses](#) and [marburgviruses](#). The basis of the book was Preston's 1992 [New Yorker](#) article "[Crisis in the Hot Zone](#)".

The [filoviruses](#) [Ebola virus](#) (EBOV), [Sudan virus](#) (SUDV), [Marburg virus](#) (MARV), and [Ravn virus](#) (RAVV) are [Biosafety Level 4](#) agents. Biosafety Level 4 agents are extremely dangerous to humans because they are very infectious, have a high case-fatality rate, and there are no known [prophylactics](#), treatments, or cures. Along with describing the history of the diseases caused by these two [Central African](#) diseases, [Ebola virus disease](#) (EVD) and [Marburg virus disease](#) (MVD), Preston describes an incident in which a relative of Ebola virus named [Reston virus](#) (RESTV), which was the result of a mutation in the Ebola virus. Its name is derived from [Reston, Virginia](#), nonhuman primate quarantine facility less than fifteen miles (24 km) away from [Washington, DC](#), because it was where they found it. The original Reston, VA, facility located at 1946 Isaac Newton Square was torn down sometime between 1995 and 1998.

### Synopsis

The book is in four sections:

1. "The Shadow of Mount Elgon" delves into the history of filoviruses, as well as speculation about the origins of [AIDS](#). Preston accounts the story of "Charles Monet" (a [pseudonym](#)), who might have caught MARV from visiting [Kitum Cave](#) on [Mount Elgon](#) in [Kenya](#). The author describes in great detail the progression of the disease, from the initial headache and backache, to the final stage in which Monet's internal organs fail and he "bleeds out" (i.e., hemorrhages extensively) in a waiting room in a Nairobi hospital. This part also introduces a young promising physician who becomes infected with MARV while treating Monet. Nancy Jaax's story is told. Viruses, and biosafety levels and procedures are described. The EVD outbreaks caused by EBOV and its cousin, [Sudan virus](#) (SUDV) are mentioned. Preston talks to the man who named Ebola virus.
2. "The Monkey House" The discovery of [Reston virus](#) virus among imported monkeys in [Reston, Virginia](#), and the following actions taken by the [U.S. Army](#) and [Center for Disease Control](#).
3. "Smashdown" is more on the Reston epizootic, which involved a strain of the virus that does not affect humans but which easily spreads by air, and is very similar to its cousin the [Ebola virus](#).
4. "Kitum Cave" The author visits the cave that is the suspected home of the natural [host](#) animal that Ebola lives inside of.



The book starts with "Charles Monet" visiting [Kitum Cave](#) during a camping trip to Mount Elgon in Central Africa. Not long after, he begins to suffer from a number of symptoms, including vomiting, diarrhea and red eye. He is soon taken to Nairobi Hospital for treatment, but his condition deteriorates further and he goes into a coma while in the waiting room. He dies, but not before a Doctor named Shem Musoke, attempting to insert a laryngoscope, is infected by exposure to Charles' blood and vomit. Musoke is one of the few to become symptomatic from a filovirus and survive. This particular filovirus is called [Marburg virus](#).

Dr. Nancy Jaax had been promoted to work in the Level 4 Biosafety containment area at [USAMRIID](#), and is assigned to research [Ebola virus](#). While preparing food for her family at home, she cuts her right hand. Later, while working on a dead, EBOV-infected monkey, one of the gloves on the hand with the open wound tears, and she is almost exposed to contaminated blood, but does not get infected. Meanwhile, Peter Cardinal, a ten-year-old, visits Kitum Cave, gets infected with a MARV relative, [Ravn virus](#) (RAVV), and does not survive this infection. Nurse Mayinga is also infected by a nun and elects to visit Nairobi Hospital for treatment, where she succumbs to the disease. A [CDC](#) team arrives to collect samples of the virus for study.

In Reston, Virginia, less than fifteen miles (24 km) away from [Washington, DC](#), a company called Hazelton Research once operated a [quarantine](#) center for monkeys that were destined for laboratories. In October 1989, when an unusually high number of their monkeys began to die, their veterinarian decided to send some samples to Fort Detrick ([USAMRIID](#)) for study. At the time, it was believed that the virus was [Simian hemorrhagic fever virus](#), a [viral hemorrhagic fever](#) harmless to humans but almost always fatal to other primates (see [zoonosis](#)). Early during the testing process in [biosafety level 3](#), when one of the flasks appeared to be contaminated with harmless [pseudomonas bacterium](#), two USAMRIID scientists exposed themselves to the virus by [wafting](#) the flask. When they eventually tested the samples with known Level 4 agents, only EBOV reacted with the unknown samples. They decided not to tell anyone about their exposure, but they did secretly test their blood every day. After one of the monkey house staff members becomes ill with nausea and violent vomiting, USAMRIID is given permission to send in a team to euthanize all the monkeys at the facility and collect tissue samples. They later determine that, while the virus is terrifyingly lethal to monkeys, humans can be infected with it without any health effects at all. This virus is now known as [Reston virus](#) (RESTV).

Finally, the author himself goes into Africa to explore Kitum Cave. On the way, he discusses the role of [AIDS](#) in the present, as the highway they were on, sometimes called the "[AIDS Highway](#)," or the "Kinshasa Highway" was where it first appeared. Equipped with a [Hazmat suit](#), he enters the cave and finds a large number of animals, one of which might be the virus carrier. At the conclusion of the book, he travels to the quarantine facility in Reston. The building there was abandoned and deteriorating. He concludes the book by saying EBOV will be back ([Wikipedia, 2012](#)).



# Bio Terror Bible

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**Title:** Hatfill Novel Depicts Terror Attack

**Date:** August 14, 2002

**Source:** [UCLA](#)

**Abstract:** An unfinished novel by a scientist being scrutinized in last fall's [anthrax-by-mail attacks](#) centers on a terror scheme to spread deadly bacteria in Washington, but the story written in 1998 differs in important ways from recent real-world events.

The 198-page novel, mostly finished, describes a paralyzing attack against the White House and Congress in which dozens of people sicken or die, including the fictional president and top congressional leaders. But the unpublished book, on file at the U.S. Copyright Office, does not involve anthrax or mailings.

The co-author, former Army biological weapons researcher Steven J. Hatfill, is one of about 30 scientists who have drawn the attention of law enforcement officials investigating in the attacks, although only Hatfill's name has become public.

Hatfill, 48, has denied any role and criticized the FBI and news media for engaging in what he described as personally damaging speculation and innuendo.

Hatfill's novel, "Emergence," has raised suspicions at the FBI. A U.S. law enforcement official on Tuesday characterized the work as an "interesting coincidence at this point." The FBI found a copy of the novel on Hatfill's seized computer.

It was registered for a copyright in 1998 by Roger Akers, a friend of Hatfill's who said Tuesday that he had proofread it for Hatfill and, with his permission, copyrighted it in both their names.

Hatfill's fictional villain is a Palestinian terrorist, Ismail Abu Asifa, paid by Iraq to launch a biological attack against Washington. The novel opens in Antarctica, where 10 members of a South African research team die from a strange sickness.

"Eight years later, a similar disease sweeps with explosive effect through the members of the U.S. congressional House and Senate," Hatfill wrote in the opening synopsis. "The nation's leadership is paralyzed and panic ensues as members of the executive office begin to show symptoms."

Asifa flies from England to Washington Dulles International Airport planning "to strike terror deep into the heart of the most powerful nation on Earth."

Once in Washington, Asifa buys supplies for \$387 to grow bubonic plague bacteria -- "not a high price to strike terror in the government of a country this large." The bacteria in the attacks is yersinia, not anthrax.

Hatfill's villain infects the White House using a sprayer hidden inside a wheelchair during a public tour. The president is sickened before he departs for a trip to Moscow, and within days the illness spreads to top congressional leaders.

In his plot, the White House becomes the "House of Death."

But Asifa also accidentally infects himself and ultimately stumbles into the path of a car, dying six days later in a hospital.

"For all its wealth and power, the United States ... was actually an incredibly easy target for biological terrorism," Hatfill wrote. But Hatfill noted that U.S. experts were sufficiently well trained to detect attacks that his villain "would probably have only enough time to perform one attack and observe its early effects."

"It was unlikely with his present resources, that he would be able to kill more than a few hundred people at most," Hatfill added.

Also Tuesday, the FBI in New Jersey showed merchants near a mailbox that tested positive for anthrax exposure the photograph of a man and asked if they had seen him in the area last fall. An FBI spokesman would not identify the man in the photo, but several published reports said it was Hatfill.

The idea for the novel was hatched several years ago at a dinner party where a group of journalists and former military men got to talking about bioterrorism, said Pat Clawson, a friend of Hatfill's who was there.

"We started kicking it around, that would be a cool novel to write -- let's have a bioterrorism attack on Washington and Congress," said Clawson, who is serving as Hatfill's spokesman.

The FBI has searched Hatfill's apartment in Frederick, Md., twice, as well as his car, a storage locker in Florida and the home of his girlfriend.

Law enforcement officials have described Hatfill as a "person of interest," not a criminal suspect.

While declaring his innocence publicly this week, Hatfill emphasized that his background is in the study of viral diseases such as Ebola, not bacterial diseases such as anthrax.

Hatfill previously worked at the U.S. Army Medical Research Institute at Fort Detrick, Md., once home to the U.S. biological warfare program and repository for the Ames strain of anthrax that was used in the attacks [\(UCLA, 2002\)](#).

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**Title:** Living Terrors: What America Needs To Know To Survive the Coming Bioterrorist Catastrophe  
**Date:** October 9, 2000  
**Source:** [Good Reads](#)

**Abstract:** A deadly cloud of powdered anthrax spores settles unnoticed over a crowded football stadium.... A school cafeteria lunch is infected with a drug-resistant strain of E. coli.... Thousands in a bustling shopping mall inhale a lethal mist of smallpox, turning each individual into a highly infectious agent of suffering and death....

Dr. Michael Osterholm knows all too well the horrifying scenarios he describes. In this eye-opening account, the nation's leading expert on bioterrorism sounds a wake-up call to the terrifying threat of biological attack — and America's startling lack of preparedness.

He demonstrates the havoc these silent killers can wreak, exposes the startling ease with which they can be deployed, and asks probing questions about America's ability to respond to such attacks.

Are most doctors and emergency rooms able to diagnose correctly and treat anthrax, smallpox, and other potential tools in the bioterrorist's arsenal? Is the government developing the appropriate vaccines and treatments?

The answers are here in riveting detail — what America has and hasn't done to prevent the coming bioterrorist catastrophe. Impeccably researched, grippingly told, Living Terrors presents the unsettling truth about the magnitude of the threat. And more important, it presents the ultimate insider's prescription for change: what we must do as a nation to secure our freedom, our future, our lives ([Good Reads, 2000](#)).

**Title:** Book Warned U.S. Of Its Vulnerability  
**Date:** October 4, 2001  
**Source:** [Milwaukee Journal Sentinel](#)

**Title:** Book Excerpt: Bioterror  
**Date:** October 15, 2001  
**Source:** [ABC](#)

**Abstract:** According to author Michael T. Osterholm, PhD., the question isn't whether we will face a terrorist attack with a deadly viral or bacterial weapon, but when and where — and how devastating it will be. In the following excerpt from his book, Living Terrors, Osterholm presents his prescription for what the U.S. must do as a nation to secure its freedom.

## **Chapter Nine: MITIGATED DISASTER**

### **Eight Point Plan: Preparing for Terror**

Whatever we do, America will remain a uniquely compelling target for terrorists.

But our lack of preparedness doubtless heightens our vulnerability to bioterror attack. So far, most of what we have done has been to react to incidents; now it is time to act, to prepare. Although the law of diminishing returns understandably limits what actions we should take in the name of prevention, there are nevertheless a few things that must be done at the federal, state, and local levels, and by each of us to make a difference. We can take steps now that could both make it harder for terrorists to commit evil and keep the damage they do from growing out of control. And we can steer the outcome of an attack from the unmitigated disaster of the Chicago scenario to the "mitigated disaster" of Milwaukee.

Below, my eight-point plan for change:

#### **1. Stop Talking About "Weapons of Mass Destruction"**

I'm not talking about conveniently erasing these weapons out of our everyday world, though it would be a miracle if such magic actually existed. No, I simply mean it's time to stop lumping all weapons that can kill large numbers of people under the single rubric of WMD. The difference in responding to bioterrorism, as opposed to a chemical or nuclear attack, is like the difference between flying a plane and driving a Formula One car. Both are moving vehicles, but very different skills are required for each one. The overuse of the term "weapons of mass destruction" has done a great deal to stunt the necessary attention to the looming threat of biological terrorism. It has allowed policy makers to throw money at the broader problem, shortchange this narrower one, and still claim to be solving the problem. As we've seen, in contrast to other forms of WMD, bioterrorism response is not primarily a military and law enforcement effort. It's a public health and medical system effort.

I don't actually expect the phrase to go away, any more than I expect the weapons to. Buzzwords are like viruses, neither alive nor dead but moving from host to host, seemingly forever. But we should all insist that policy makers acknowledge that biological terrorism is different from terrorism that relies on chemical weapons or explosives, and deserves separate consideration. That means our budgets at the federal, state, and local levels have to show proper funding for bioterrorism planning, training, monitoring, and stockpiling. In 1999, the CDC supported funding of \$41 million for all 50 states and three large metropolitan areas a minuscule amount in light of the \$10 billion spent on terrorism. Yet those public health and medical programs are our first, second, and third lines of defense against and in response to a biological weapons attack. To put it bluntly, our priorities are really screwed up.

Our laws should be rewritten to recognize the distinction between responding to most weapons of mass destruction and responding to a bioterrorism attack. Terry O'Brien's analysis of the gaping holes in our legal system shows issues that must be addressed before a crisis, not during one. Otherwise, when we finally do have to authorize and carry out a quarantine, valuable time will be lost figuring out who is in charge and sorting out issues of legal authority. In a bioterrorist event, loss of such time will translate directly to loss of human lives; to prevent this, I believe that the administration and Congress should appoint a bipartisan national legal panel to draw up model legislation and enact it as quickly as possible.

Removing the WMD bias is most important in the area that policy makers call consequence management—running the show in the aftermath of an attack. I hope I have made the point that responding to a biological attack requires an entirely different structure and management system than responding to a chemical or bomb attack. At the moment, coordination of response to WMD attacks falls to the Department of Justice and the Department of Defense. To be sure, that is the right management team for a blast or chemical release: the cops and soldiers should remain the goto guys in that kind of crisis. But

you don't want them running the show during a biological attack, any more than you would expect them to coordinate the response to an outbreak of listeriosis at a hot dog plant, Legionnaires' disease from a cooling tower, or even West Nile virus in New York City. Those crises require special skills, special knowledge, and special people all already present within the public health system. The Centers for Disease Control and Prevention has been late to recognize its potential role in biological terrorism response, and its leadership may have room for improvement, but since 1999 it has become a more active participant in the process and should be placed in charge of civilian biodefense.

## **2. Build the Stockpile.**

Until we have a large and usable stockpile of the right antibiotics and vaccines for the most likely agents to be used in a biological attack, we're dead. Nothing can move forward until we have created this fundamental buffer between us and the abyss. Experts have been pushing for a new smallpox vaccine for three years, and seem little closer to having one than when they started. Both the administration and Congress must accept blame for a situation that has shown the worst of the federal bureaucracy. Yes, creating a stockpile involves a guessing game: a determined terrorist could well find out what agents the stockpile defends us against and hit us with an alternative. But if it means that we're able to respond quickly to an attack of anthrax or smallpox, it is well worth the effort. And yes, it will be expensive, but just a fraction of what we are currently wasting on other terrorism preparedness schemes today. It's part of the essential reordering of priorities that goes with rethinking "WMD": we must have fewer tricorder contracts and a lot more vaccines.

## **3. Build More "Surge Capacity"**

At the moment, hospitals, pharmaceutical companies, and insurers squeeze every excess penny out of health care, performing at the limits of their capacity. It's time to open the debate over how much we're going to let economics be the single compass for directing our medical system; we need, as a nation, to build a little more slack into the system. The added capacity would have the side benefit of better preparing our health care networks for natural disasters and the still possible pandemic of influenza like the one that carried off so many millions of people worldwide at the beginning of this century. It also will be expensive but then, so are fire departments at airports. When was the last time the fire department at your nearest metropolitan airport responded to a plane crash? Still, we would never operate those airports without fire fighters on duty 24 hours a day, every day of the year. History shows us that we pay for what we think we need, and when we understand how much we need this, I'm confident we will pay for it. If we don't, we'll really pay for it.

We desperately need doctors, particularly infectious disease experts, and nurses to participate in local and regional planning activities for bioterrorism. But they almost never show up. Why? In large part, they are so stretched in their capacities to provide more patient care with less resources, they have no "financial freedom" to spend time at an all-day meeting without some reimbursement to their hospital or managed care organization. Our failure to address this is pennywise and poundfoolish.

Part of our surge capacity process will involve assembling medical teams to supplement the staffs of local hospitals and treatment centers wherever outbreaks may occur. Prior to any attacks, these professionals, who would come from the ranks of trained medical personnel nationwide, would voluntarily receive the vaccinations they need to be able to go safely into the nation's new hot zones. Although I knew it would be their job to do so, my worst nightmare when I was at the Department of Health was the prospect of forcing my staff to investigate an outbreak of smallpox in my state. As most of them have little if any immunity against smallpox, I knew it would be a death sentence. Military leaders have become experts in the unhappy business of putting people in harm's way and suffering "acceptable losses," but public health officials have not and won't ever have to if we prepare these medical teams.

We'll also need to enlist the help of mental health professionals equipped to help counsel the survivors, which could include entire cities of people whose world and lives will have been shattered by the advent of the unthinkable.

#### **4. Shore Up the Public Health Infrastructure to Be Ready for Quick Response to Outbreaks.**

This point is related to the third item, but goes further and deeper. Along with helping the people who will treat patients on the front lines, we have to strengthen the broader public health system that supports their efforts. The first major phase of the nation's new infectious disease detection program, a nine site network of monitoring and diagnostic centers (now receiving only \$12 million of annual funding), must grow. The \$41 million for the CDC's first grants to 53 state and local public health programs must also grow quickly. Current levels provide only very limited resources for any one state or large city, given the potential need. With our public health infrastructure in its current shape, trying to detect and respond to a bioterrorism attack is comparable to running O'Hare Airport's air traffic control system with tin cans and string.

Like the proposed buildup in surge capacity, strengthening our public health system is "dual use" in the best sense of the phrase. The improvements will be felt by the entire nation as we find ourselves better able to detect and combat natural outbreaks like foodborne pathogens, influenza, and the next West Nile virus scare. They will also help us fix problems of our own making such as the rise in antibiotic resistant strains of bacteria; there's no risk that we'll be spending money just to have a lot of people sitting around idle.

It is this reinforced public health infrastructure that will be able to respond to outbreaks natural and manmade by mobilizing the necessary antibiotics and vaccines and getting them to the people that need them. Building an adequate stockpile of vaccines and antibiotics won't mean much if the cache is locked in a vault in Atlanta and nobody can get it to the citizens who need it. Having to scramble to get antibiotics and vaccines to a large population isn't as rare as you might think it is. Remember the meningitis outbreak I discussed earlier, where our team was stretched to the breaking point with a need to distribute vaccine and antibiotics to only 30,000 people. It occurred under the watch of one of the best health departments in the country and it stretched us to the very limits of our ability. Now imagine needing to vaccinate millions of people!

#### **5. Clear Up the Roles of Federal, State, and Local Governments.**

Just as we need to define the roles of the various agencies across the federal government, we need to drill down through the layers of bureaucracy and clarify the roles and responsibilities on the state and local levels. Our efforts to turn around the lagging preparedness issues at the top don't automatically ensure that the same problems will be resolved at the other levels. Local police and medical teams don't have any better understanding of each other than the federal Departments of Justice and HHS do, but the federal government can help by setting a better example. Heads of federal agencies, too, can improve matters by treating the funding for biological terrorism as less of an opportunity for porkbarrel grantsmanship and more of an opportunity to help the nation head off catastrophe.

This requires leadership at every level of government. Congress has held hearing after hearing on issues of WMD terrorism over the past four years, but what leadership have they contributed? I would say very little; so far, they have added to the confusion by breaking up the field into the jurisdiction of countless committees and by providing categorical funding that doesn't guide the federal agencies to do the best work they possibly can. State officials also need to show adaptability and leadership. They invite disaster by taking the easy route and leaving these issues entirely to federal lawmakers. Like their Washington brethren, they aren't acting, only reacting. But state lawmakers can also plan ahead, funding local training programs and beefing up the disease surveillance capabilities of their own state health departments. Many states prepare their local health and law enforcement professionals for natural disasters like earthquakes and fires, discrete events that do their considerable damage in a definite span of time; it

shouldn't be hard to see the value of preparing for a manmade disaster that could cause the fullscale economic collapse that a large outbreak of contagious disease could cause.

## 6. Clean Up the Coverage.

Most of the press coverage of biological terrorism has been made up of scare stories, the give-'em-the-gross-details writing we like to call gorenography, and gee-whiz pieces detailing the high-tech schemes that various agencies are funding. That's a shame, because thoughtful news coverage could help keep lawmakers and agencies focused on the problems at hand, and keep them honest besides. That's the role of the press envisioned by the authors of the Constitution as key players in the national marketplace of ideas. First Amendment protection was granted to the press because the questions that journalists ask were seen as an essential part of the machinery of democracy itself. Instead, we're inundated with celebrity gossip and daily handicapping of political horse races. Today's press serves the attention deficit generation, not the needs of the nation. A few reporters have focused on the issues of biological terrorism intelligently, and with a critical eye:

Laurie Garrett's work for Newsday comes to mind, as does Richard Preston's work for the New Yorker. David Kaplan at U.S. News & World Report and Judith Miller and William Broad at The New York Times also shine a light in areas that desperately need to be seen. A single story doesn't shift the direction of the ship of state, though Preston's chilling July 1999 report on smallpox should have! But the information that top journalists like these put before the public helps inform us all and should lead to better policies and programs.

Reporters and editors also need to prepare themselves for writing about these outbreaks by learning what they can about the diseases that might be used. Reporting inaccurately that anthrax is a communicable disease like smallpox could worsen the panic in the midst of an attack. Journalists aren't agents of the government, and shouldn't be. But journalism, at its best, does serve the public interest.

## 7. We'll Understand It If We Actually Practice.

Most everyone can recall seeing a picture in the newspaper or video footage of the classic WMD exercise. Typically, a number of HAZMAT professionals are seen in space suits walking out of some building carrying a container. We all feel comforted to know that the government has an impressive effort for terrorism. The painful irony is that these exercises do nothing to prepare us for the eventual bioterrorist attack.

As I noted before, we have fooled ourselves into believing we're prepared to deal with bioterrorism because we have perfected our response to an event such as an explosion or release of a chemical agent. In real life, none of these players, including the FBI or other law enforcement officials, will be on the front lines when we recognize the results of the intentional release of a biologic agent. Moreover, that recognition will occur not over minutes to hours, but rather over days to weeks. In the end, it will be the emergency rooms, doctor's offices, and public health departments that will be the smoke alarms going off alerting us to the impending raging fire.

**Despite this conclusion, we continue in this country to avoid preparing for bioterrorism through such activities as meaningful live drills and tabletop exercises (a type of make-believe exercise usually conducted in a single room). Why? Frankly, to unfold a bioterrorism exercise that is realistic means days to weeks of challenging health care workers, persons working in clinical laboratories, and public health officials with bits of information that appear to be unrelated.** And it won't happen in a single clinic, hospital, or even geographic region. Most of all, no one will even know it happened. That's different from responding to a recognized crisis, even if you don't know why the building blew up.



For these reasons, very few communities have attempted to play out realistic scenarios involving the release of a biologic agent. Instead, we continue to fall back on exercising the classic chemical release to earn the comfort of knowing that our HAZMAT teams are in place. This is a serious mistake. **We need to begin to organize, on a regional basis, plans for addressing head-on the complexities of a one-week to several-months scenario that could mean simulating the provision of antibiotics and vaccine to hundreds of thousands of individuals and direct medical care for an equal number of critically ill patients.** These types of drills will take resources. Unfortunately, both the public health and medical care delivery systems are already stretched to the point of breaking by their efforts to provide the necessary resources for daytoday business. There isn't any flexibility in these systems to allow for the kind of exercises that will allow us to understand and address the serious deficiencies in our bioterrorism response protocols. In addition, state and federal planning efforts to date have generally neglected hospitals. While first responders, EMS, and law enforcement have become very energized about this issue, there has been very little attention paid to what needs to be done within the hospitals.

## 8. We're on Our Own Together

What does this leave for individuals to do? Plenty, actually. Citizens need to keep informed about what is being done in their name and to think about whether the things that are being done truly serve their interests. Then take that knowledge and use it to pressure our elected representatives at the federal, state, and local levels to do the right thing, fund the right programs, and make sound choices for the future. Each of us has to demand more accountability of our elected officials and not to confuse performances on Nightline with performance of their duties.

You might expect me to advise you to get vaccinated against the most likely diseases to be used in biological terrorism. I won't, though, because it's the wrong thing to do. Yes, we'll need the vaccines and antibiotics for the outbreaks, but not as a part of a routine program.

It goes against the simple realities of statistics. No individual in America is highly likely to be infected by a biological terrorism attack, which after all will affect only those directly exposed or, in the case of contagious diseases, those who come into contact with the initial victims. This means that the likelihood of being exposed to one of these agents for any single American is quite low, kind of like getting struck by lightning. **Moreover, getting protected against anthrax requires up to six shots, and the current smallpox vaccine has side effects that would be unacceptable to many people today, especially in light of advances made in producing vaccines with far fewer side effects for other diseases.** I worry that disease hustlers will begin encouraging people to pay top dollar to be vaccinated against anthrax and smallpox as moneymaking schemes, pitching their wares to the worried well. Marketers say that sex sells, but sex doesn't have anything on fear. Don't give in to the hype. The appropriate use of these vaccines will be in association with an outbreak, or in advance for a limited number of volunteer public health and health care workers, police, and other personnel needed to maintain our basic infrastructure support during the crisis.

Ultimately, the lesson of this book is that we can't take bugs for granted anymore ([ABC, 2001](#)).

# Bio Terror Bible

## EXPOSING THE COMING BIO-TERROR PANDEMIC

**BIOTERRORBIBLE.COM:** [Starting in 1939](#), there have been [21 books](#), both fiction and non-fiction, dealing with the topics of bio-terror and pandemics. Although these books have been sporadic over the last 50+ years, they have intensified over the last 10.

**Title:** The Biology Of Doom: America's Secret Germ Warfare Project

**Date:** 2012

**Source:** [Amazon](#)

**Abstract:** From anthrax to botulism, from smallpox to Ebola, the threat of biological destruction is rapidly overtaking our collective fear of atomic weaponry. This riveting narrative traces America's own covert biological weapons program from its origins in World War II to its abrupt cancellation in 1969. In light of America's increasing surveillance and condemnation of foreign biological weapons programs, this exposé of America's own dangerous Cold War secret is both fascinating and shocking. The project, at its peak, employed 5,000 people and tested pathogens on 2,000 live human volunteers; conducted open-air tests on American soil; sprayed our cities with bacterial aerosols; and stockpiled millions of bacterial bombs for instant deployment. Yet, surprisingly, almost nothing has been published about this project until now. This is the first book to expose the true story of America's secret program to create biological weapons of mass destruction.

### Publishers Weekly Review

Regis (Virus Ground Zero, etc.) presents a thorough, frightening look at America's biological warfare program, from its inception during the late 1930s through the 1980s. He covers all the bases in looking at the strategic and scientific developments of biological warfare both in the U.S. and among its principal adversaries, including Japan, Germany and Russia. The topic is gruesome: Regis reveals that humans, as well as guinea pigs, rhesus monkeys and other animals, were exposed to live infectious agents. Bombs were created to remain underwater, then surface and spray out germs; tests were done on the efficacy of fleas as agents to carry plague. Regis writes for the layperson, and he is careful to depict the human dramas behind the science. He writes, for instance, of the scientist who tested psychotropic agents on unwitting co-workers and of the University of Wisconsin professor who had been drafted into the war effort and found it impossible to get out (as Regis puts it, "being in the profession was all too much like being in the Mafia: once you were in, you were in for good"). Along his way to reporting this important and underdiscussed aspect of the Cold War, Regis offers a great deal of startling evidence on the use of biological agents during the Korean conflict and, also disturbing, that America used data from Japanese biological warfare tests done on Manchurian criminals. (Nov.)

### **Scientific American Review**

Scientific American Regis ... interested himself in what the U.S. and other countries did during and after World War II to develop methods of biological warfare. With the aid of the Freedom of Information Act, he obtained more than 2,000 pages of formerly secret U.S. government documents on the subject. They form the foundation of this account, which traces the U.S. biological weapons program from its inception in 1942 to its termination by President Richard Nixon in 1969 ... By then, according to Regis, "the U.S. Army had officially standardized and weaponized two lethal biological agents, *Bacillus anthracis* and *Francisella tularensis*, and three incapacitating biological agents, *Brucella suis*, *Coxiella burnetii*, and Venezuelan equine encephalitis virus. The Army had also weaponized one lethal toxin, botulinum, and one incapacitating toxin, staphylococcal enterotoxin B." ... Notwithstanding all this activity ... nations have so far avoided serious biological warfare. Regis thinks the reason is that biological weapons lack "the single most important ingredient of any effective weapon, an immediate visual display of overwhelming power and brute strength" ([Amazon, 2012](#)).

# Bio & Terror Bible

## EXPOSING THE COMING BIO-TERROR PANDEMIC

**BIOTERRORBIBLE.COM:** [Starting in 1939](#), there have been [21 books](#), both fiction and non-fiction, dealing with the topics of bio-terror and pandemics. Although these books have been sporadic over the last 50+ years, they have intensified over the last 10.

**Title:** [Demon In The Freezer](#)

**Date:** 2012

**Source:** [Wikipedia](#)

**Abstract:** The Demon in the Freezer is a 2002 non-fiction book on the [biological weapon](#) agents [smallpox](#) and [anthrax](#) and how the American government develops defensive measures against them. It was written by journalist [Richard Preston](#), also author of the best-selling book [The Hot Zone](#) (1994), about outbreaks of [Ebola](#) virus in Africa and [Reston, Virginia](#) and the U.S. government's response to them.

The book is primarily an account of the [Smallpox Eradication Program](#) (1967–80), the ongoing perception by the U.S. government that smallpox is still a potential [bioterrorism](#) agent, and the controversy over whether or not the remaining samples of [smallpox virus](#) in [Atlanta](#) and [Moscow](#) (the “demon” in the freezer) should be finally destroyed. However, the writer was overtaken by events — the [9/11](#) attacks and the [anthrax letter](#) incidents (called “Amerithrax”), both in 2001 — and so much of the book interweaves the anthrax investigation with the smallpox material in an awkward and somewhat disjointed manner. Synopsis

**Section 1: “Something in the Air”**, begins with a day-by-day account of the anthrax letter attacks in [Florida](#) and [Washington, DC](#), for the period 2 to 15 October 2001. [Robert Stevens](#), a photo retoucher for the tabloid [The Sun](#) was a victim and [US Senator Tom Daschle](#) was an intended victim. The reactions of the [FBI](#), the [CDC](#) and the [U.S. Army Medical Research Institute of Infectious Diseases](#) (USAMRIID) are detailed.

**Section 2: “The Dreaming Demon”**, looks back to an outbreak of smallpox at [St Walberga Hospital](#) in [Meschede, Germany](#). The successful efforts organized by local public health authorities and the [WHO](#) -- including a textbook example of [ring vaccination containment](#) -- are described.

**Section 3: “To Bhola Island”**, describes the variety and evolution of [poxviruses](#) and the history of smallpox in particular. The story of the SEP (Smallpox Eradication Program, referred to throughout as “the Eradication”), led by [DA Henderson](#) and others is recounted. The more personal story of physician, [counterculture](#) figure, and future [virtual community](#) pioneer [Lawrence Brilliant](#) is told as his Indian guru, [Neem Karoli Baba](#) exhorts him in 1970 to join the SEP and “go eradicate smallpox”. (Brilliant ended up fighting the outbreak at the [Tatanagar Railway Station](#) in [Bihar](#). Finally, the [Maximum Containment Facility](#) (MCF) of the CDC in Atlanta is described.

**Section 4: “The Other Side of the Moon”**, begins with an account of the 1989 defection to the [UK](#) of [Vladimir Pasechnik](#), the first [Soviet bioweaponer](#) to flee to the West. Pasechnik described [Biopreparat](#), the Soviet biological weapons program, to [MI6](#), including their [genetically modified](#), antibiotic resistant plague and their smallpox program at the site known as [Vector](#). The fact that the Russians had armed [ICBMs](#) with both [plague](#) and [smallpox](#) is revealed. Various biological weapon facilities in Russia and [Iraq](#)

are described. Finally, the history and work of the [Ad Hoc Committee on Orthopox Infections](#) is related. This group of the WHO has hotly debated since 1980 over the fate of the remaining samples of smallpox in the last two official repositories. DA Henderson has been in favor of destruction, while US Army scientist [Peter Jahrling](#) has been against it on the basis that further research is needed since smallpox almost certainly exists (he believes) outside of the repositories.

**Section 5: “A Woman with a Peaceful Life”**, tells the story of USAMRIID microbiologist and epidemiologist Dr [Lisa E. Hensley](#) who was originally recruited to do Ebola work. A January 2000 accident in the AA4 “Hot Suite” that Hensley experienced, along with the protocols that followed it, is described. The efforts of USAMRIID scientists to get approval to do smallpox research on animals is described including the FDA’s “[Animal Efficacy Rule](#)” and the WHO General Assembly’s provisional permission to do research for three years (1999–2002). A “Monkey Cabinet” is designed at USAMRIID and CDC for use in the possible investigation of the question of whether animals can be infected with smallpox. The development of a lethal, genetically engineered [mousepox](#) virus (the [Jackson-Ramshaw virus](#)) and its implications for bioterrorism are described. Finally, the “awakening” of the smallpox at the CDC’s MCF West in 2001 by US Army investigators to induce smallpox disease in monkeys for the first time is dramatically recounted.

**Section 6: “The Demon’s Eyes”**, continues the story of the induction of smallpox disease in monkeys at the CDC in 2001. It was determined that the [Harper strain](#) of smallpox kills monkeys slowly while the [India strain](#) kills them quickly. This was the first time that smallpox had ever been shown capable of infecting non-humans. Of eight monkeys infected, seven died—six of hemorrhagic smallpox and one of the classic pustular type. There follows a discussion of the need and justification for animal-use smallpox experiments. The emergency evacuation of the Army workers in the MCF West on 9/11 is described.

**Section 7: “The Anthrax Skulls”**, relates the atmosphere at the [Department of Health and Human Services](#) and their actions at the time of the 9/11 attacks. The story of the Amerithrax investigations is picked up again in day-by-day detail for the period 16 to 25 October 2001. The response by the FBI, HHS, [DOJ](#), [CIA](#) and the [White House](#) are detailed. Actions at USAMRIID and [USAMRMC](#) are also described. (USAMRIID became the FBI’s reference lab for forensic evidence related to the bioterror incident.) The events leading to Dr [Steven Hatfill](#) becoming a DOJ “person of interest” are related. Finally, the indignation of [Alfred Sommer](#), dean of the [Johns Hopkins School of Public Health](#) at the news of the Army animal smallpox experiments is described as well as a reiteration of DA Henderson’s opposition to the same.

**Section 8: “Superpox”**, the last section, begins with a description of an attempt at replication of the Jackson-Ramshaw virus at a lab at the [Saint Louis University School of Medicine](#) by Mark Buller working for USAMRIID. The potential for a similarly engineered “super-smallpox” virus for use by a terrorist is examined. The procedure for the [transfection](#) of an [interleukin-4](#) gene into a mousepox virus is described. Finally, an unusual artifact – the preserved arm of a 3 or 4 year old child with classic smallpox lesions, discovered in 1999 and now housed at USAMRIID—is described. This leads the author to muse that “the dream of the total eradication had failed”, because although we could eradicate smallpox from nature, “we could not uproot the virus from the human heart” ([Wikipedia, 2012](#)).

**Title:** The Demon In The Freezer: How Smallpox, A Disease Of Officially Eradicated Twenty Years Ago, Became The Biggest Bioterrorist Threat We Now Face

**Date:** July 17, 1999

**Source:** [Cryptome](#)

**Abstract:** The smallpox virus first became entangled with the human species somewhere between three thousand and twelve thousand years ago -- possibly in Egypt at the time of the Pharaohs. Somewhere on earth at roughly that time, the virus jumped out of an unknown animal into its first human victim, and began to spread. Viruses are parasites that multiply inside the cells of their hosts, and they are the smallest life forms. Smallpox developed a deep affinity for human beings. It is thought to have killed more people than any other infectious disease, including the Black Death of the Middle Ages. It was declared

eradicated from the human species in 1979, after a twelve-year effort by a team of doctors and health workers from the World Health Organization. Smallpox now exists only in laboratories.

Smallpox is explosively contagious, and it travels through the air. Virus particles in the mouth become airborne when the host talks. If you inhale a single particle of smallpox, you can come down with the disease. After you've been infected, there is a typical incubation period of ten days. During that time, you feel normal. Then the illness hits with a spike of fever, a backache, and vomiting, and a bit later tiny red spots appear all over the body. The spots turn into blisters, called pustules, and the pustules enlarge, filling with pressurized opalescent pus. The eruption of pustules is sometimes called the splitting of the dermis. The skin doesn't break, but splits horizontally, tearing away from its underlayers. The pustules become hard, bloated sacs the size of peas, encasing the body with pus, and the skin resembles a cobbled stone street.

The pain of the splitting is extraordinary. People lose the ability to speak, and their eyes can squeeze shut with pustules, but they remain alert. Death comes with a breathing arrest or a heart attack or shock or an immune-system storm, though exactly how smallpox kills a person is not known. There are many mysteries about the smallpox virus. Since the seventeenth century, doctors have understood that if the pustules merge into sheets across the body the victim will usually die: the virus has split the whole skin. If the victim survives, the pustules turn into scabs and fall off, leaving scars. This is known as ordinary smallpox.

Some people develop extreme smallpox, which is loosely called black pox. Doctors separate black pox into two forms -- flat smallpox and hemorrhagic smallpox. In a case of flat smallpox, the skin remains smooth and doesn't pustulate, but it darkens until it looks charred, and it can slip off the body in sheets. In hemorrhagic smallpox, black, unclotted blood oozes or runs from the mouth and other body orifices. Black pox is close to a hundred per cent fatal. If any sign of it appears in the body, the victim will almost certainly die. In the bloody cases, the virus destroys the linings of the throat, the stomach, the intestines, the rectum, and the vagina, and these membranes disintegrate. Fatal smallpox can destroy the body's entire skin -- both the exterior skin and the interior skin that lines the passages of the body.

Smallpox virus's scientific name is *variola*. It means "spotted" in Latin, and it was given to the disease by a medieval bishop. The virus, as a life form, comes in two subspecies: *Variola minor* and *Variola major*. Minor is a weak mutant, and was first described in 1863 by doctors in Jamaica. People usually survive it. Classic major kills one out of three people if they haven't been vaccinated or if they've lost their immunity. The death rate with major can go higher -- how much higher no one knows. *Variola major* killed half of its victims in an outbreak in Canada in 1924, and presumably many of them developed black pox. Smallpox is less contagious than measles but more contagious than mumps. It tends to go around until it has infected nearly everyone.

Most people today have no immunity to smallpox. The vaccine begins to wear off in many people after ten years. Mass vaccination for smallpox came to a worldwide halt around twenty-five years ago. There is now very little smallpox vaccine on hand in the United States or anywhere else in the world. The World Health Organization once had ten million doses of the vaccine in storage in Geneva, Switzerland, but in 1990 an advisory committee recommended that most of it be destroyed, feeling that smallpox was longer a threat. Nine and a half million doses are assumed to have been cooked in an oven, leaving the W.H.O. with a total supply of half a million doses -- one dose of smallpox vaccine for every twelve thousand people on earth. A recent survey by the W.H.O. revealed that there is only one factory in the world that has recently made even a small quantity of the vaccine, and there may be no factory capable of making sizable amounts. The vaccine was discovered in the age of Thomas Jefferson, and making a lot of it would seem simple, but so far the United States government has been unable to get any made at all. Variola virus is now classified as a Biosafety Level 4 hot agent -- the most dangerous kind of virus -- because it is lethal, airborne, and highly contagious, and is now exotic to the human species, and there is not enough vaccine to stop an outbreak. Experts feel that the appearance of a single case of smallpox anywhere on earth would be a global medical emergency.

At the present time, smallpox lives officially in only two repositories on the planet. One repository is in the United States, in a freezer at the headquarters of the federal Centers for Disease Control and Prevention, in Atlanta -- the C.D.C. The other official smallpox repository is in a freezer at a Russian virology institute called Vector, also known as the State Research Institute of Virology and Biotechnology, which is situated outside the city of Novosibirsk, in Siberia. Vector is a huge, financially troubled former virus-weapons-development facility -- a kind of decayed Los Alamos of viruses -- which is trying to convert to peaceful enterprises.

There is a growing suspicion among experts that the smallpox virus may also live unofficially in clandestine biowarfare laboratories in a number of countries around the world, including labs on military bases in Russia that are closed to outside observers. The Central Intelligence Agency has become deeply alarmed about smallpox. Since 1995, a number of leading American biologists and public-health doctors have been given classified national-security briefings on smallpox. They have been shown classified evidence that as recently as 1992 Russia had the apparent capability of launching strategic-weapons-grade smallpox in special biological warheads on giant SS-18 intercontinental missiles that were targeted on the major cities of the United States. In the summer of last year, North Korea fired a ballistic missile over Japan in a test, and the missile fell into the sea. Some knowledgeable observers thought that the missile could have been designed to carry a biologic warhead. If it had carried smallpox and landed in Japan, it could have devastated Japan's population: Japan has almost no smallpox vaccine on hand and its government seems to have no ability to deal with a biological attack. The United States government keeps a list of nations and groups that it suspects either have clandestine stocks of smallpox or seem to be trying to buy or steal the virus. The list is classified, but it is said to include Russia, China, India, Pakistan, Israel, North Korea, Iraq, Iran, Cuba, and Serbia. The list may also include the terrorist organization of Osama bin Laden and, possibly, the Aum Shinrikyo sect of Japan -- a quasi-religious group that had Ph.D. biologists as members and a belief that an apocalyptic war will bring them worldwide power. Aum members released nerve gas in the Tokyo subway in 1995, and, as the year 2000 approaches, the group is still active in Japan and in Russia. In any case, the idea that smallpox lives in only two freezers was never anything more than a comfortable fiction. No one knows exactly who has smallpox today, or where they keep the virus, or what they intend to do with it.

The man who is most widely credited with the eradication of smallpox from the human species is a doctor named Donald Ainslie Henderson. Everyone calls him D. A. Henderson. He was the director of the World Health Organization's Smallpox Eradication Unit from its inception, in 1966, to 1977, just before the last case occurred. "I'm one of many in the eradication," Henderson said to me once. "There's Frank Fenner, there's Isao Arita, Bill Foege, Nicole Grasset, Zdenek Jezek, Jock Copland, John Wickett -- I could come up with fifty names. Let alone the tens of thousands who worked in the infected countries." Nevertheless, Henderson ran it. Smallpox killed at least three hundred million people in the twentieth century. During that time, humanity was largely immune to smallpox, which is not the case today. When D. A. Henderson arrived on the scene in 1966, two million people a year were dying of smallpox. In the years since the eradication effort began, Henderson and his team have effectively saved more than fifty million lives. This could be the most impressive achievement in the history of medicine. Henderson and his colleagues, however, have never received the Nobel Prize for their work.

D. A. Henderson is now a professor at the Johns Hopkins School of Public Health. He is the founder and the director of the Johns Hopkins Center for Civilian Biodefense Studies, a think tank that considers what might be done to protect the American population during a biological event. The term "biological event" hardly existed two years ago, but it is now used by emergency planners and by the F.B.I. to mean a terrorist attack with a bioweapon -- an unnatural event, caused by human intent.

Henderson lives with his wife in a large brick house in Baltimore. I arrived there on a cold, drizzly Saturday, and he ambled to the door. Henderson is an imposing man, six feet two inches tall. He is seventy years old. He has broad shoulders and a broad, seamed, angular face, pointed ears that stick out at angles from his head, a brush of gray hair, metal-framed eyeglasses, sharp blue eyes, and an easygoing voice that can flash with calculation. He was wearing a red checked shirt, with suspenders that held up Saturday slacks.



"In the last ten days, we've had fourteen different anthrax scares," he remarked in an offhand way as we stood in the front hallway of his house and he loomed over me. He has a top-secret-level national-security clearance, and he hears about little bioterror events that don't get noticed by the media. He went on to say, "Everybody and his brother is threatening to use anthrax. This week, it happened in Atlanta, in Washington, D.C., in Michigan, and in California. It's largely hoaxes. Of course, a real bioterror event is going to happen one of these days."

We settled into easy chairs in the family room. The walls and shelves of the room were crowded with African and Asian sculptures and wooden Ethiopian crosses, which he had picked up in his global hunt for smallpox. A Japanese garden was visible through sliding-glass doors.

We ate ham and roast-beef sandwiches, and drank Molson Ice beers. Henderson bit into a sandwich and chewed thoughtfully. Then he said, "Often, you get a worried look on your face, with the first signs of rash. We speak of the 'worried face' of smallpox. That face is a diagnostic sign. The rash comes up all at once. It's more dense on the face and the extremities. That's how you can tell smallpox from chicken pox. With chicken pox, the rash crops up over a period of days, and it's more dense on the chest and trunk of the body. Smallpox pustules have a dimple, a dent in the center. Doctors say that the pustules have a 'shotty' feel, like shotgun pellets. You can roll them between your fingertips under the skin."

"How many doctors could recognize smallpox today?" I asked.

"Virtually none. Smallpox takes forms that even I can't diagnose. And I wrote the textbook." He is a co-author of "Smallpox and Its Eradication," a large book in red covers, which experts call the Big Red Book of Smallpox. It was supposed to be the final word on smallpox-the tombstone of the virus.

On February 15, 1972, a thirty-eight-year-old Muslim clergyman returned to his home town of Damnjane, in Kosovo, Yugoslavia, after he'd been on a pilgrimage to Mecca, stopping at holy sites in Iraq. I will call him the Pilgrim. A photograph of the Pilgrim shows a man who looks well educated, has an intelligent face, and is wearing a clipped mustache and a beret. He had travelled by bus for his entire journey. The morning after his return home, he woke up feeling achy. At first, he thought he was tired from the long bus ride, but then he realized that he had caught a bug. He shivered for a day or two, and developed a red rash brought on by his fever, but quickly recovered. He had been vaccinated for smallpox two months earlier. Indeed, the Yugoslav medical authorities had been vaccinating the population of Yugoslavia relentlessly for more than fifty years, and the country was considered to be thoroughly immunized. The last case of smallpox in Yugoslavia had occurred in 1930.

The Pilgrim's family members and friends came to visit him. They wanted to hear about his trip, and he enjoyed telling them about it. Meanwhile, variola particles were leaking out of raw spots in the back of his throat and mixing with his saliva. When he spoke, tiny droplets of saliva, too small to be seen, drifted around him in a droplet cloud. If the person is throwing off a lethal virus, the cloud becomes a hot zone that can extend ten feet in all directions. Although the raw spots in the Pilgrim's throat amounted to a tiny surface of virus emission, smaller than a postage stamp, in a biological sense it was as hot as the surface of the sun, and it put enough smallpox into the air to paralyze Yugoslavia.

Variola particles are built to survive in the air. They are rounded-off rectangles that have a knobby, patterned surface-a gnarly hand-grenade look. Some experts call the particles bricks. The whole brick is made of a hundred different proteins, assembled and interlocked in a three-dimensional puzzle, which nobody has ever figured out. Virus experts feel that the structure of a smallpox particle is almost breathtakingly beautiful and deeply mathematical-one of the unexplored wonders of the viral universe. The structure protects the virus's genetic material: a long strand of DNA coiled in the center of the brick.

Pox bricks are the largest viruses. If a smallpox brick were the size of a real brick then a cold-virus particle would be a blueberry sitting on the brick. But smallpox particles are still extremely small; about three million smallpox bricks laid down in rows would pave the period at the end of this sentence. A

smallpox victim emits several bricks in each invisible droplet of saliva that spews into the air when the person speaks or coughs. When an airborne smallpox particle lands on a mucus membrane in someone's throat or lung, it sticks. It enters a cell and begins to make copies of itself. For one to three weeks, the virus spreads from cell to cell, amplifying silently in the body. No one has discovered exactly where the virus hides during its incubation phase. Probably it gets into the lymph cells, confusing the immune system, and victims are said to experience terrible dreams.

On February 21st, when the Pilgrim had been feeling achy for almost a week, a thirty-year-old man, a schoolteacher, who is known to experts as Ljatif M., arrived in Djakovica, a few miles from the Pilgrim's town, to enroll in the Higher Institute of Education. Doctors who later investigated the schoolteacher's case never found out how he had come in contact with the Pilgrim. One of them must have ended up in the other's town. Possibly they stood next to each other in a shop-something like that.

On March 3rd, Ljatif developed a fever. Two days later, he went to a local medical center, where doctors gave him penicillin for his fever. Antibiotics have no effect on a virus. Then his skin broke with dark spots, and he may have developed a worried face. He felt worse, and a few days later his brother took him by bus to a hospital in the town of Cacak, about a hundred miles away. The dark spots were by this time merging into blackened, mottled splashes, which the doctors in Cacak didn't recognize. Ljatif became sicker. Finally, he was transferred by ambulance to Belgrade, where he was admitted to the Dermatology and Venereal Diseases Department of the city's main hospital. By then, his skin may have turned almost black in patches. We don't have access to his clinical reports, so I am describing a generalized extreme smallpox of the kind Ljatif had.

Inside the cells of the host, smallpox bricks pile up as if they were coming off a production line. Some of the particles develop tails. The tails are pieces of the cell's protein, which the virus steals from the cell for its own use. The tailed smallpox particles look like comets or spermatozoa. They begin to twist and wriggle, and they corkscrew through the cell, propelled by their tails toward the cell's outer membrane. You can see them with a microscope, thrashing with the same furious drive as sperm. They bump up against the inside of the cell membrane, and their heads make lumps, and the cell horripilates. Then something wonderful happens. Finger tubes begin to extend from the cell. The tubes grow longer. The cell turns into a Koosh ball. Inside each finger tube is a smallpox comet. The fingers lengthen until they touch and join nearby cells, and the smallpox comets squirm through the finger tubes into the next cell. The comets are protected from attack by the immune system, because they stay inside the finger tubes, where antibodies and killer white blood cells can't reach them. Then the Koosh ball explodes. Out pour heaps of bricks that don't have tails. These smallpox particles are wrapped in a special armor, like hand grenades. They float away, still protected by their armor, and they stick to other cells and go inside them, and those cells turn into Koosh balls. Each infected cell releases up to a hundred thousand virus particles, and they are added to the quadrillions of particles replicating in the universe of the ruined host.

Ljatif's skin had become blackened, mottled, and silky to the touch, and sheets of small blood blisters may have peppered his face. In a case of black pox, variola shocks the immune system so that it can't produce pus. Small blood vessels were leaking and breaking in his skin, and blood was seeping under the surface. His skin had developed large areas of continuous bruises.

On March 9th, the Belgrade doctors showed Ljatif to students and staff as a case that demonstrated an unusual reaction to penicillin. (In fact, a very bad reaction to penicillin can look like this.) Ljatif's eyes may have turned dark red. In hemorrhagic smallpox, one or two large hemorrhages appear in each eye, in the white encircling the iris, making the eyes look as if they could sag or leak blood. The eyes never do leak, but the blood in the eyes darkens, until the whites can sometimes seem almost black.

During the day of March 10th, Ljatif suffered catastrophic hemorrhages into the intestines. His intestines filled up with blood, and he expelled quarts of it, staining the sheets black, and he developed grave anemia from blood loss. For some unknown reason, black-pox patients remain conscious, in a kind of paralyzed shock, and they seem acutely aware of what is happening nearly up to the point of death -- "a peculiar state of apprehension and mental alertness that were said to be unlike the manifestations of any

other infectious disease," in the words of the Big Red Book of Smallpox. We can imagine that Ljatif was extremely frightened and witnessed his hemorrhages with a sense that his insides were coming apart. During the final phase of a smallpox intestinal bleedout, the lining of the intestines or the rectum can slip off. The lining is expelled through the anus, coming out in pieces or in lengths of tube. This bloody tissue is known as a tubular cast. When a smallpox patient throws a tubular cast, death is imminent. All we know about Ljatif is that his bleeds were unstoppable, that he was rushed to the Surgical Clinic of the Belgrade hospital, and that he died in the evening. The duty physician listed the cause of death as a bad reaction to penicillin.

"These hemorrhagic smallpox cases put an incredible amount of virus into the air," D. A. Henderson said. Some of the doctors and nurses who treated Ljatif were doomed. Indeed, Ljatif had seeded smallpox across Yugoslavia. Investigators later found that while he was in the hospital in Cacak he infected eight other patients and a nurse. The nurse died. One of the patients was a schoolboy, and he was sent home, where he broke with smallpox and infected his mother, and she died. In the Belgrade hospital, Ljatif infected twenty-seven more people, including seven nurses and doctors. Those victims infected five more people. Ljatif directly infected a total of thirty-eight people. They caught the virus by breathing the air near him. Eight of them died.

Meanwhile, the Pilgrim's smallpox travelled in waves through Yugoslavia. A rising tide of smallpox typically comes in fourteen-day waves -- a wave of cases, a lull down to zero, and then a much bigger wave, another lull down to zero, then a huge and terrifying wave. The waves reflect the incubation periods, or generations, of the virus. Each wave or generation is anywhere from ten to twenty times as large as the last, so the virus grows exponentially and explosively, gathering strength like some kind of biological tsunami. This is because each infected person infects an average of ten to twenty more people. By the end of March, 1972, more than a hundred and fifty cases had occurred.

The Pilgrim had long since recovered. He didn't even know that he had started the outbreak. By then, however, Yugoslav doctors knew that they were dealing with smallpox, and they sent an urgent cable to the World Health Organization, asking for help.

Luckily, Yugoslavia had an authoritarian Communist government, under Josip Broz Tito, and he exercised full emergency powers. His government mobilized the Army and imposed strong measures to stop people from travelling and spreading the virus. Villages were closed by the Army, roadblocks were thrown up, public meetings were prohibited, and hotels and apartment buildings were made into quarantine wards to hold people who had had contact with smallpox cases. Ten thousand people were locked up in these buildings by the Yugoslav military. The daily life of the country came to a shocked halt. At the same time, all the countries surrounding Yugoslavia closed their borders with it, to prevent any travellers from coming out. Yugoslavia was cut off from the world. There were twenty-five foci of smallpox in the country. The virus had leapfrogged from town to town, even though the population had been heavily vaccinated. The Yugoslav authorities, helped by the W.H.O., began a massive campaign to revaccinate every person in Yugoslavia against smallpox; the population was twenty-one million. "They gave eighteen million doses in ten days," D. A. Henderson said. A person's immunity begins to grow immediately after the vaccination; it takes full effect within a week.

At the beginning of April, Henderson flew to Belgrade, where he found government officials in a state of deep alarm. The officials expected to see thousands of blistered, dying, contagious people streaming into hospitals any day. Henderson sat down with the Minister of Health and examined the statistics. He plotted the cases on a time line, and now he could see the generations of smallpox -- one, two, three waves, each far larger than the previous one. Henderson had seen such waves appear many times before as smallpox rippled and amplified through human populations. Reading the viral surf with a practiced eye, he could see the start of the fourth wave. It was not climbing as steeply as he had expected. This meant that the waves had peaked. The outbreak was declining. Because of the military roadblocks, people weren't travelling, and the government was vaccinating everyone as fast as possible. "The outbreak is near an end," he declared to the Minister of Health. "I don't think you'll have more than ten additional cases." There were about a dozen: Henderson was right -- the fourth wave never really materialized. The

outbreak had been started by one man with the shivers. It was ended by a military crackdown and vaccination for every citizen.

At the present time, the United States' national stockpile of smallpox vaccine is a collection of four cardboard boxes that sit on a single pallet behind a chain-link fence inside a walk-in freezer in a warehouse in Lancaster County, Pennsylvania, near the Susquehanna River, at a facility owned by Wyeth-Ayerst Laboratories. The vaccine is slowly deteriorating. The Food and Drug Administration has put a hold on the smallpox vaccine, and right now no one can use it -- not even emergency personnel or key government leaders.

The vaccine is owned by the federal government and is managed by Wyeth-Ayerst, which is the company that made it, twenty-five to thirty years ago. It is stored in glass vials. The vials contain freeze-dried nuggets of live vaccinia virus. Vaccinia is a mild virus. When you are infected with it by vaccination, it causes a pustule to appear, and afterward you are immune to smallpox for some years. People who have been vaccinated have a circular scar the size of a nickel on their upper arm, left by the vaccinia-virus pustule they had in childhood after vaccination. Some adults can remember how much the pustule hurt.

People from Wyeth periodically open the boxes and send some of the vials out for testing, to see how the vaccine is doing. The vials once held fifteen million good doses, but now moisture has invaded some of them. The nuggets are normally dry and white in color, but when moisture invades they turn brown and look sticky, and the vaccine may be weakened. The vaccine was made by a traditional method: the manufacturer had a farm where calves were raised. The calves' bellies were scratched with vaccinia virus, and their bellies developed pustules. Then the calves were killed and hung up on hooks, the blood was drained out of them, and the pustules were scraped with a knife. The resulting pus was freeze-dried. The vaccine is dried calf pus. According to one virologist who examined it under a microscope, "It looks like nose snot. It's all hair and wads of crap." It was a good vaccine for its time, but the F.D.A. would never clear it for general use today except in a national emergency. Furthermore, some people have bad or fatal reactions to the vaccine. There is an antidote, but the supplies of it have turned strangely pink, and the F.D.A. has put a hold on the use of these supplies, too.

D. A. Henderson believes that in practice doctors could obtain about seven million doses of vaccine from the vials. Unaccountably, most of the vaccine has not recently been tested for potency, so it has not been absolutely proved to work. The experts believe that it would work, but there still isn't enough.

Henderson explained the problem this way: "If there's a bioterror event, and someone releases enough smallpox to create a hundred cases -- let's say in the Baltimore area -- it would be a national emergency. The demand for vaccine would be beyond all belief." In Yugoslavia in 1972, the outbreak was started by one man, and eighteen million doses of vaccine were needed -- one for almost every person in the country.

"That first wave after the bioterror event could be a hundred people with smallpox," Henderson said. "It takes two weeks after exposure before doctors can diagnose smallpox. Meanwhile, those hundred people will give smallpox to a thousand or two thousand people. That's the second wave. Some of those first hundred people will go to other cities -- to Washington, to New York, all over. So the second wave will include cases in other American cities, and probably in foreign countries. By then, it'll be too late to treat them, and we'll lose the second wave. We'll be well into the third wave -- ten to twenty thousand people with smallpox -- before we can really start vaccinating people. By then, we'll begin to pick up so many cases in the Baltimore area that we won't be able to track cases, and we'll just have to vaccinate everybody around Baltimore. A lot of people in Baltimore work in Washington. And so you're going to have a whole lot of people in Washington with smallpox. You can see the deal. Immediately, you would have to vaccinate Washington." Henderson thinks that a hundred million doses of vaccine would be needed in the United States alone to stop a surging outbreak triggered by a hundred initial cases of smallpox from a bioterror event. That much vaccine could be stored in the space occupied by a one-car garage.

Raindrops splattered on a wooden deck in Henderson's garden, and the room grew dark, until it was a pool of shadows full of African masks. Henderson's voice came out of the gloom. He didn't bother to get up and turn on the lights. He said, "The way air travel is now, about six weeks would be enough time to seed cases around the world. Dropping an atomic bomb could cause casualties in a specific area, but dropping smallpox could engulf the world."

Henderson passionately wants to get rid of the virus. "What we need to do is create a general moral climate where smallpox is considered too morally reprehensible to be used as a weapon. That would make the possession of smallpox in a laboratory, anywhere, effectively a crime against humanity. The likelihood that it would be used as a weapon is diminished by a global commitment to destroy it. How much it is diminished I don't know. But it adds a level of safety."

In the late seventeen-hundreds, the English country doctor Edward Jenner noticed that dairymaids who had contracted cowpox from cows seemed to be protected from catching smallpox, and he thought he would do an experiment. Cowpox (it probably lives in rodents, and only occasionally infects cows) produced a mild disease. On May 14, 1796, Jenner scratched the arm of a boy named James Phipps, introducing into the boy's arm a droplet of cowpox pus that he'd taken from a blister on the hand of a dairy worker named Sarah Nelmes. A few months later, he scratched the boy's arm with deadly pus he had taken from a smallpox patient, and the boy didn't come down with smallpox. The boy had become immune. Jenner had discovered what he called vaccination, after the Latin word for cow. He saw the road to eradication clearly. In 1801, he wrote, "It now becomes too manifest to admit of controversy, that the annihilation of the Small Pox, the most dreadful scourge of the human species, must be the final result of this practice."

A Soviet epidemiologist, Viktor Zhdanov, deserves credit for kick-starting the modern effort. At the 1958 annual meeting of the World Health Assembly, in Minneapolis, he called for the global eradication of smallpox. He spoke passionately and logically, but the scientific community was skeptical. Many biologists held a common view that it was impossible to separate a wild microorganism from the ecological web it lived in. In 1965, President Lyndon Johnson endorsed the idea of smallpox eradication. It was a political move to help improve American-Soviet relations. D. A. Henderson was then the head of disease surveillance at the C.D.C. He was given an order to report to Geneva to head the W.H.O.'s new Smallpox Eradication Unit. He didn't want the job, but he was told that if he didn't take it he would have to resign from government service. He went to Geneva, where he formed a hand-picked team. "The World Health Assembly proposed a ten-year program, because Kennedy had said we could land a man on the moon in ten years," he recalled.

The team set a goal of vaccinating eighty per cent of the population of countries that harbored smallpox. Henderson says that from the beginning they had another idea as well, and it proved to be the key. The idea was to track smallpox outbreaks and vaccinate people in a ring around any outbreak. This is known as surveillance and ring vaccination. In order to throw a ring around smallpox, they had to know where the demon was moving at all times, and they started showing villagers photographs of a baby with smallpox, so that the villagers could recognize and report cases to the authorities.

Henderson's team needed a way of vaccinating people fast. They tried a machine called the Ped-o-Jet, which was operated by foot pedal. It could shoot jets of vaccine into the arms of thousands of people in a day, but it broke down. Then they tried a needle with two points. It was known as the bifurcated needle, and it looked like a tiny two-pronged fork. The points of the fork held a droplet of vaccine, and the needle was to be jabbed repeatedly into a person's arm. It could be used by a volunteer who had no medical training.

They discovered that the virus rose and fell in seasonal waves, like flu. This led to an idea to attack the virus with a ring assault when it was at its ebb. The virus was a wild organism that lived only in humans. It needed to find and invade a susceptible human every fourteen days or it would die. If each outbreak of the virus could be surrounded by a ring of immune people during the virus's low season, the virus would

not be able to complete its fourteen-day life cycle. It would be cut off, unable to move to the next human host, and its chain of infection would be broken.

The ring had to be tight. If it developed a leak, smallpox would blow out. In January, 1975, smallpox blew out in Bangladesh, after the eradicators thought they were on the verge of stopping it everywhere in Asia. *Variola major* swept through more than five hundred towns and villages. Henderson began shuttling between Geneva and Bangladesh, and in April of that year, when things were still not under control, he visited the Infectious Disease Hospital in Dacca, the nation's capital. He wanted to do rounds in a smallpox ward. "I went down the rows of beds," he told me. There were seventy or eighty people, and half of them were dying. "There is nothing you can do for any of these patients. They were afraid to move. There were a lot of flies crawling all over the place. My God, they talk about the odor of smallpox. It is an odd smell, not like anything else."

The skin gives off gases. "It's a sickly odor, like rotting flesh, but it's not decay, because the skin remains sealed and the pus isn't leaking out," Henderson said. "That smell is one of the mysteries of smallpox. No one knows what it is. I was with this British guy, Nick Ward, M.D. He had worked in Africa -- he was a tough guy. At the end, he stood by a fence looking at the ground. Finally, he said to me, 'I don't know that I could go through another situation like that again.'"

Nicholas Ward, who now lives in France, remembered that moment. "I've spent a fair amount of my life working with tropical diseases, and I can truly say there is nothing so awful as a case of smallpox, particularly the type where a person becomes a bloody mess," he said. He knew the odor. "I would have a shrewd idea of a diagnosis after walking into a home. I could smell it."

Henderson and his team mounted ring vaccinations across Bangladesh, and they traced cases and contacts, trying to surround the life form. Finally, in the fall of 1975, they cornered variola on an island off the coast of Bangladesh. It was a marshy, poor place called Bhola Island, and there, on October 16th, a three-year-old girl named Rahima Banu broke with the last case of naturally occurring *Variola major* anywhere on earth. She survived. Rahima Banu would be twenty-seven years old today; researchers have lost track of her. Doctors from the Smallpox Eradication Unit collected six of the girl's pustules after they had dried into scabs, peeling them off her skin gently, with tweezers. Two years later, on October 26, 1977, the last natural case of the mild type of smallpox, *Variola minor*, popped up in a cook in Somalia named Ali Maow Maalin. He survived, and the last ring tightened around variola, and its life cycle stopped.

The headquarters of the Centers for Disease Control, in Atlanta, is a jumble of old and new buildings, joined by elevated walkways, which give the place the feel of a maze. The buildings sit along Clifton Road, an artery that winds through green neighborhoods in the northeastern part of Atlanta. I arrived at the C.D.C. On a perfect day in spring. Changeable clouds marched across a deep sky, and oak trees were shedding green flowers. Across the street from the entrance, a blue jay screamed in a pine tree, and the branches glittered in the sun, throwing off a scent of pitch.

Joseph J. Esposito, Ph.D., who is the chief of the C.D.C.'s Poxvirus Section, led me along an outdoor walkway toward his laboratory and office. Esposito is a stocky man of moderate height, in his mid-fifties, who runs to keep his weight down, and he has a dark beard and wears eyeglasses over brown eyes that are perceptive and serious. I asked him if we could get closer to smallpox. We passed along an aerial walkway covered with a chain-link fence, and we turned onto another walkway. We stopped and leaned on a railing. We were facing the C.D.C.'s Level 4 biocontainment building. It contains the Level 4 hot suites-labs where researchers work with lethal viruses while wearing pressurized spacesuits. The building has a line of windows tinted blue-green, like fish tanks. "The variola is in there somewhere," Joe Esposito said, offering me a grave smile and nodding at the Level 4 building. "There is a kind of electricity in the air when we're working with smallpox. Everybody around here always seems to know -- 'Joe's got the smallpox out of the freezer.' "

The smallpox freezer may be encircled by alarms and motion detectors. It may or may not be wrapped in chains. It may be a stainless-steel cylinder. Or it may be a white box intended to look like any other freezer. Officials at the C.D.C. won't comment.

Inside the freezer, the entire collection of smallpox occupies a volume slightly larger than that of a basketball. It consists of approximately four hundred little plastic vials the size of pencil stubs, the residue of D. A. Henderson's war with variola. They're an inch long and they have plastic screw caps. They sit in seven little white cardboard boxes, in a rack inside the freezer, which keeps the virus not strictly alive, not exactly dead, but potent. Most of the vials contain milky ice or bloody ice. The virus has been cultured in flasks of live cells (milky ice) or in live chicken eggs (live eggs have a blood system). Around twenty-five of the vials contain human scabs-dried smallpox pustules. The scabs look like pencil erasers.

The six scabs that were collected from the girl in Bangladesh named Rahima Banu used to sit in a vial, but recently Esposito's group used the last of her scabs for research. The strain that came out of her scabs is known as Bangladesh 1975 -- or, informally, as the Rahima. Now that the scabs are gone, the Rahima exists in vials of milky ice.

Esposito sat hunched in his chair in front of his computer. His office is a windowless room with cinder-block walls. A troll with Shocking-pink hair stood on top of the computer, staring at him wide-eyed. "I like to think like a virus," Esposito said. "If you can think like a virus, then you can begin to understand why a virus does what it does. A smallpox particle gets into a person's body and, in a way, it's thinking, I'm this one particle sitting here surrounded by an angry immune system. I have to multiply fast. Then I have to get out of this host fast. It escapes into the air before the pustules develop." By the time the host feels sick, the virus has already moved on to its next host. The previous host has become a cast-off husk (and is now becoming saturated with virus), but whether the person lives or dies no longer matters to the virus. However, the dried scabs, when they fall off, contain live virus. The scabs are the virus's seeds. They preserve it for a long time, just in case it hasn't managed to reach a host in the air. The scabs give the virus a second chance.

Pox Viruses move easily through the animal kingdom. Along with herds of animals or swarms of insects come poxviruses circulating among them like pickpockets at a fair. Esposito once classified what he and other virologists have glimpsed of the poxviruses in nature. He noted monkeypox, swinepox, buffalopox, skunkpox, raccoonpox, gerbilpox, a few deerpoxes, a sealpox, turkeypox, canarypox, pigeonpox, starlingpox, peacockpox, dolphinpox, Nile crocodilepox, penguinpox, two kangaroopoxes, and a quokkapox. (The quokka is an Australian wallaby.) Any attempt to get to the bottom of the butterflypoxes, mothpoxes, and beetlepoxes would be something like enumerating the nine billion names of God.

A caterpillar that has caught an insectpox dissolves into a liquefaction of insect guts mixed with pure crystals of poxvirus. This is known as a virus melt. The melt pours out of the dead caterpillar, and other caterpillars come along and accidentally eat the crystals lying on a leaf, and they melt, and so it goes for millions of years in the happy life of an insectpox. "It is a good thing no person has been known to catch an insectpox," Esposito remarked. (You might avoid eating melted caterpillars.) The yellow-fever mosquito, *Aedes aegypti*, suffers from a fatal mosquito-pox. At least two midge-poxes torment midges. Grasshoppers are known to get at least six poxes. If a grasshopperpox breaks out in a swarm of African Locusts, it can wipe them out with a plague.

Viruses have an ability to move from one type of host to another in what is known as a trans-species jump. The virus changes during the course of a jump, adapting to its new host. The trans-species jump is the virus's most important means of long-term survival. Species go extinct; viruses move on. There is something impressive in the trans-species jump of a virus, like an unfurling of wings or a flash of stripes when a predator makes a rush. Some fifty years ago, in central Africa, the AIDS virus apparently moved out of chimpanzees into people. Chimpanzees are now endangered, while the AIDS virus is booming.



For most of human prehistory, people lived in small groups of hunter-gatherers. The poxviruses did not deign to notice *Homo sapiens* as long as the species consisted of scattered groups; there was no percentage in it for a pox. With the growth of agriculture, the human population of the earth swelled and became more tightly packed. Villages became towns and cities, and people were crowded together in river valleys.

Epidemiologists have done some mathematics on the spread of smallpox, and they find that the virus needs a population of about two hundred thousand people living within a fourteen-day travel time from one another or the virus can't keep its life cycle going, and it dies out. Those conditions didn't occur in history until the appearance of settled agricultural areas and cities. At that point -- roughly seven thousand years ago -- the human species became an accident with a poxvirus waiting to happen.

Smallpox could be described as the first urban virus. It is thought to have made a trans-species jump into humans in one of the early agricultural river valleys -- perhaps in the Nile Valley, or in Mesopotamia, or in the Indus River Valley. In the Cairo Museum, the mummy of the Pharaoh Ramses V, who died as a young man in 1157 B.C., is speckled with yellow blisters from face to scrotum.

In 1991, Joe Esposito and the molecular biologist Craig Venter, who was at the National Institutes of Health, sequenced the entire genome of the Rahima strain of smallpox; that is, they mapped all its DNA. They found that the virus contains a hundred and eighty-six thousand base pairs of DNA (each base pair being a step on the ladder of the molecule), and that the DNA contains about a hundred and eighty-seven genes-making smallpox one of the most complicated viruses known. (The AIDS virus has only ten genes.) A gene is a piece of DNA, which contains the recipe for making one protein. Esposito's team noticed that smallpox has a gene that is also found in the placenta of a mouse. Smallpox knows how to make a mouse protein. How did smallpox learn that? "The poxviruses are promiscuous at capturing genes from their hosts," Esposito said. "It tells you that smallpox was once inside a mouse or some other small rodent." D. A. Henderson speculates that the original host of smallpox may have been an African rodent that lived in a crescent of green forests along the southern Nile River. The forests disappeared, cut down by people, and possibly the rodent has gone extinct. This is only a guess. Smallpox moved on.

The principal American biodefense laboratory is the United States Army Medical Research Institute of Infectious Diseases, or USAMRIID, in Fort Detrick, Maryland -- an Army base that nestles against the eastern front of the Appalachian Mountains in the city of Frederick, an hour's drive northwest of Washington. There is no smallpox at USAMRIID, for only the two W.H.O. repositories are allowed to have it. The principal scientific adviser at USAMRIID is Peter Jahrling, a civilian in his fifties with gray-blond hair, PhotoGray glasses, and a craggy face. Jahrling was the primary scientist during the 1989 outbreak of Ebola virus in Reston, Virginia: he discovered and named the Ebola-Reston virus.

"I don't think there is any higher biological threat to this nation than smallpox," Jahrling said to me, in his office, a windowless retreat jammed with paper. His voice was croaking. "I was over in Geneva for a meeting on smallpox, and I came back with some flu strain," he said hoarsely. The flu strain had swept through the world's smallpox experts. "Shows how fast a virus can move. If we have some kind of bioterror emergency with smallpox, there will be no time to start stroking our beards. We'd better have vaccine pre-positioned on pallets and ready to go."

Jahrling opposes the destruction of the official stocks of smallpox. "If you really believe there's a bioterrorist threat out there, then you can't get rid of smallpox," he said. "If smallpox is outlawed, only outlaws will have smallpox." His group has been testing antiviral drugs that might work on smallpox, and he feels that in order to verify the effectiveness of a new drug it would be necessary to test it on live smallpox virus.

One of Jahrling's researchers, John Huggins, led me into the central areas of USAMRIID. Huggins is a chunky man with round Fiorucci eyeglasses. He turned into a corridor leading to the Level 4 spacesuit hot suites, or hot zones. The walls were cinder block, and the light turned bile green. A smoky reek drifted in

the corridors, coming from huge autoclaves -- pressure cookers -- where contaminated equipment and waste were being heated and sterilized after being brought out of a hot zone. We stopped at a door that had a window of thick glass, looking into hot suite AA5, the Ebola hot zone.

I pressed my nose against the glass. It was cool, and there was a faint rumble of blowers, keeping the zone at negative pressure, so that no contaminated air would flow out through cracks. The suite was dark and drowned in shadows, illuminated only by light coming from lab equipment. I could see no one in there but white mice in racks of plastic boxes. They were scribble-scrabbling in pine shavings.

"These mice are all infected with Ebola," Huggins said. "They bleed when they die. Like humans."

The mice looked fine. I couldn't see any blood in the shavings.

"We're giving them an antiviral drug that saves their lives," Huggins explained. "They're kind of perky. It's called an S.A.H. drug. It's not ready for human testing. It could work in humans, but we don't know."

In 1995, Huggins spent time in a spacesuit at the C.D.C. Level 4 lab in Atlanta, testing drugs on live smallpox. He found that a drug called cidofovir can block smallpox replication. Cidofovir, which is normally used against a virus that infects AIDS patients, has drawbacks. It must be given to people by I.V. drip, and there is some concern that it might damage the kidneys. Huggins and Jahrling believe that within five years better smallpox drugs are likely to be discovered. They say they will need to test the drugs directly on the virus. They add that the drug must be tested on the live virus in order to receive F.D.A. approval.

In March, a committee of the highly respected Institute of Medicine, in Washington, D.C., concluded that one of the main reasons for retaining live smallpox virus would be to help develop drugs against it. D. A. Henderson, who was not a member of the Institute of Medicine committee and thoroughly disagrees with its conclusions, thought that Jahrling was being too optimistic. "To get a new antiviral drug against smallpox is going to cost three hundred million dollars," he said. "The money simply isn't there."

Jahrling stood his ground. "Ceremonial destruction of smallpox is the crown jewel in D. A. Henderson's career," he said. "He would like to throw the lever on smallpox himself. If I had spent my life tramping the planet to eradicate the virus, I would want to throw the lever, too. What he did was a great accomplishment, but he has become blinded by the last glittering crown jewel of total eradication."

Ken Alibek, who was once Kanatjan Alibekov, a leading Soviet bioweaponer and the inventor of the world's most powerful anthrax, shocked the American intelligence community when he defected, in 1992, and revealed how far the Soviet Union had gone with bioweapons. In a new book of his, entitled "Biohazard," Alibek says that there were twenty tons of liquid smallpox kept on hand at Soviet military bases; it was kept ready for loading on biowarheads on missiles targeted on American cities. I contacted certain government sources and asked them if there was any evidence to corroborate Alibek's claims.

One person who asked not to be named said, "I really have to be careful what I say. Yeah, Alibek's claims have been corroborated in multiple ways. There's not a lot of evidence. There's some."

Another person who asked not to be named said that the Soviet Union had put the biowarheads on ICBM missiles and test launched them sometime before 1991 over the Pacific Ocean. The United States -- probably using spy satellites that orbited near the tests -- was able to monitor the missiles as they soared into space and then punched back through the atmosphere and landed in the sea. The warheads were spinning weirdly: they were unusually heavy, and they had a strange shape. The warhead was heavy because it had an active refrigeration system to keep its temperature near or below the boiling temperature of water during reentry. Nuclear warheads don't need to be actively cooled. Why would a warhead need to be cooled? Presumably, because it was designed to contain something alive. But what? The person said, "The warhead was built to carry a very small quantity of biological weapon. Anthrax wouldn't have worked too well, because you need to put a lot of anthrax in the air to kill people, and

anthrax isn't contagious. With smallpox, you don't need much. If you use smallpox, you get around the most difficult technical problem of bioweapons -- the problem of dissemination. With smallpox, you use people as disseminators."

In 1989, a Soviet biologist named Vladimir Pasechnik defected to Britain. British intelligence agents spent a year debriefing him in a safe house. By the end, the British agents felt they had confirmed that the U.S.S.R. had biological missiles aimed at the United States. This information reached President George Bush and the British Prime Minister, Margaret Thatcher. Mrs. Thatcher then apparently telephoned the Soviet leader, Mikhail Gorbachev, and sternly confronted him. She was furious, and so was Bush. Gorbachev responded by allowing a small, secret team of American and British biological-weapons inspectors to tour Soviet biowarfare facilities. In January of 1991, the inspectors travelled across the U.S.S.R., getting whirlwind looks at some of the major clandestine bases of the Soviet biowarfare program, which was called Biopreparat. The inspectors were frightened by what they discovered. ("I would describe it as scary, and I feel a responsibility to tell the world medical community about what I saw, because doctors could face these diseases," an inspector, Frank Malinoski, M.D., Ph.D., said to me.) On January 14th, the team arrived at Vector, the main virology complex, in Siberia, and the next day, after being treated to vodka and piles of caviar, they were shown into a laboratory called Building 6, where one of the inspectors, David Kelly, took a technician aside and asked him what virus they had been working with. The technician said that they had been working with smallpox. Kelly repeated the question three times. Three times, he asked the technician, "You mean you were working with *Variola major*?" and he emphasized to the technician that his answer was very important. The technician responded emphatically that it was *Variola major*. Kelly says that his interpreter was the best Russian interpreter the British government has. "There was no ambiguity," Kelly says.

The inspectors were stunned. Vector was not supposed to have any smallpox at all, much less be working with it. All the Russian smallpox stocks were supposed to be kept in one freezer in Moscow, which was supposed to be under the control of the World Health Organization. For Vector to have smallpox would be a supreme violation of rules set down by the W.H.O.

Then they went upstairs into Building 6, and entered a long corridor. On one side was a line of glass windows looking in on a giant airtight steel chamber of a type known as a dynamic aerosol test chamber. The device is for testing bioweapons. Small explosives are detonated inside the chamber, throwing a biological agent into the air of the chamber. The chamber in Building 6 had an octopus-like structure of tubes coming out of it where sensors could be attached or monkeys could be clamped with their faces exposed to the chamber's air. An airborne bioweapon would get into the sensors or into the animals' lungs. On the other side of the corridor was a room that Frank Malinoski said "looked like a NASA control room," and video cameras provided views inside the chamber, so that Vector scientists could watch the release of a bioweapon.

Vector scientists later told the inspectors that the chamber was a Model UKZD-25-a bioweapons explosion-test chamber. It was the largest and most sophisticated modern bioweapons test chamber that has ever been found by inspectors in any country. It was used for testing smallpox.

The inspectors asked to put on spacesuits and to go inside. (They had brought along Q-Tip-like swab kits: they would have liked to swab the inner walls of the chamber, in the hope of collecting a virus.) The Russians refused. "They said our vaccines might not protect us," Malinoski says. "It suggested that they had developed viruses that were resistant to American vaccines." The Russians ordered the inspectors to leave Building 6.

At a large gathering that evening, three inspectors -- David Kelly, Frank Malinoski, and Christopher Davis -- publicly confronted the head of Vector, a virologist named Lev Sandakhchiev, about Vector's smallpox. (His name is pronounced "Sun-dock-chev.") He back-pedalled angrily. Davis, a medical doctor with a Ph.D. who was then with British intelligence, now recalls, "Lev is gnome-like, a short man with a wizened, weather-beaten, lined face, and black hair. He's very bright and capable, a tough individual, full of bonhomie, but he can be very nasty when he is upset." Sandakhchiev heatedly insisted that his

technician had misspoken. He called on his deputy, Sergei Netesov, to support him. The two Vector leaders insisted that there had been no work with smallpox at Vector. They had been doing genetic engineering with smallpox genes, they said, but Vector didn't have any live smallpox, only the virus's DNA -- and the more they spoke the murkier their statements seemed. David Kelly remembers, "They were both lying, and it was a very, very tense moment. It seemed like an eternity, but it only lasted about fifteen minutes. And then there were so many other aspects of Vector we had to explore."

"The brazenness of these people!" one inspector later fumed. "They had been testing smallpox in their explosion chamber the week before we arrived."

Lev Sandakhchiev is still the head of Vector. He declined to be interviewed for this account but has steadfastly maintained that no offensive bioweapons research occurs now at Vector. In January of this year, at the Geneva meeting of smallpox experts, Sandakhchiev delivered a paper (and may have caught their flu). In his paper he claimed that Vector did not have any smallpox until 1994, when, he said, Vector had obtained it legally from Moscow. D. A. Henderson was also at that meeting. "It was quite elaborate and quite unbelievable," Henderson said. "I rolled my eyes, and saw other people rolling their eyes at me. We're sitting there, he's presenting us with all this horseshit, and he knows it's horseshit. Sandakhchiev is lying flagrantly."

Four sources have suggested to me that Lev Sandakhchiev was in charge of a Vector research group that in 1990 devised a more efficient way to grow weapons-grade smallpox in industrial-scale pharmaceutical tanks known as bioreactors. The Vector smallpox bioreactors had a capacity of six hundred and thirty litres -- virus tanks big enough for a microbrewery. Once the Vector scientists had worked out the details of variola manufacturing, the results were written up in master production protocols -- recipe books -- and these protocols ended up at the Russian Ministry of Defense, in Moscow. At the time, weapons-grade smallpox was being manufactured by two older methods at a top-secret virus-munitions production plant near the city of Sergiyev Posad, forty-five miles northeast of Moscow. At another virus-munitions plant, near Pokrov, about two hundred miles southeast of Moscow, military virus-production specialists converted the plant to the new Vector method of making smallpox in the large virus bioreactors, but apparently never started the reaction. When one considers that a single person infected with smallpox would be considered a global medical emergency, this is rather a lot of smallpox activity to have bubbling near Moscow. It means that live smallpox virus and the protocols for how to mass-produce it had spread to various places in Russia by the nineteen-nineties. Indeed, live smallpox could be bubbling in reactors now at Sergiyev Posad--no one in the United States government admits to having a clue, and no Russian journalists have seen the place. Peter Jahrling said, "I really think that Vector is out of the offensive BW [biowarfare] business. But Sergiyev Posad is the black hole. We have no contacts there, and the Russians won't allow us to visit the place."

These days, Lev Sandakhchiev has cordial relationships with Peter Jahrling and Joe Esposito. They are eager to draw their colleague into the circle of open international science. During their visits to Siberia, Sandakhchiev has come across to them as warm and human, and desperate for research money to support his institute. Sometimes, candid remarks slip out from the Russians. Jahrling put it this way: "There were tons of smallpox virus made in the Soviet Union. We know that. The Russians have admitted that to us. I was in a room with one of the Vector leaders when he said to us, 'Listen, we didn't account for every ampule of the virus. We had large quantities of it on hand. There were plenty of opportunities for staff members to walk away with an ampule. Although we think we know where our formerly employed scientists are, we can't account for all of them--we don't know where all of them are.' " Today, smallpox and its protocols could be anywhere in the world. A master seed strain of smallpox could be carried in a person's pocket. The seed itself could be a freeze-dried lump of virus the size of a jimmy on an ice-cream cone.

While I was sitting with D. A. Henderson in his house, I mentioned what seemed to me the great and tragic paradox of his life's work. The eradication caused the human species to lose its immunity to smallpox, and that was what made it possible for the Soviets to turn smallpox into a weapon rivaling the hydrogen bomb.

Henderson responded with silence, and then he said, thoughtfully, "I feel very sad about this. The eradication never would have succeeded without the Russians. Viktor Zhdanov started it, and they did so much. They were extremely proud of what they had done. I felt the virus was in good hands with the Russians. I never would have suspected. They made twenty tons -- twenty tons -- of smallpox. For us to have come so far with the disease, and now to have to deal with this human creation, when there are so many other problems in the world . . ." He was quiet again. "It's a great letdown," he said.

For years, the scientific community generally thought that biological weapons weren't effective as weapons, especially because it was thought that they're difficult to disperse in the air. This view persists, and one reason is that biologists know little or nothing about aerosol-particle technology. The silicon-chip industry is full of machines that can spread particles in the air. To learn more, I called a leading epidemiologist and bioterrorism expert, Michael Osterholm, who has been poking around companies and labs where these devices are invented. "I have a device the size of a credit card sitting on my desk," he said. "It makes an invisible mist of particles in the one-to-five-micron size range -- that size hangs in the air for hours, and gets into the lungs. You can run it on a camcorder battery. If you load it with two tablespoons of infectious fluid, it could fill a whole airport terminal with particles." Osterholm speculated that the device could create thousands of smallpox cases in the first wave. He feels that D. A. Henderson's estimate of how fast smallpox could balloon nationally is conservative. "D.A. is looking at Yugoslavia, where the population in 1972 had a lot of protective immunity," he said. "Those immune people are like control rods in a nuclear reactor. The American population has little immunity, so it's a reactor with no control rods. We could have an uncontrolled smallpox chain reaction." This would be something that terrorism experts refer to as a "soft kill" of the United States of America.

The idea that a biological credit card could execute a soft kill of the United States has reached the White House. The chief terrorism expert on the National Security Council, Richard Clarke, has sent word through the federal government that getting national stockpiles of smallpox vaccine is a top priority.

The effort started four years ago. So far, the government has little to show except numerous meetings among agencies, with no hope of vaccine anytime soon. The Department of Defense has put all its vaccine efforts into something called the Joint Vaccine Acquisition Program, which is run by the Joint Program Office for Biological Defense. People inside the military don't want their names used when they talk about the Pentagon's efforts. "It's a fucking disaster," said one knowledgeable military officer who has had direct experience in the matter. Last year, the Pentagon hired a systems contractor called Dynport, headquartered in Reston, Virginia, to develop and make a number of different vaccines for troops. The smallpox-vaccine contract calls for three hundred thousand doses, at a cost of \$22.4 million, or seventy-five dollars a dose, with delivery now scheduled for 2006. (The date has been pushed back at least once already.) This amount of vaccine could be made in about fifteen flasks the size of soda bottles. There are 2.3 million people in the armed forces, and they have several million more dependents. "Three hundred thousand doses is not enough vaccine to protect anyone -- not even our troops. It totally ignores the fact that smallpox is contagious," one military man said. "These guys ought to be buying tank treads and belt buckles. They know nothing about vaccines."

The Department of Health and Human Services (H.H.S.) has been given the responsibility by the White House for producing a stockpile of smallpox vaccine large enough to protect the American civilian population in case of a bioterror event; originally, the idea was for H.H.S. to consider hiring the military's contractor, Dynport, to make forty million extra doses, in addition to the three hundred thousand that Dynport was making for the Pentagon. (Any such initiative would require competitive bidding.)

At a series of meetings at H.H.S., a top Dynport executive said that forty million doses could be quite expensive. One scientist asked if a group of knowledgeable people could be drawn together to come up with an estimate of costs. The Dynport man answered, "Yes, we can do a study that will list the questions that need to be asked. It will cost two hundred and forty thousand dollars and will take six weeks."

Somebody then asked how much it would cost to answer the questions. The Dynport official responded, "That will be a different study. That study will cost two million dollars and will take six months."

With that, one scientist at the meeting burst out, "This is horseshit! We're asking an encyclopedia salesman if we need an encyclopedia!"

The C.E.O. of Dynport, Stephen Prior, said that the situation is more complicated: "The civilian population is very different from the military. There's an age spread from newborns to the elderly, there's more compromised immunity, with AIDS, chemotherapy, and organ transplants. And possibly thirty-five per cent of people have never been vaccinated. So it's not just scaling up the manufacturing."

Another knowledgeable observer is the retired Army General Philip K. Russell, M.D., who gave the order to send biohazard troops into Reston in 1989 to deal with a building full of monkeys infected with Ebola. Russell said to me, "Many of us are afraid that Dynport won't deliver the goods without wasting an inordinate amount of money."

However, H.H.S. has quietly opened talks with other potential contractors, preparing to solicit bids to make a civilian stockpile of smallpox vaccine, though there has been no announcement. "The effort at H.H.S. still isn't organized," D. A. Henderson said. General Russell said, "If smallpox really got going, people should be most concerned about a lack of effective leadership on the part of their government."

I WANTED to get closer to smallpox virus. In Joe Esposito's lab, at the Centers for Disease Control, there was a test going of a biosensor device for detecting smallpox. It was a machine in a black suitcase. It could detect a bioweapon using the process called the polymerase chain reaction, or P.C.R. -- the same kind of molecular fingerprinting that police use to identify the DNA of a crime suspect. The suitcase thing was called a Cepheid Briefcase Smart Cycler, and it had been co-invented by M. Allen Northrup, a biomedical engineer who founded a company to make and sell biosensors. He was there, along with a cluster of other scientists.

Esposito, the official guardian of one half of the world's official supply of smallpox, handed a box of tubes to a scientist in the room. Two of the tubes contained the whole DNA of smallpox virus but not live smallpox. The DNA drifted in a drop of water; it was the Rahima strain. Two other tubes contained anthrax. The samples were snapped into slots in the machine.

Northrup turned his attention to a laptop computer that nestled in the machine. Northrup is a chunky man with a mustache and reddish-brown hair. He tapped on the keys.

We waited around, chatting. Meanwhile, the Cepheid was working silently. It showed colored lines on its screen. In fifteen minutes, the anthrax lines started going straight up, and someone said, "The anthrax is screaming." Finally, one of the smallpox lines crept upward, slowly. "That's a positive for smallpox, not so bad," a scientist said. Emergency-response teams could carry a Cepheid suitcase to the scene of a bioterror event and begin testing people immediately for anthrax or smallpox. The machine is priced at sixty thousand dollars.

Afterward, Joe Esposito went around collecting the used tubes. The smallpox-sample holder -- a plastic thing the size of a thumbnail-had been left on a counter. I picked it up.

Esposito wasn't about to let anyone walk off with smallpox. "Leave me that tube," he said. "You are not allowed to have more than twenty per cent of the DNA."

Before I handed it to him, I glanced at a little window in the tube. When I held it up to the light, the liquid looked like clear water. The water contained the whole molecules of life from variola, a parasite that had colonized us thousands of years ago. We had almost freed ourselves of it, but we found we had developed a strong affinity for smallpox. Some of us had made it into a weapon, and now we couldn't get rid of it. I wondered if we ever would, for the story of our entanglement with smallpox is not yet ended ([Cryptome, 2002](#)).

**Title:** 'The Demon In The Freezer': A Terrifying Microbe

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**Abstract:** Ever since the publication in 1994 of "The Hot Zone," a factual account of a barely averted disaster with accidentally imported Ebola virus, Richard Preston has been increasingly lionized as our troubadour of troubling microbes. In his new book, "The Demon in the Freezer," the spotlight shifts to another kind of microbial disaster, one that would be intentional and potentially much more lethal -- a bioterrorist attack with the smallpox virus.

No human being is known to have been infected by smallpox for close to a quarter of a century. Yet in a world sensitized to the dangers of terrorism, talk of smallpox is on every front page and at every dinner table. Because infection is often lethal, because the virus is easily transmitted between people and because the discontinuation of routine vaccination three decades ago has made us highly vulnerable, it is not difficult to imagine an attack -- it could be as simple as the undetected arrival in the country of recently infected, suicidal terrorists -- that is truly terrifying.

Policy analysts, public health officials, reporters and many citizens have been imagining such attacks and considering ways to blunt them with the tools of antiterrorism and with medical science -- renewed vaccinations, new medicines, swifter diagnoses. But few of the resulting news reports and books, however informative, portray the immediacy of our predicament with the passion of Preston's new work.

In an afterword he calls the book the third in a "trilogy on Dark Biology." Throughout his trilogy, Preston has used a highly effective technique that seems simple but is artful and informed. He combines extraordinarily vivid descriptions of the pathological effects of infectious agents -- including gruesome but fascinating visits to the autopsies of afflicted people and animals -- with homely accounts of the ordinary routines of people who experience the infections and those who investigate them. With these methods, which blend terror, technology and trivia, he has probably done more than any other writer to establish a nation-wide imperative to think about infectious agents as global threats and potential weapons.

"The Hot Zone," the first in the trilogy, is a factual account that reads like a novel. Despite its frightening aspects, the outbreak of Ebola virus in monkeys imported by a research facility in Reston, Va., was not devastating, because the virus strain, now known as Ebola Reston, was unable to infect other hosts efficiently. Thus the outbreak was confined largely to the monkey colony. The second volume, "The Cobra Event," is a fiction that reads like fact, an account of mysterious deaths from a fabricated infectious agent. Buttressed by detailed accounts of the real history, politics, technology and bureaucracy of bioterrorism, it had widely reported effects on national policy. After reading it, President Bill Clinton convened experts and government leaders to discuss its implications, and then readjusted his federal budget proposal to augment defenses against biological weapons.

In this third installment, Preston returns to nonfiction to address what almost all analysts would argue is the most dangerous of the known biological agents. He teaches his readers about the chemical properties of the smallpox virus; how a single infected person (like a returning traveler in Meschede, West Germany, in 1970 -- but read bioterrorist in the post-9/11 world) can set off an epidemic; and what this horrendous disease can be like (in "flat hemorrhagic smallpox," the skin "darkens until it can look charred, and it can slip off the body in sheets"). We learn how the disease was eliminated by an international vaccination campaign in the 1970's; why there are reasons to believe that the Soviet Union grew staggering quantities of the virus, allegedly in part to arm intercontinental missiles; and how the virus might now be used by others as a "strategic weapon" (one that can cause enormous damage to a society without great effort or expense).

Even without evidence that smallpox virus has been used as a weapon in the modern era, concerns about it have sharpened because we have recently witnessed a real episode of bioterrorism within our



boundaries: the dissemination of anthrax spores through the mail in the fall of 2001, causing five deaths from inhaled anthrax, several other cases of cutaneous anthrax infection and much panic and confusion.

Apparently for this reason, Preston has chosen, with only partial success, to draw readers into his stories about smallpox through the prism of our experience with anthrax. The book opens with material that is familiar, if ingeniously handled: the first anthrax death, the letters to Senator Tom Daschle and news media figures, and the often clumsy official efforts to understand these incidents and respond. We also get some startling examples of Preston's basic technique. A few pages after being told that a Florida photo retoucher likes to file the barbs off his fishing hooks, we watch pathologists leave their anthrax-contaminated instruments in his body cavity after an autopsy.

A question posed by Peter Jahrling, from the Army's Medical Research Institute of Infectious Diseases, one of the federal investigators of the outbreak -- might the anthrax spores have been laced with particles of smallpox virus? -- is intended to serve as a conduit to the heart of the book, several long chapters about smallpox. Since the proposal seems somewhat implausible and the answer -- which Preston gives only much later -- will be presumed by most readers, the book lacks the integrity and dramatic intensity of its predecessors.

But the essays on smallpox have much to offer. As in the two previous books, the style is a stimulating mixture of cinema (fast cuts to change time and place), science journalism (with news that will surprise even some researchers in virology, presented with an admirable clarity) and personal reminiscence (the ordinary events of people facing extraordinary danger and death).

"The Demon in the Freezer," like Preston's 1999 New Yorker article that ran under the same title, feeds on an undercurrent of uncertainty about recent decisions taken by the World Health Organization, with the support of the United States government, not to destroy the two known stockpiles of smallpox virus ("the demon in the freezer"), at the Centers for Disease Control in Atlanta and the ominously named Vector Laboratory in Russia. These decisions, still intensely debated, have disappointed many, like D. A. Henderson, who directed the famously successful worldwide effort by the W.H.O. to eliminate smallpox, and who as an adviser to Tommy Thompson, the secretary of health and human services, is a frequently cited guru on bioterrorism. (He is one of Preston's most fully rendered figures.)

The drive to eradicate every vestige of smallpox, even its causative agent, has now been derailed by two considerations. First, there are reasonable, and worrisome, conjectures -- aired abundantly here and even more thoroughly in other recent books -- that active smallpox virus is not just in the two authorized sites but also in the hands of untrustworthy regimes and terrorists. In addition, there is a more welcome prospect: that the stored virus might be used to produce and test safer vaccines and new antiviral treatments for our vulnerable population.

Preston pursues these conjectures and prospects energetically. In his discussion he emphasizes two recent scientific undertakings that exacerbate underlying tensions about the future of the official virus repositories and raise additional questions about the kind of experiments that should be done in this new era, and about whether they should be reported in widely accessible forms.

The first of these is a collaborative effort between the Centers for Disease Control and Army scientists, urged on by Jahrling, to determine whether our stored smallpox viruses can be transmitted to monkeys to establish an animal model for testing antismallpox drugs and vaccines. Because the story has not been reported in the scientific literature, many virologists will read for the first time in this book about the dozen or so crab-eating monkeys who succumbed to experimentally administered smallpox virus in the summer of 2001, even before the terrorist attacks of Sept. 11 and the anthrax outbreak that followed shortly afterward.

Preston is appropriately ambiguous about whether to view such experiments as harbingers of danger or as a sign of hope for a better defense. But the novelty of the findings may be less than he implies.

References reporting the transmission of smallpox virus to various kinds of nonhuman primates as early as 1874 can be found in what Preston respectfully calls "the Big Red Book." This is "Smallpox and Its Eradication," by Frank Fenner and others, including Henderson (who is quoted here as saying, before the new experiments, that monkeys can't get smallpox). But regardless of precedents, readers will be unable to tell whether the recent work should be celebrated, feared or ignored.

The other line of work is more provocative. In characteristic fashion, Preston describes two of his scientific informants, Jahrling and an associate, learning accidentally about surprising results from an Australian group while wandering through a meeting of virologists in Montpellier, France. In these studies, now published in a well-regarded journal, a smallpox-like virus of mice (mousepox) was made more potent -- able to grow in mice that are resistant to the normal virus -- by adding a mammalian gene to the mousepox virus. Such genetic engineering is generally believed more likely to impair than enhance viral virulence, so the findings are surprising and interesting. But if the findings can be extended to the human smallpox virus, something we simply don't know, they might be interesting to bioterrorists too. Such speculation prompts other questions: Should such work have been done in the first place? Should it have been published? Should it be followed up? Should the story even be told in this book? Most of us would answer yes to all of these questions, but in these days of Dark Biology, uncertainty reigns.

Such uncertainty and unanswered questions dominate "The Demon in the Freezer," making it as perplexing as the times. It is also a less satisfying tale than its predecessors. As Preston says, with sadness, on the final page: "All I knew was that the dream of total Eradication had failed... . We could eradicate smallpox from nature, but we could not uproot the virus from the human heart" ([UCLA, 2002](#)).

# Bio & Terror Bible

## EXPOSING THE COMING BIO-TERROR PANDEMIC

**BIOTERRORBIBLE.COM:** [Starting in 1939](#), there have been [21 books](#), both fiction and non-fiction, dealing with the topics of bio-terror and pandemics. Although these books have been sporadic over the last 50+ years, they have intensified over the last 10.

**Title:** Bioterror: Manufacturing Wars The American Way

**Date:** 2003

**Source:** [Haymarket Books](#)

**Abstract:** While Washington justifies "first strikes" against those nations unilaterally identified as the "Axis of Evil," this controversial and timely book proves that the United States itself has been the most notorious practitioner of chemical and biological warfare since blankets laced with smallpox were given to Native Americans 250 years ago.

The editors of this book, William Schaap and Ellen Ray, are two prominent U.S. authorities on the CIA. This well-documented book backgrounds several cases of development and use by the United States of chemical-biological warfare, from Agent Orange in Vietnam to the Gulf War syndrome of the 1990s.

In their introduction, the editors offer an analysis of current events concerning the issue of biochemical weapons and the "war on terror."

Among the contributors are: Robert Lederer (WBAI/Pacifica Radio journalist), Tod Ensign (director of Citizen Soldier and veterans' rights advocate), Dr. Meryl Nass (expert on anthrax and biological warfare who has testified several times to U.S. Congress)

William Schaap and Ellen Ray were co-founders of Covert Action Quarterly, the authoritative magazine which has been a multiple award-winner of "Project Censored" prizes for its decades of groundbreaking investigative reporting. William Schaap is a New York attorney, who has worked with the Center for Constitutional Rights, and has testified as an expert witness on the CIA and intelligence matters in Congressional and UN hearings, as well as federal, state and foreign courts. Ellen Ray is an independent documentary filmmaker and was a consultant for Oliver Stone's JFK ([Haymarket Books, 2003](#)).

**Title:** Bioterror: Manufacturing Wars The American Way (Excerpts)

**Date:** 2003

**Source:** [Third World Traveler](#)

**Abstract:** The hypocrisy and dissembling of the U.S. Government is evident today not only in such actions and its language - "Weapons of Mass Destruction" (WMD) being the new, more militaristic buzzword - but also in the fact that the United States has been the only nation ever to have deployed the most lethal of WMDs, nuclear bombs, against civilians. Moreover, the United States has also been the most notorious and prolific practitioner of chemical-biological warfare (CBW) since World War II ...

Although such military research was highly classified, by 1975 concern over revelations of myriad intelligence abuses led to a comprehensive investigation by the U.S. Senate's Church Committee, which published a CIA memorandum listing the deadly chemical agents and toxins then stockpiled at Fort

Detrick. These included anthrax, encephalitis, tuberculosis, lethal snake venom, shellfish toxin, and half a dozen lethal food poisons, some of which, the committee learned, had been shipped in the early 1960s to Congo and to Cuba in unsuccessful CIA attempts to assassinate Patrice Lumumba and Fidel Castro.

In the wake of its unconscionable and devastating use of CBW during the Vietnam War, Washington repeatedly claimed that its enemies were either using or on the verge of using CBW. In the 1980s, the United States accused Vietnam of dropping so-called "yellow rain" in Cambodia; it accused the Soviet Union of using lethal chemicals in Afghanistan. It accused Iraq and Iran, at different times, of using nerve gas against each other. It similarly accused North Korea, Libya, Syria, and recently Al Qaeda of CBW/WMD capabilities. Many of these accusations were later shown to be outright intelligence disinformation hoaxes or to have involved substances the United States itself had supplied to one side or the other.

Although the United States is a signatory to the 1972 Biological Weapons Convention, the Bush administration refused to accept 1997 protocol on verification of compliance. While Washington demanded that Iraq and any other country accused of CBW capacity open its doors to inspectors, it rejected the protocol because it would grant foreign inspectors too much access to U.S. installations and companies. It might expose, they argued, legitimate U.S. military and commercial secrets.

Rarely is it acknowledged that during the 1980s, when relations between the United States and Iraq were restored, it was Washington that supplied Iraq with more than a dozen biological and chemical agents with military potential, almost all of the material now suspected of use by Iraq in bioweapons research. At the same time the United States went so far as to veto a UN resolution condemning chemical warfare there. Donald Rumsfeld, now Secretary of Defense, was President Reagan's personal envoy who reestablished those relations and who oversaw the resumption of such chemical munitions trade, in an effort to prevent Iran's victory in the Iran-Iraq War. Rumsfeld was in Baghdad with Hussein the day that veto was cast. Under President George Bush (Snr.) U.S. support for Iraq intensified, (as described in Jack Colhoun's article) only to terminate abruptly with Iraq's invasion of Kuwait and the commencement of the Gulf War.

It is further irony that the only people ever in history to use smallpox as a weapon are the Americans whose colonial forebears, as early as the 1760s, gave blankets laced with smallpox to the indigenous inhabitants of the land they were rapidly expropriating. Thousands of Native Americans were killed by this virulent disease, to which they had never before been exposed. The tactic was repeated by the U.S. Army in the Indian Wars of the mid- and late-19th century ...

### **The History of U.S. Bio-chemical Killers**

The involvement of the United States with chemical-biological warfare] began in 1763 when blankets poisoned with smallpox were presented as gifts to Indians who sought only friendly relations with the colonists. It reached its peak 200 years later when the U.S. Air Force blanketed the countryside of Indochina with poisons whose effects are still being felt.

### **Germ Warfare and Nuremberg**

The United States and Britain, in 1944 or earlier, planned to attack six major German cities - Berlin, Hamburg, Stuttgart, Frankfurt, Wilhelmshafen, and Aachen - with anthrax bombs that would have killed half their populations. The bombs were ordered to be produced at a factory in Vigo, Indiana, but the hazards of production delayed start-up, and the war was over before the bombs could be manufactured.

### **After World War 11**

The next reasonably well-documented instance of germ warfare occurred during the Korean War, in February 1952, the Democratic People's Republic of Korea and the People's Republic of China charged that U.S. pilots had dropped "germ bombs" on North Korea. They offered as evidence the testimony of captured U.S. Air Force officers and intelligence agents, and Koreans who told of finding large quantities of fleas and other insect pests shortly after U.S. planes had flown over their areas. The U.S. Government strenuously denied the charge, but a respected group of scientists believed the evidence was convincing proof that the United States had employed biological weapons.

"The International Scientific Commission for the Investigation of the Facts Concerning Bacteriological Warfare in Korea and China" included scientists from Great Britain, France, Italy, Sweden, Brazil, and the Soviet Union. One of the most renowned scientists of the 20th century, Joseph Needham of England, sat on the commission. Its 700 page report described a whole array of germ weapons: feathers infected with anthrax; lice, fleas, and mosquitoes dosed with plague and yellow fever; diseased rodents; and various implements contaminated with deadly microbes - toilet paper, envelopes, and the ink in fountain pens.

### **The Vietnam War**

When the bicentennial of U.S. chemical-biological warfare came in the early 1960s, the U.S. Government marked the occasion with the most massive chemical war waged by any power in world history. Even today the people of Indochina are suffering the long-term effects of those chemicals on their land, crops, livestock, and persons. Ironically, a large number of U.S. military personnel involved in the Indochina war have also suffered serious harm from those same chemicals, especially Agent Orange.

The use of chemical defoliants was approved by President Kennedy on November 30, 1961, following a recommendation by Secretary of State Dean Rusk that the way to win a war against a guerrilla army is to destroy crops. General William C. Westmoreland also considered crop destruction an important aspect of U.S. strategy, pointing out in a secret report that spraying 13,800 acres would destroy "crops which if allowed to grow until harvest might feed 15,000 soldiers for a year." By the end of the war, 55 million kilograms of chemical defoliants had been dropped on Indochina, mainly Agent Orange (a mixture of two herbicides plus small but toxic amounts of dioxin, a substance considered 100 times as poisonous as cyanide ...

The use of chemical weapons in Indochina was more open than the germ warfare waged against North Korea, but it was still deceptive. In 1971, Major General Bernard Rogers wrote to Senator J. William Fulbright that defoliation operations in Vietnam "are of limited scope and are subject to the same regulations applied to herbicide use in the United States." General Rogers, now NATO commander, must have known this was a lie. Five million acres, 12 percent of South Vietnam, were sprayed at an application rate that averaged 13 times the amounts recommended by the U.S. Department of Agriculture.

Few details of this war would have become public, but for its immense scale. Secretary of Defense Robert McNamara wanted the spraying disguised as a program conducted by South Vietnamese civilians, and his Deputy Undersecretary U. Alexis Johnson proposed that "U.S. aircraft be used to conduct a major defoliant spray program in South Vietnam, although the aircraft would carry South Vietnamese markings and the pilots would wear civilian clothes." The actual scope of the chemical attack against Laos, opposed even by then U.S. Ambassador William H. Sullivan, was kept secret until this past January [1982], and some of the details are still classified. In fact, the joint Chiefs of Staff noted in a 1961 document that "care must be taken to assure that the United States does not become the target for charges of employing chemical or biological warfare. International repercussions could be most serious."

Although the main victims of these weapons are the people of Indochina, thousands who suffer the results of dioxin poisoning - weakness of the eyes and some actual blindness, muscle weakness, liver damage, cancer, and a high rate of miscarriage and infant malformation, including hundreds of babies born without eyes - the harmful effects would probably have vanished from the pages of the [U.S.] press were it not for the vast number of former GIs, 60,000 of them, who are suffering the same symptoms. But even their plight, which ought to serve as a monument to the horrors of chemical/biological warfare, is not deterring our government from embarking on its third century of germ and chemical warfare with all the attendant lies and deceit.

### **U.S. Biological Warfare: The 1981 Cuba Dengue Epidemic**

For more than 20 years Cuba has been the victim of American attacks, overt and covert, large and small, unrelenting. Ships and buildings have been bombed; cane fields have been burned; invasions have been launched; and planes have been blown out of the sky. But many of the attacks have been even less conventional. Cuba has seen its share of chemical-biological warfare - some of which has been proved,

some of which has not. If the Cuban charges are true - and we believe that this article will help demonstrate that they are - then the dengue fever epidemic of 1981 was only the latest in a long line of outrageous, immoral, and illegal chemical-biological warfare attacks against Cuba.'

### **The History of Attacks**

Many studies have been written on the chemical-biological warfare capabilities of the United States. Some have discussed specifics; some have mentioned Cuba. John Marks, Victor Marchetti, Philip Agee, and Seymour Hersh have all discussed various specifics. Shortly after the triumph of the Cuban Revolution, during the early 1960s, food poisoning attempts were common, often at the same time that crop burnings were being carried out. A Washington Post report (September 16, 1977) confirmed that during this time the CIA maintained an "anticrop warfare" program. Both the CIA and the army were studying biological warfare, primarily at the facilities of Fort Detrick, Maryland. Dr. Marc Lappe noted in his book, *Chemical and Biological Warfare: The Science of Public Death*, that the army had a biological warfare agent prepared for use against Cuba at the time of the Missile Crisis in 1962; it was most likely Q fever.

Throughout the 1960s there were occasional biological attacks against Cuba, sometimes, according to Cuban allegations in 1964, involving apparent weather balloons. And in 1970 the CIA engineered the introduction of African swine fever into Cuba, a successful operation carried out by Cuban exile agents .2 It led to the forced destruction of more than a half million pigs. The same groups attempted unsuccessfully a few months later to infect the Cuban poultry industry. These operations were first exposed in *Newsday* (January 9, 1977), and later appeared in the *Washington Post*, *Le Monde*, the *Guardian*, and other papers.

Then, in 1980 - the year of the plagues - Cuba was beset with disasters. Another African swine fever epidemic hit; the tobacco crop was decimated by blue mold; and the sugarcane crops were hit with a particularly damaging rust disease. As *The Nation* put it, this was "a conjunction of plagues that would lead people less paranoid about the United States than the Cubans to wonder whether human hands had played a role in these natural disasters..."

It is against this backdrop that the Cubans found themselves facing, in the spring and summer of 1981, an unprecedented epidemic of hemorrhagic dengue fever.

### **Why Dengue?**

As noted above, the arsenal of chemical-biological warfare is unlimited. The U.S. military and the CIA have experimented with diseases which merely make a person uncomfortable for a few hours, with toxins which kill instantly, and with everything in between. John Marks describes a few in his study of MKULTRA, the CIA's mind control experiment, *The Search for the "Manchurian Candidate."* Staphylococcal enterotoxin, for example, a mild food poisoning, would incapacitate its victim for three to six hours; Venezuelan equine encephalomyelitis (VEE) virus would immobilize a person for two to five days and keep its victims weak for perhaps another month; brucellosis would keep its victims in the hospital for three or more months, killing some. Even the deadly poisons were prepared with variations: shellfish toxin kills within a few seconds; botulinum, however, takes eight to 12 hours, giving the assassin time to get away.

Dengue fever is one of some 250 arthropod-borne viruses, or arboviruses, "diseases transmitted from one vertebrate to another by hematophagous arthropods - blood eating insects, usually mosquitoes. Dengue is transmitted by the *Aedes aegypti* mosquito, the same insect which transmits yellow fever. There are four types of dengue, numbered one through four, depending on the type of antibody which the virus induces. Normal dengue fever begins with the same symptoms as a severe cold or flu, watery eyes, runny nose, headache, backache, fever, insomnia, lack of appetite, and weakness. The bone pain is incapacitating. Indeed, dengue was once known as "break bone." Its characteristic symptom is pain at the back of the eyes, most noticeable when looking from side to side. All types of dengue can give rise to the

hemorrhagic form, that is, accompanied by internal bleeding and shock. This form is the most dangerous, especially to children, for whom it is often fatal.

Dengue and other arboviruses are ideal as biological warfare weapons for a number of reasons. Dengue, especially hemorrhagic dengue, is highly incapacitating; it can be transmitted easily through the introduction of infected mosquitoes; it will spread rapidly, especially in highly populated and damp areas. The Aedes mosquito bites during the day, when people are more active and less protected; moreover, in favorable winds, Aedes mosquitoes can travel hundreds of miles before landing, none the worse for wear. And, of course, since dengue fever is found in nature in many parts of the world, a human role in its spread is hard to detect. This is the inherent advantage of biological over chemical warfare.

### **The 1981 Epidemic**

Although dengue fever is much more common in the Far East, there have been many outbreaks in the Caribbean and Central America during the past century. All four types have been found during the last two decades. In 1963 there was a dengue-3 outbreak in Puerto Rico and Antigua; in 1968, dengue-2 was found in Jamaica; in 1977, dengue-1 was found in Jamaica and Cuba; and in 1981, dengue-4 was found in the Lesser Antilles.

The epidemic which hit Cuba in May 1981 was of type 2 dengue with hemorrhagic shock. Except for the type 1 epidemic reported in 1977, this was the first major dengue outbreak in Cuba since 1944, and, most importantly, the first in the Caribbean since the turn of the century to involve hemorrhagic shock on a massive scale.

From May to October 1981 there were well over 300,000 reported cases, with 158 fatalities, 101 involving children under 15. At the peak of the epidemic, in early July, more than 10,000 cases per day were being reported. More than a third of the reported victims required hospitalization. By mid-October, after a massive campaign to eradicate Aedes aegypti, the epidemic was over.

The history of the secret war against Cuba and the virulence of this dengue epidemic were enough to generate serious suspicions that the United States had a hand in the dengue epidemic of 1981. But there is much more support for those suspicions than a healthy distrust of U.S. intentions regarding Cuba.

### **The Clues**

We reviewed the reports on the epidemic of the Pan American Health Organization and of the Cuban Ministry of Public Health, and interviewed a number of health officials. There are indeed indications that the epidemic was artificially induced.

The epidemic began with the simultaneous discovery in May 1981 of three cases of hemorrhagic dengue caused by a type 2 virus. The cases arose in three widely separated parts of Cuba: Cienfuegos, Camagüey, and Havana. It is extremely unusual that such an epidemic would commence in three different localities at once. None of the initial victims had ever traveled out of the country; for that matter, none of them had recently been away from home. None had had recent contact with international travelers. Moreover, a study of persons arriving in Cuba in the month of May from known dengue areas found only a dozen such passengers (from Vietnam and Laos), all of whom were checked by the Institute of Tropical Medicine and found free of the disease. Somehow, infected mosquitoes had appeared in three provinces of Cuba at the same time. Somehow, the fever spread at an astonishing rate. There appears to be no other explanation but the artificial introduction of infected mosquitoes.

### **Gulf War Syndrome: Guinea Pigs and Disposable GIs**

What has become known as the "Gulf War Syndrome" may actually result from a combination of factors, including:

1. Smoke and pollution from some 600 oil-field petrochemical fires that burned in Kuwait for as long as eight months after the U.S.-led forces attacked Iraq.



2. Two vaccines, pentavalent botulinum-toxoid and anthrax, and a medication, pyridostigmine bromide, which were designed as antidotes for biological or nerve gas weapons.
3. Aerial spraying of pesticides over U.S. military bases in Saudi Arabia.
4. Spraying of diesel oil to control dust around U.S. military bases in Saudi Arabia.
5. Radiation exposure from depleted uranium used in some high velocity shells fired by M1A1 Abrams tanks and A-10 Thunderbolt fighter bombers.
6. Portable heaters that used leaded gasoline and diesel fuel inside unventilated tents.
7. Wholesale detonation of Iraqi ammunition depots without first determining whether or not they held toxic materials.
8. Leishmaniasis - a parasitic infection spread by sand-flies.

### **Possible War Crime**

The most controversial of the possible causes of the syndrome are the two drugs - pyridostigmine bromide and pentavalent botulinum toxoid vaccine - neither of which had cleared the required Food and Drug Administration (FDA) review for new drugs.

Some Americans are vaguely aware that this country signed the Nuremberg Charter, which provided the legal basis for prosecuting Nazi leaders at the end of World War II. Fewer know of its companion treaty, the Nuremberg Code, aimed at preventing future human experimentation of the sort practiced by some German physicians. It is "absolutely essential," the code states, to obtain informed and voluntary consent for any medical treatment. There is no exception for wartime conditions or because soldiers are involved ([Third World Traveler, 2003](#)).

# Bio Terror Bible

## EXPOSING THE COMING BIO-TERROR PANDEMIC

**BIOTERRORBIBLE.COM:** [Starting in 1939](#), there have been [21 books](#), both fiction and non-fiction, dealing with the topics of bio-terror and pandemics. Although these books have been sporadic over the last 50+ years, they have intensified over the last 10.

**Title:** Frist Writes Bioterror Book for 'When Every Moment Counts'

**Date:** February 13, 2003

**Source:** [Fox News](#)

**Abstract:** Americans looking for easy-to-understand information on biological terror threats now have a good resource at their fingertips, and the author hopes it becomes much more than simply a coffee table book.

Senate Majority Leader Bill Frist, the chamber's only doctor, last year published the book *When Every Moment Counts*. It details "what you need to know about bioterrorism," and is aimed at the everyday American looking for more information on anthrax, plague, smallpox and other possible threats, as well as what people can do to protect themselves against them.

"My dream is to have the book sitting on your nightstand or maybe in your kitchen next to the telephone, available to answer that specific question that flies through your mind at any time of the day," Frist wrote in the introduction.

Frist, a Republican from Tennessee, became the spokesman for Congress after letters laced with anthrax were sent to several news outlets and lawmakers in the fall of 2001 in the wake of the Sept. 11 terrorist attacks. He was contacted by thousands of people seeking answers and advice about how to keep their families safe.

"It became clear that there was a lack of information available to the public. To make matters worse, the information that did exist was often contradictory and difficult to understand," Frist said in an e-mail interview with Foxnews.com. "I wanted to empower Americans with information to protect themselves and their families against a potential bioterrorist attack.

"Writing *When Every Moment Counts* was a lesson in how to communicate a complicated issue like bioterrorism in a way that we can all understand. In these turbulent times, helping people feel secure is absolutely critical."

People from all facets of society also gave the book rave reviews.

"I think it's quite useful -- it's very constructive," David Siegrist, director of studies for countering biological terrorism at the Potomac Institute, told Foxnews.com.

"Apropos the terrorism concerns of the times, an easy-to-read, how-and-when-to book that will also lessen anxiety and prevent panic; the best advice I have read," former U.S. Surgeon General C. Everett Koop said in his review.

"Senator Frist has expertly focused his skills and knowledge both as a physician and as a congressional leader to give us a book that belongs in every home," wrote Dr. Antonia Novella, former U.S. surgeon general and current New York state commissioner of health.

"With this important book, Senator Bill Frist has made another major contribution to the nation's preparedness for bioterrorism," said Sen. Edward Kennedy, D-Mass. "It can serve as a guide for every family on the actions they can take to meet the challenge of bioterrorism."

Even U2 lead singer Bono had a ringing endorsement.

"Sound science and smart medicine by a man who has practiced it. ... Everything we wish we didn't have to know, in case we need to know it," he said.

Siegrist said that one of the things he admired about the book was the chapter entitled "Safe at Home: a Family Survival Guide."

This 27-page chapter covers topics such as "What is bioterrorism?", "When the nation is put on 'high' alert, what specific actions should I take?", "When I'm in public, what should I look for?" and "Where should my family go if there's a bioterrorist attack?"

There is also information on what types of gas masks to buy, decontamination techniques and how to deal with the stress and anxiety in a state of high alert.

"There is no reason for paralysis in our everyday lives, and clearly no cause for panic ... but there is good reason for every American, young and old, to know much more about what in these times might confront them," Frist writes.

The chemical warfare section says signs that a chemical attack has occurred would appear within minutes or hours, and the first indications may be distinct odors, colored residues and dead insects or animals. In the case of a biological attack, however, the effects may not be seen or felt for days or weeks, and there are typically no environmental indicators "such as dead birds falling out of the sky," Frist writes.

The book details various nerve and blister agents, and cites hydrogen cyanide as another chemical to be aware of. Easy to make by mixing salt and a strong acid, this substance can be extremely toxic in large doses. Hydrogen cyanide was spiked into Tylenol in the United States in 1982 and caused rampant panic. The scare led to the development of tamper-resistant packaging.

There is also a chapter on threats to the nation's food and water supply, as well as agroterrorism -- the use of biological weapons against animals and crops.

The high fatality rate, combined with the ease with which a terrorist could obtain a harmful organism such as salmonella or E. Coli, feed the fear that the nation's food supply is a likely target. Other foodborne diseases include brucellosis, listeriosis and vibrio vulnificus.

Agroterrorist threats include mad cow disease, foot-and-mouth disease and others that can be spread mainly by consuming contaminated meat.

Frist recommends that the United States improve its intelligence-gathering capabilities, track down missing or undisclosed bioterror weapons in foreign countries and gain tighter control of these substances here at home.

"Today, we remain highly vulnerable," Frist writes. "It's not that we're unprepared. It's that we're underprepared."

"We can't lose sight of the fact that in our federal, state, local, and private health systems, we have all the pieces we need to wage an effective defense against bioterrorism. We just need to coordinate those pieces in a seamless way."

BlueCross BlueShield of Tennessee last month began handing out copies to state health officials there.

"Everyone has concerns about bioterrorism," said Vicky Gregg, CEO-elect for BlueCross BlueShield of Tennessee. "It's our hope that with the proper information, some fears can be alleviated, and that we, as a state, can better prepare to detect and respond to the threat."

While Frist told Foxnews.com he has no plans for another book at this time, "I recognize that we're learning more and more everyday.

"The best way that I can serve the American people is to help the president in the war against terror" ([Fox News, 2003](#)).

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**Title:** Twilight Series

**Date:** 2012

**Source:** [Wikipedia](#)

**Abstract:** Twilight is a series of four [vampire-themed fantasy romance novels](#) by American author [Stephenie Meyer](#). It charts a period in the life of [Isabella "Bella" Swan](#), a teenage girl who moves to [Forks, Washington](#), and falls in love with a 104-year-old vampire named [Edward Cullen](#). The series is told primarily from Bella's point of view, with the epilogue of [Eclipse](#) and Part II of [Breaking Dawn](#) being told from the viewpoint of character [Jacob Black](#), a [werewolf](#).

The unpublished [Midnight Sun](#) is a retelling of the first book, [Twilight](#), from Edward Cullen's point of view. The novella [The Short Second Life of Bree Tanner](#), which tells the story of a newborn vampire who appeared in [Eclipse](#), was published on June 5, 2010 as a hardcover book and on June 7 as a free online ebook. [The Twilight Saga: The Official Illustrated Guide](#), a definitive encyclopedic reference with nearly 100 full colour illustrations, was released in bookstores on April 12, 2011.

Since the release of the first novel, [Twilight](#), in 2005, the books have gained immense popularity and commercial success around the world. The series is most popular among [young adults](#); the four books have won multiple awards, most notably the 2008 [British Book Award](#) for "Children's Book of the Year" for [Breaking Dawn](#), while the series as a whole won the [2009 Kids' Choice Award](#) for Favorite Book.

As of October 2010, the series has sold over 116 million copies worldwide with translations into at least 38 different languages around the globe. The four Twilight books have consecutively set records as the biggest selling novels of 2008 on the [USA Today](#) Best-Selling Books list and have spent over 235 weeks on the [New York Times Best Seller list](#) for Children's Series Books.

The books have been made into [The Twilight Saga](#) series of motion pictures by [Summit Entertainment](#). The film adaptations of the first three books were released in 2008, 2009, and 2010. The fourth book is being adapted as two full-length films - the first film was released in November 2011, and the second film is scheduled to be released in November 2012 ([Wikipedia, 2012](#)).

# Bio Terror Bible

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**Title:** The Last Town On Earth

**Date:** 2012

**Source:** [Wikipedia](#)

**Abstract:** The Last Town on Earth is a 2006 novel by [Thomas Mullen](#). The novel focuses on the town of Commonwealth, [Washington](#) in 1918 during [World War I](#) and the emergence of the [Spanish Flu](#).

The town agrees to quarantine itself from the outside world, to hopefully save itself from the flu. Unfortunately, Phillip Worthy, the adopted son of Charles Worthy, the town founder, brings a lost soldier into the town and while it seems as if the soldier is perfectly healthy, the flu comes into Commonwealth anyway causing the town to start turning on each other.

The politics of the [Industrial Workers of the World](#), [American Protective League](#), and the [Four-Minute Men](#), as well as the aftermath of the [Everett Massacre](#), play major roles in the novel. According to the afterward, Commonwealth was inspired by a combination of [Gunnison, Colorado](#) (which quarantined itself from the flu) and the communes of [Equality Colony](#), [Freeland](#), and [Home](#) (which were socialist communes in Washington). [John M. Barry](#)'s The Great Influenza was also an inspiration.

It won the [James Fenimore Cooper Prize for Best Historical Fiction](#) in 2007. [The New York Times Book Review](#) calls it a "remarkable first novel" and praises the novel's "brilliant series of plot twists" and "carefully detailed historical context" ([Wikipedia, 2012](#)).

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**Title:** World War Z

**Date:** 2012

**Source:** [Wikipedia](#)

**Abstract:** World War Z: An Oral History of the Zombie War is a 2006 [post-apocalyptic horror novel](#) by [Max Brooks](#). It is a follow-up to his 2003 book, [The Zombie Survival Guide](#). Rather than a grand overview or narrative, World War Z is [a collection of individual accounts](#) in the form of first-person anecdotes. Brooks plays the role of an agent of the United Nations Postwar Commission, who published the report a decade after the ten-year [Zombie](#) War. The United Nations left much of his research out of the official report, choosing to focus on facts and figures from the war rather than the individual stories that form the bulk of Brooks' novel. The interviews chart a decade-long war against zombies from the view point of many different people of various nationalities. The personal accounts also describe the changing religious, geo-political, and environmental aftermath of the Zombie War.

World War Z was inspired by [The Good War](#), an [oral history](#) of World War II by [Studs Terkel](#); and by the zombie films of director [George A. Romero](#). Brooks used World War Z to comment on social issues like government ineptitude and American [isolationism](#), while also examining themes of [survivalism](#) and uncertainty. Critics have praised the novel for reinventing the zombie genre; the audiobook version, performed by a full cast including [Alan Alda](#), [Mark Hamill](#) and [John Turturro](#), won an [Audie Award](#) in 2007. A [film based upon the book](#) is in production, and is set for a June 2013 release.

### Development

Brooks designed World War Z to follow the "laws" set up in [The Zombie Survival Guide](#), and explained that the guide may exist in the world of the novel as a precursor to the Zombie War. The zombies of The Zombie Survival Guide are undead humans reanimated by an incurable virus, Solanum. They are devoid of intelligence and are motivated only by the desire to consume living flesh. The only way to destroy them is to destroy the brain, by any means. Although zombies are as strong as the humans they infect and do not tire, they are slow moving and incapable of planning or cooperation in their attacks. Zombies usually reveal their presence by moaning.

Brooks did a large amount of research while writing World War Z to make the novel as realistic as possible: "Everything in World War Z (as in The Zombie Survival Guide) is based in reality... well, except the zombies. But seriously, everything else in the book is either taken from reality or 100% real. The technology, politics, economics, culture, military tactics... it was a LOT of homework." Brooks used a variety of reference books and consulted with friends who were experts in several fields when writing the novel. He also cites the U.S. Army as a reference on firearm statistics.

### Plot Summary

Through a series of oral interviews, Brooks, as an agent of the United Nations Postwar Commission,



describes the history of 'World War Z'. Although the origin of the [zombie pandemic](#) is unknown, the story begins in China after a zombie bites a young boy, who becomes the pandemic's '[patient zero](#)'. The Chinese government attempts to contain the infection and concocts a crisis involving Taiwan to mask their activities. The infection is spread to other countries by the black market [organ trade](#) and by refugees, before an outbreak in South Africa finally brings the plague to public attention.

As the infection spreads, only Israel initiates a nationwide quarantine and closes its borders to all but uninfected Jews and Palestinians. Pakistan and Iran destroy each other in a [nuclear war](#) after Iran attempts to stem the flow of refugees from Pakistan. The United States of America does little to prepare; although special forces teams are used to contain initial outbreaks, a widespread effort never starts as the nation is sapped of political will by several "[brushfire wars](#)", and a [placebo](#) fraudulently marketed as a vaccine has created a false sense of security. When the world recognizes the true scope of the problem, a period known as the "Great Panic" begins. Following the fall of New York City, the [United States Army](#) sets up a high-profile defense at [Yonkers, New York](#) to restore American morale. The military uses [Cold War](#) tactics on the zombies, including [weapons intended to disable vehicles](#) and demoralization through wounding. These have no effect on the zombies, which have no self-preservation instincts and can only be stopped if shot in the head and killed. The soldiers are [routed](#) on live television, while other countries suffer similarly disastrous defeats, and human civilization teeters on the brink of collapse.

In South Africa, the government adopts a plan drafted by ex-[apartheid](#) government official Paul Redeker, which calls for the establishment of small "safe zones", areas surrounded by natural boundaries and cleared of zombies. Large groups of refugees are abandoned, but kept alive outside the safe zones to distract the hordes of undead, allowing those within time to regroup and recuperate. Governments worldwide adopt their own versions of the "Redeker Plan", or relocate the populace to safer foreign territory, such as the complete evacuation of the [Japanese Home Islands](#). As zombies freeze solid in the cold, many civilians in North America flee to the wilds of northern Canada and the Arctic where 11 million people die from starvation and [exposure](#).

During a conference near [Honolulu](#) aboard the [USS Saratoga](#), seven years after the pandemic starts, most of the world's leaders indicate they want to wait out the zombie plague, but the United States President successfully argues that the only way to survive physically and psychologically is to go on the offensive. Determined to lead by example, the United States military reinvents itself to meet the specific challenges involved in fighting the living dead: automatic weapons and [mobility](#) are replaced by semi-automatic rifles and formation firing, troops are retrained to focus on head shots and slow, steady rates of fire, and a multipurpose hand tool, the "Lobotomizer" or "Lobo", is designed to destroy zombie heads close up. In two north-south lines stretching across North America, the military leaves its safe zone west of the [Rocky Mountains](#) and crosses the continent in a three-year campaign, systematically destroying the zombies and reclaiming outposts of survivors (whether they want to be reclaimed or not).

Ten years after the "official" end of the zombie war, millions of zombies are still active and the geopolitical landscape of the Earth has been transformed. A democratic Cuba has become the world's most thriving economy and the international banking capital. China has also become a democracy, following a civil war sparked by the collapse of the [Three Gorges Dam](#) and ended after a Chinese submarine destroys the [Communist leadership](#) with [intercontinental ballistic missiles](#). Tibet, freed from Chinese rule, hosts the world's [most populated city](#). Following a religious revolution, Russia is now an expansionist [theocracy](#). The refugee-inhabited islands stretching from Palau to French Polynesia have become a new nation referred to as the "Pacific Continent". North Korea is completely empty, with the entire population presumed to have disappeared into underground bunkers; it is unknown if they survived or have become zombies. Iceland has been completely depopulated, and is the world's most heavily infested country. The United Nations fields a large military force to eliminate the

remaining zombies from overrun areas, defeat hordes that surface from the ocean floor, and kill frozen zombies before they thaw. Overall, there is a drastic reduction in the human population, which is alluded to have been brought to the brink of extinction, and many environments and animal species have been devastated, as much by desperate humans as by marauding zombies ([Wikipedia, 2012](#)).

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**Title:** Analysis: Bioterror Book Warns Of Hazards

**Date:** October 1, 2007

**Source:** [UPI](#)

**Abstract:** The threat of terrorists using biological agents to attack the United States has preoccupied Barry Kellman, a professor of international law and director of the International Weapons Control Center at the DePaul University College of Law for the past decade.

Kellman is special adviser to Interpol on prevention of bio-crimes, a program he initiated. He describes bio-violence -- the possibility of terrorists using biological agents -- "as a threat without borders to the human species."

Kellman has documented his research, his findings, his fears and his recommendations on how to tackle this potential disaster in his newly released book, "Bioviolence: Preventing Biological Terror and Crime."

Kellman rates the risks of bio-violence -- violence resulting from terrorists using biological agents to inflict the greatest harm possible -- "as a very serious threat." He says: "In a major biological attack in the foreseeable future, even if the attack is of lower intensity, it has the capacity of producing millions of casualties."

While much of the focus of counter-terrorism specialists seems to revolve on fears of terrorists getting their hands on a nuclear device or obtaining enough plutonium to produce a dirty bomb, Kellman believes bio-violence has a far greater devastating potential. He explains the differences: Devastating as it might be, the result of a nuclear detonation remains localized, to a certain degree, around the area of the explosion, along with the fallout zone, usually limited to a radius of a few miles, depending on the power of the nuclear warhead. The victims caught at ground zero and those unfortunate enough to be caught downwind from the fallout are the likely casualties. People outside the blast zone and away from the fallout perimeter are, in principle, safe.

Whereas a major biological attack -- say a deliberate spreading of anthrax, botulism or smallpox -- is contagious, or easy to spread and can spread far beyond the point of original contamination. These three bio-agents, along with others, are classified as Category A agents by the Centers for Disease Control and Prevention. Classification as Category A by the CDC identifies a biological agent with recognized bioterrorism potential.

Given that these bio-agents are so contagious and/or easy to disseminate, it adds the element of panic when people living thousands of miles from the strike zone suddenly fall victim of an attack that was carried out on the other side of the globe. It perpetuates the feeling there is no safe place to hide, adding panic to chaos and making it all that harder for law enforcement agencies to control the situation. And

that, the notion that no border will be able to prevent the initial spread of the disease, is what makes the thought of a well-coordinated bioterror attack so terrifying, Kellman says.

To be sure, there are effective vaccines stockpiled by authorities around the country and the world to counter such attacks. However, experts say by the time the agent is identified and the appropriate vaccine issued, tens of thousands of people are likely to die first. And secondly, would there be enough vaccines to inoculate an entire population? Although health and public safety authorities in most jurisdictions claim to have enough vaccines stockpiled precisely in the eventuality of such a scenario unfolding, it seems rather unlikely.

He points to difficulties faced by law enforcement agents when it comes to tracking biological weapons or agents that may be weaponized.

Nuclear material for the most part can be traced, or has been traced. The information is maintained by the International Atomic Energy Agency. But when it comes to biological agents, Kellman says, "We don't know where the biological agents are nor how to ensure the pathogens don't disappear" -- as indeed they have from many laboratories worldwide.

Part of the problem, explains the professor, is there is no central institution in charge of documenting, tracking and policing biological agents. "We are talking about a trans-global threat," said Kellman. "It's a threat to the international peace and security. And it's not going away."

Another major factor is the bureaucracy surrounding international laws, which moves very slowly. "Time consideration is the real challenge. We have to start predicting 10-15 years down the road."

The solution, says Kellman, though far from a perfect one, is to task the United Nations with forming three agencies to act as watchdogs. In the interim, all while pursuing his work, Kellman prays that his predictions may be proven wrong ([UPI, 2007](#)).

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**Title:** Company of Liars

**Date:** 2012

**Source:** [Wikipedia](#)

**Abstract:** Company of Liars is a historical novel by [Karen Maitland](#), set in the fourteenth century. The setting is a Britain which is being decimated by a [pandemic](#) known as the [Plague](#).

This novel reached a large number [\[weasel words\]](#) of people in Britain due to the first few chapters being given away with [The Daily Telegraph](#) as a mini-paperback, in 2008.

The year is 1348. The Black Plague grips the country. In a world ruled by faith and fear, nine desperate strangers, brought together by chance, attempt to outrun the certain death that is running inexorably toward them.

Each member of this motley company has a story to tell. From Camelot, the relic-seller who will become the group's leader, to Cygnus, the one-armed story-teller... from the strange, silent child called Narigorm to a painter and his pregnant wife, each has a secret.

None are what they seem. And one among them conceals the darkest secret of all- Propelling these liars to a destiny they never saw coming... [\(Wikipedia, 2012\)](#).

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**Title:** Bioterror In The 21st Century

**Date:** 2009

**Source:** [USNI](#)

**Abstract:** Daniel Gerstein draws on twenty-nine years of experience in the security and defense sectors to address the threat of bioterrorism in the twenty-first century. He warns that while the proliferation of knowledge and capabilities in the field of biotechnology offers ever-increasing opportunities for scientific breakthroughs, the potential for the misuse of that knowledge also increases. Gerstein takes a classic game theory approach in his analysis of the potential for a bioterror attack in the future. His examination provides an objective capability for assessing threats, understanding emerging trends, and developing mitigation strategies. However, in the end the book is less about predicting future behavior than about understanding the framework in which dangerous capabilities are allowed to proliferate. The study also makes a valuable contribution to the debate over perceived threats and vulnerabilities in this new global environment.

### Reviews

"Dan Gerstein has carefully and realistically set out the dangers of a terrorist biological attack in the 21st century. The threat is evolving, and the determination and motivations of modern terrorists makes such an attack more possible than ever. It is urgent that the United States and its citizens prepare and be emotionally prepared for such a catastrophe so that our certain reaction inflicts punishment on our enemies, and not on the liberties of all Americans. Dan Gerstein adds to the body of knowledge we need in this time of technological possibility and violent danger." JAMES S. GILMORE III, Chairman, Gilmore Commission on Homeland Security, 1999-2003

"Dan Gerstein presents a thoughtful and balanced review of the terrorist threat and the potential of biotechnology to give terrorists a novel weapon. He reviews actions that the U.S. government has taken since 2001 and offers a sound process by which to develop and prioritize the necessary actions required to protect U.S. citizens from this threat. This book is a "must read" for any serious homeland security policy analyst." AL MAURONI, author of Where are the WMDs? The Reality of Chem-Bio Threats on the Homefront and the Battlefield

"Daniel Gerstein has done the country a great service. In one all-inclusive volume he has addressed the most dangerous threat this nation faces. As Dr. Gerstein so clearly demonstrates, modern technology is rapidly putting the capability to create even the most deadly pathogens within the grasps of civilization's sworn enemies. For anyone interested in understanding the magnitude of the bioterror threat and what we can and must do to avert it, then this book is their first stop. If this country is to have any hope of averting a calamity that could rival the Black Plague in scope and lethality then it must heed the warnings so dramatically laid bare in this book." JIM LACEY, editor of The Canons of Jihad: Terrorists' Strategy for Defeating America

"This comprehensive analysis of bioterrorism could not be more timely. The book opens with the impact of globalization on the spread of infectious disease and the world witnesses the swine flu pandemic; it discusses medical problems as President Obama and the Congress struggle with health reform. Let us hope relevant political decision-makers and the medical community will read this important book." C.L. GILBERT, MD, Professor of Medicine, George Washington University ([USNI, 2009](#)).



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**Title:** Two Journeys

**Date:** 2012

**Source:** [Wikipedia](#)

**Abstract:** Two Journeys (2009, Booksurge Publishing, 626 pages, [ISBN 1439250138](#), [ISBN 9781439250136](#)) is a [apocalyptic and post-apocalyptic fiction adventure](#) novel by [Clemens P. Suter](#), which describes the aftermath of a global [pandemic](#) that has eradicated all of humankind.

Alan, the protagonist and apparently the only survivor, finds himself stranded in Tokyo and decides to travel home to Berlin to find out whether his family has survived.

The story describes his trip through Korea, China, Mongolia and Siberia and can be regarded as a [travelogue](#), mixed with [adventure novel](#) elements, such as the encounter with a local warlord ([Wikipedia, 2012](#)).

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**Title:** New Book Provides Guidelines To Deal With Bioattack

**Date:** February 9, 2011

**Source:** [Bio Prep Watch](#)

**Abstract:** A new book entitled *Bio-Shield* by Dr. Kedar Prasad provides a series of guidelines on how to protect against the adverse effects harmful bacteria and viruses, certain toxic chemicals, and the radiation caused by dirty bombs and diagnostic imaging machines.

The probability of attack by terrorists using chemical, biological, radiological or nuclear weapons has created fear among the public as well as in experts on the subject. Such an attack has the potential to cause mass casualties and create long term adverse health effects.

There are currently few adequate countermeasures to help protect the public should such a disaster occur. *Bio-Shield* seeks to fill that gap by providing a means by which the public can help itself by describing the risks and recommending several simple strategies.

*Bio-Shield* elucidates the nature of these weapons and describes their adverse effects. The strategies in the book can also help the public understand the risks one faces when trying to protect a family from the terrorist threat.

Dr. Prasad obtained his master's degree in zoology from the University of Bihar in Ranchi, India, and his Ph.D. in radiation biology from the University of Iowa. He has published over 200 articles in peer reviewed journals and has authored and edited more than 15 books in the areas of radiation biology, nutrition and cancer, and nutrition and neurological disease ([Bio Prep Watch, 2011](#)).

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**BIOTERRORBIBLE.COM:** BSL Labs or biosafety level labs have been built all over the United States and around the world. For strategic purposes, a majority of these BSL labs have been purposely placed in large population centers. Regardless of their rating (1-4), BSL labs are a major health risk to the general public simply based on the fact that they house deadly pathogens and suspicious “[accidents](#)” tend to occur at these facilities on a regular basis. Should a bio-terror pandemic arise, it is highly likely that BSL labs will serve as the original source of the deadly pathogen.

**Title:** Biosafety Level 1

**Date:** 2012

**Source:** [Wikipedia](#)

**Abstract:** A biosafety level is the level of the [biocontainment](#) precautions required to isolate dangerous [biological agents](#) in an enclosed facility. The levels of containment range from the lowest biosafety level 1 (BSL-1) to the highest at level 4 (BSL-4). In the United States, the [Centers for Disease Control and Prevention](#) (CDC) have specified these levels. In the [European Union](#), the same biosafety levels are defined in a [directive](#).

### Biosafety Level 1

This level is suitable for work involving well-characterized agents not known to consistently cause disease in healthy adult humans, and of minimal potential hazard to laboratory personnel and the environment (CDC, 1997).

It includes several kinds of bacteria and viruses including [canine hepatitis](#), non-pathogenic [Escherichia coli](#), as well as some cell cultures and non-infectious bacteria. At this level precautions against the biohazardous materials in question are minimal, most likely involving gloves and some sort of facial protection. The laboratory is not necessarily separated from the general traffic patterns in the building. Work is generally conducted on open bench tops using standard microbiological practices. Usually, contaminated materials are left in open (but separately indicated) waste receptacles. Decontamination procedures for this level are similar in most respects to modern precautions against everyday microorganisms (i.e., washing one's hands with anti-bacterial soap, washing all exposed surfaces of the lab with disinfectants, etc.). In a lab environment all materials used for cell and/or bacteria cultures are decontaminated via [autoclave](#). Laboratory personnel have specific training in the procedures conducted in the laboratory and are supervised by a scientist with general training in [microbiology](#) or a related science ([Wikipedia, 2012](#)).

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**Title:** Biosafety Level 2

**Date:** 2012

**Source:** [Wikipedia](#)

**Abstract:** A biosafety level is the level of the [biocontainment](#) precautions required to isolate dangerous [biological agents](#) in an enclosed facility. The levels of containment range from the lowest biosafety level 1 (BSL-1) to the highest at level 4 (BSL-4). In the United States, the [Centers for Disease Control and Prevention](#) (CDC) have specified these levels. In the [European Union](#), the same biosafety levels are defined in a [directive](#).

### Biosafety Level 2

This level is similar to Biosafety Level 1 and is suitable for work involving agents of moderate potential hazard to personnel and the environment. It includes various bacteria and viruses that cause only mild disease to humans, or are difficult to contract via [aerosol](#) in a lab setting, such as [C. difficile](#), most [Chlamydiae](#), hepatitis [A](#), [B](#), and [C](#), [influenza A](#), [Lyme disease](#), [Salmonella](#), [mumps](#), [measles](#), [HIV](#), [scrapie](#), [MRSA](#), and [VRSA](#). BSL-2 differs from BSL-1 in that:

1. Laboratory personnel have specific training in handling pathogenic agents and are directed by scientists with advanced training;
2. Access to the laboratory is limited when work is being conducted;
3. Extreme precautions are taken with contaminated sharp items; and
4. Certain procedures in which infectious aerosols or splashes may be created are conducted in [biological safety cabinets](#) or other physical containment equipment ([Wikipedia, 2012](#)).

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**Title:** Biosafety Level 3

**Date:** 2012

**Source:** [Wikipedia](#)

See Current List [Here](#)

**Abstract:** A biosafety level is the level of the [biocontainment](#) precautions required to isolate dangerous [biological agents](#) in an enclosed facility. The levels of containment range from the lowest biosafety level 1 (BSL-1) to the highest at level 4 (BSL-4). In the United States, the [Centers for Disease Control and Prevention](#) (CDC) have specified these levels. In the [European Union](#), the same biosafety levels are defined in a [directive](#).

### Biosafety Level 3

This level is applicable to clinical, diagnostic, teaching, research, or production facilities in which work is done with indigenous or exotic agents which may cause serious or potentially lethal disease after inhalation. It includes various bacteria, parasites and viruses that can cause severe to fatal disease in humans but for which treatments exist, such as [Leishmania donovani](#), [Mycobacterium tuberculosis](#), [Bacillus anthracis](#), [Chlamydomonas psittaci](#), [West Nile virus](#), [Venezuelan equine encephalitis virus](#), [Eastern equine encephalitis virus](#), [SARS coronavirus](#), [Salmonella typhi](#), [Coxiella burnetii](#), [Rift Valley fever virus](#), [Rickettsia rickettsii](#), and [yellow fever virus](#).

Laboratory personnel have specific training in handling pathogenic and potentially lethal agents, and are supervised by competent scientists who are experienced in working with these agents. This is considered a neutral or warm zone.

All procedures involving the manipulation of infectious materials are conducted within biological safety cabinets, specially designed [hoods](#), or other physical containment devices, or by personnel wearing appropriate personal protective clothing and equipment. The laboratory has special engineering and design features.

It is recognized, however, that some existing facilities may not have all the facility features recommended for Biosafety Level 3 (i.e., double-door access zone and sealed penetrations). In this circumstance, an acceptable level of safety for the conduct of routine procedures, (e.g., diagnostic procedures involving the propagation of an agent for identification, typing, susceptibility testing, etc.), may be achieved in a biosafety level 2 (P2) facility, providing the filtered exhaust air from the laboratory room is discharged to the outdoors, the ventilation to the laboratory is balanced to provide directional airflow into the room, access to the laboratory is restricted when work is in progress, and the recommended Standard Microbiological Practices, Special Practices, and Safety Equipment for

Biosafety Level 3 are rigorously followed. The decision to implement this modification of biosafety level 3 recommendations is made only by the laboratory director ([Wikipedia, 2012](#)).

### **Admitted Bio-Safety Level 3 Labs Worldwide**

#### **Argentina**

**Bio-Safety Level 3:** Instituto Nacional de Tecnologia Agropecuaria: Castelar, Buenos Aires, Argentina

#### **Australia**

**Bio-Safety Level 3:** University of Queensland: Royal Women's Hospital Brisbane: Herston, Australia

**Bio-Safety Level 3:** University of Queensland: St Lucia Microbiology Building: St Lucia, Australia

#### **Canada**

**Bio-Safety Level 3:** British Columbia Centre for Disease Control (3 Labs): British Columbia, Canada

**Bio-Safety Level 3:** Saskatchewan Disease Control Laboratory: Regina, Canada

**Bio-Safety Level 3:** International Vaccine Center: Saskatoon, Canada

**Bio-Safety Level 3:** Centre National de Biologie Expérimentale: Quebec, Canada

#### **China**

**Bio-Safety Level 3:** Wuhan Institute of Virology of the Chinese Academy of Sciences: Wuhan, Hubei, China

#### **Finland**

**Bio-Safety Level 3:** National Institute for Health and Welfare: Hermann, Helsinki, Finland

**Bio-Safety Level 3:** National Institute for Health and Welfare: Tilkanmäki, Helsinki, Finland

#### **Iceland**

**Bio-Safety Level 3:** University of Iceland, The Department of Medical Virology: Reykjavik, Iceland

#### **India**

**Bio-Safety Level 3:** All India Institute of Medical Sciences: New Delhi, India

**Bio-Safety Level 3:** Gauhati Medical College and Hospital Guwahati: Assam, India

**Bio-Safety Level 3:** National JALMA Institute for Leprosy & Other Mycobacterial Diseases (NCJILOMD): Agra, India

#### **Ireland**

**Bio-Safety Level 3:** Institute of Molecular Medicine, Trinity College Dublin: Dublin, Ireland

#### **Indonesia**

**Bio-Safety Level 3:** Institute of Tropical Disease (ITD): Surabaya, East Java, Indonesia

#### **Japan**

**Bio-Safety Level 3:** National Institute for Infectious Diseases: Tokyo, Japan

#### **Malaysia**

**Bio-Safety Level 3:** Biotechnology Research Institute (BRI), University of Malaysia: Borneo, Malaysia

**Bio-Safety Level 3:** Institute for Medical Research (IMR), Ministry of Health: Kuala Lumpur, Malaysia

**Bio-Safety Level 3:** Veterinary Research Institute (VRI), Department of Veterinary Services: Perak, Ipoh, Malaysia

#### **Netherlands**

**Bio-Safety Level 3:** Netherlands National Institute for Public Health and the Environment (RIVM): Bilthoven, Netherlands

**Bio-Safety Level 3:** Erasmus Medical Center: Rotterdam, Netherlands

#### **New Zealand**

**Bio-Safety Level 3:** University of Auckland: School of Medical Sciences: Auckland, New Zealand

### Poland

**Bio-Safety Level 3:** Centre of the Military Institute of Hygiene and Epidemiology: Puławy, Poland

**Bio-Safety Level 3:** Sanitary and Epidemiological Station: Warsaw, Poland

### Portugal

**Bio-Safety Level 3:** National Institute of Health Dr. Ricardo Jorge: Lisbon, Portugal

**Bio-Safety Level 3:** Molecular Medicine Institute: Lisbon, Portugal

### Russia

**Bio-Safety Level 3:** State Research Center of Virology & Biotech VECTOR: Novosibirsk Oblast, Koltsovo, Russia

### South Korea

**Bio-Safety Level 3:** International Vaccine Institute: Seoul, Republic of South Korea

### Spain

**Bio-Safety Level 3:** CISA-INIA / Animal Health Research Center: Valdeolmos, Madrid, Spain

### United States

**Bio-Safety Level 3:** Brody School of Medicine, East Carolina University: Greenville, North Carolina, U.S.

**Bio-Safety Level 3:** Emerging Pathogens Institute (EPI), University of Florida: Gainesville, Florida, U.S.

**Bio-Safety Level 3:** George Mason University Biomedical Research Laboratory: Manassas, Virginia, U.S.

**Bio-Safety Level 3:** Global Bio Lab: Los Angeles, California, U.S.

**Bio-Safety Level 3:** Institute for Food Safety & Health: Illinois Institute of Technology: Bedford Park, (Chicago) Illinois, U.S.

**Bio-Safety Level 3:** Kent State University, Kent Campus: Kent, Ohio, U.S. **(scheduled for bioterrorism event response)**

**Bio-Safety Level 3:** Laboratory of Epidemiology and Public Health (LEPH), Yale: New Haven, Connecticut, U.S.

**Bio-Safety Level 3:** National Institute of Allergy and Infectious Diseases (NIAID) The Bronx, New York, U.S.

**Bio-Safety Level 3:** Plum Island Animal Disease Center: Plum Island, New York, U.S.

**Bio-Safety Level 3:** Stony Brook University Centers: Center for Infectious Diseases (CID) Stony Brook, New York, U.S.

**Bio-Safety Level 3:** Tufts Cummings School of Veterinary Medicine United States of America: Grafton, Massachusetts, U.S.

**Bio-Safety Level 3:** Saint Louis University Doisy Research Building: St. Louis, Missouri, U.S.

**Bio-Safety Level 3:** University of California, Berkeley: Berkeley, California, U.S.

**Bio-Safety Level 3:** University of Florida Medical Entomology Laboratory: Vero Beach, Florida, U.S.

**Bio-Safety Level 3:** University of New Mexico School of Medicine: Albuquerque, New Mexico, U.S.

### Vietnam

**Bio-Safety Level 3:** Ministry of Health's National Institute of Hygiene and Epidemiology Socialist: Hanoi, Vietnam



# Bio Terror Bible

## EXPOSING THE COMING BIO-TERROR PANDEMIC

**BIOTERRORBIBLE.COM:** BSL Labs or biosafety level labs have been built all over the United States and around the world. For strategic purposes, a majority of these BSL labs have been purposely placed in large population centers. Regardless of their rating (1-4), BSL labs are a major health risk to the general public simply based on the fact that they house deadly pathogens and suspicious “[accidents](#)” tend to occur at these facilities on a regular basis. Should a bio-terror pandemic arise, it is highly likely that BSL labs will serve as the original source of the deadly pathogen.

**Title:** Biosafety Level 4

**Date:** 2012

**Source:** [Wikipedia](#)

See Current List [Here](#)

**Abstract:** A biosafety level is the level of the [biocontainment](#) precautions required to isolate dangerous [biological agents](#) in an enclosed facility. The levels of containment range from the lowest biosafety level 1 (BSL-1) to the highest at level 4 (BSL-4). In the United States, the [Centers for Disease Control and Prevention](#) (CDC) have specified these levels. In the [European Union](#), the same biosafety levels are defined in a [directive](#).

### Biosafety Level 4

This level is required for work with dangerous and exotic agents that pose a high individual risk of aerosol-transmitted laboratory infections, agents which cause severe to fatal disease in humans for which vaccines or other treatments are *not* available, such as [Bolivian](#) and [Argentine hemorrhagic fevers](#), [Marburg virus](#), [Ebola virus](#), [Lassa fever](#), [Crimean-Congo hemorrhagic fever](#), [smallpox](#), and various other [hemorrhagic](#) diseases.

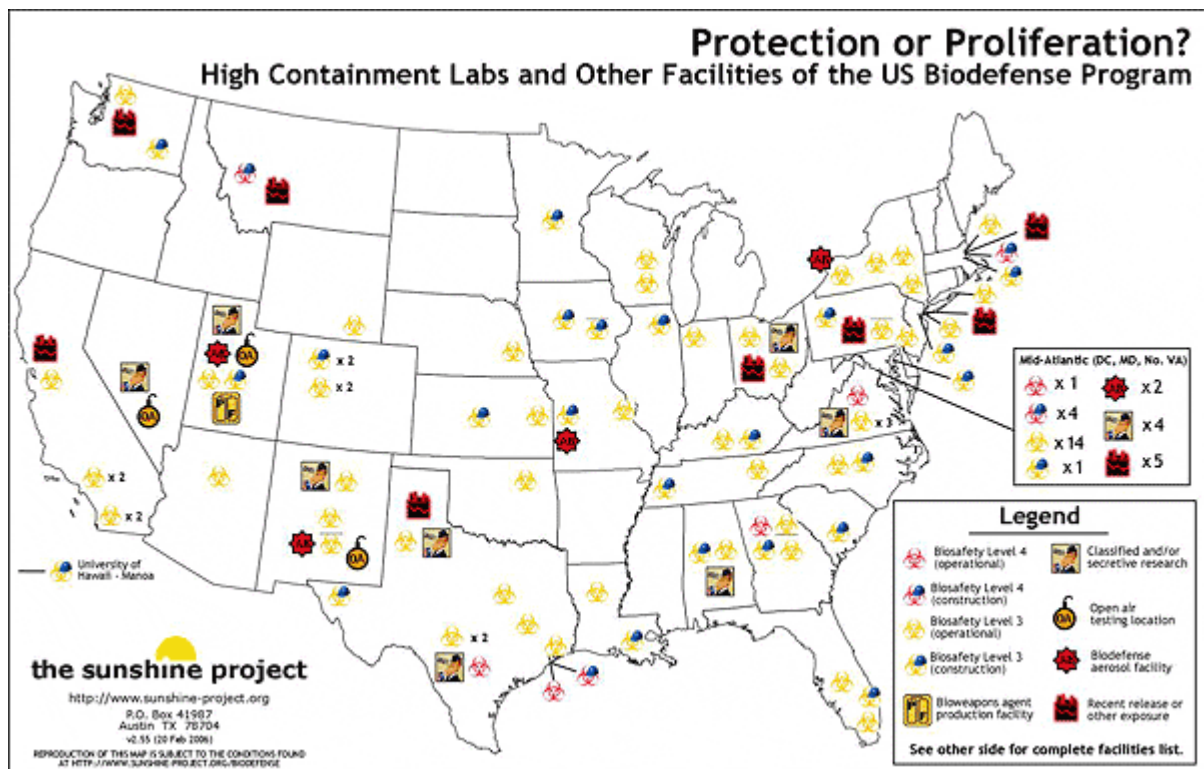
When dealing with biological hazards at this level the use of a [positive pressure personnel suit](#), with a segregated air supply, is mandatory.

The entrance and exit of a level four biolab will contain multiple showers, a vacuum room, an [ultraviolet](#) light room, and other safety precautions designed to destroy all traces of the biohazard.

Multiple airlocks are employed and are electronically secured to prevent both doors opening at the same time.

All air and water service going to and coming from a biosafety level 4 (or P4) lab will undergo similar decontamination procedures to eliminate the possibility of an accidental release.

Agents with a close or identical antigenic relationship to biosafety level 4 agents are handled at this level until sufficient data is obtained either to confirm continued work at this level, or to work with them at a lower level.



Members of the laboratory staff have specific and thorough training in handling extremely hazardous infectious agents and they understand the primary and secondary containment functions of the standard and special practices, the containment equipment, and the laboratory design characteristics.

They are supervised by qualified scientists who are trained and experienced in working with these agents. Access to the laboratory is strictly controlled by the laboratory director.

The facility is either in a separate building or in a controlled area within a building, which is completely isolated from all other areas of the building. A specific facility operations manual is prepared or adopted. Building protocols for preventing contamination often use negatively pressurized facilities, which, even if compromised, would severely inhibit an outbreak of aerosol pathogens.

Within work areas of the facility, all activities are confined to Class III biological safety cabinets, or Class II biological safety cabinets used with one-piece positive pressure personnel suits ventilated by a life support system ([Wikipedia, 2012](http://en.wikipedia.org/wiki/Biosafety_level_4)).

### **Known Bio-Safety Level 4 Labs Worldwide**

#### **Africa**

**Bio-Safety Level 4:** Centre International de Recherches Médicales de Franceville: Gabon, Africa

**Bio-Safety Level 4:** National Institute for Communicable Diseases South Johannesburg, Africa

#### **Australia**

**Bio-Safety Level 4:** Australian Animal Health Laboratory: Geelong, Australia

**Bio-Safety Level 4:** National High Security Laboratory: North Melbourne, Australia

**Bio-Safety Level 4:** University of Queensland: Sir Albert Sakzewski Virus Research Centre (SASVRC): Herston, Australia

**Bio-Safety Level 4:** Virology Laboratory of the Queensland Department of Health: Coopers Plains, Australia

#### **Canada**

**Bio-Safety Level 4:** National Microbiology Laboratory: Winnipeg, Canada

## China

**Bio-Safety Level 4:** Preventive Medical Institute of ROC Ministry of National Defense: Taiwan, China

## Eastern Europe

**Bio-Safety Level 4:** Biological Defense Center Těchonín, Czech Republic

**Bio-Safety Level 4:** Republican Research and Practical Center for Epidemiology and Microbiology: Minsk, Belarus

## England

**Bio-Safety Level 4:** Defence Science and Technology Laboratory: Porton Down, England

**Bio-Safety Level 4:** Health Protection Agency's Centre for Infections: Colindale, London, England

**Bio-Safety Level 4:** Health Protection Agency (Botulism): Porton Down, England

**Bio-Safety Level 4:** Health Protection Agency: Special Pathogens Reference Unit: Porton Down, England

**Bio-Safety Level 4:** Institute for Animal Health: Pirbright, England

**Bio-Safety Level 4:** National Institute for Medical Research: London, England

## France

**Bio-Safety Level 4:** Laboratoire P4 Jean Mérieux: Lyon, France

## Germany

**Bio-Safety Level 4:** Bernhard Nocht Institute for Tropical Medicine: Hamburg, Germany

**Bio-Safety Level 4:** Friedrich Loeffler Institute on the Isle of Riems: Greifswald, Germany

**Bio-Safety Level 4:** Philipps University of Marburg: Marburg, Germany

**Bio-Safety Level 4:** Robert Koch Institute: Berlin, Germany

## Italy

**Bio-Safety Level 4:** Azienda Ospedaliera Ospedale Luigi Sacco: Milano, Italy

**Bio-Safety Level 4:** Istituto Nazionale Malattie Infettive: Rome, Italy

## India

**Bio-Safety Level 4:** All India Institute of Medical Sciences: New Delhi, India

**Bio-Safety Level 4:** Centre for Cellular and Molecular Biology Hyderabad, India

**Bio-Safety Level 4:** High Security Animal Disease Laboratory (HSADL) Bhopal, India

## Japan

**Bio-Safety Level 4:** Institute of Physical and Chemical Research: Kantō, Tsukuba, Japan

**Bio-Safety Level 4:** National Institute for Infectious Diseases: Tokyo, Japan

## Netherlands

**Bio-Safety Level 4:** Netherlands National Institute for Public Health and the Environment (RIVM): Bilthoven, Netherlands

## Russia

**Bio-Safety Level 4:** State Research Center of Virology & Biotech VECTOR (**Smallpox**): Novosibirsk Oblast, Koltsovo, Russia

## Singapore

**Bio-Safety Level 4:** Defence Science Organization (DSO): Singapore (**Defence Science**

**Organization goal is to conduct autopsies during a potential deadly epidemic outbreak.**

**Singapore also has a mobile BSL-4 autopsy facility)**

## Sweden

**Bio-Safety Level 4:** Swedish Institute for Communicable Disease Control: Solna, Sweden

## Switzerland

**Bio-Safety Level 4:** High Containment Laboratory DDPS (SiLab): Spiez, Switzerland

**Bio-Safety Level 4:** Institute of Virology and Immunoprophylaxis (IVI): Mittelhäusern, Switzerland

## **United States**

**Bio-Safety Level 4:** Centers for Disease Control and Prevention (CDC): Atlanta, Georgia, U.S.

### **(Smallpox)**

**Bio-Safety Level 4:** Division of Consolidated Laboratory Services: Richmond, Virginia, U.S.

**Bio-Safety Level 4:** Galveston National Laboratory, National Biocontainment Facility: Galveston, Texas, U.S.

**Bio-Safety Level 4:** Georgia State University: Atlanta, Georgia, U.S.

**Bio-Safety Level 4:** Kent State University, Kent Campus: Kent, Ohio, U.S. **(sister lab for bioterrorism event response)**

**Bio-Safety Level 4:** National Bio & Agro-Defense Facility (NBAF) **(DHS)**: Kansas State University, Manhattan, Kansas, U.S.

**Bio-Safety Level 4:** National Biodefense Analysis and Countermeasures Center (NBACC) **(DHS)** Fort Detrick, Maryland, U.S.

**Bio-Safety Level 4:** National Emerging Infectious Diseases Laboratory (NEIDL): Boston, Massachusetts, U.S.

**Bio-Safety Level 4:** National Institute of Allergy and Infectious Diseases (NIAID) Fort Detrick, Maryland, U.S.

**Bio-Safety Level 4:** National Institutes of Health (NIH): Bethesda, Maryland, U.S.

**Bio-Safety Level 4:** Rocky Mountain Laboratories: Hamilton, Montana, U.S.

**Bio-Safety Level 4:** Shope Laboratory (Only privately owned BSL 4 in U.S.): Galveston, Texas, U.S.

**Bio-Safety Level 4:** Tufts Cummings School of Veterinary Medicine United States of America: Grafton, Massachusetts, U.S.

**Bio-Safety Level 4:** US Army Medical Research Institute of Infectious Diseases (USAMRIID): Fort Detrick, Maryland, U.S.

**Bio-Safety Level 4:** US Army Medical Research Institute of Infectious Diseases (USAMRIID): Fort Detrick, Maryland, U.S.

# Bio & Terror Bible

## EXPOSING THE COMING BIO-TERROR PANDEMIC

**BIOTERRORBIBLE.COM:** If and when a full-scale bio-terror attack occurs, the live pathogens or agents responsible for the pandemic will likely be dispersed via A) [chemtrails](#) by government [airplanes or drones](#), B) by the [U.S. Postal Service](#) via [Tide detergent samples](#), C) by the government and medical establishment via [tainted vaccines](#), or by D) the portable petri dish commonly known as a [Trojan condom](#).

Recent news and events related to airplanes and drones suggests that it is possible that that aerial spraying vehicles could be used in a biological attack on an unsuspecting public, especially if they refuse to line up and take the deadly vaccines. Airplanes and drones could be scapegoated for transporting infected animals, for delivering an infected person from another country, for getting hijacked by an alleged terrorists, or to disperse tainted vaccines.

**Title:** BioWarfare Drill At McAlester, OK...Who Knew?

**Date:** April 15, 2000

**Source:** [Rense](#)

**Abstract:** The two-day drill kicked off around noon Friday when a vintage 1942 C-47 transport plane flew over the city of McAlester and the McAlester Army Ammunition Plant.

While flying, **the plane simulated spraying an aerosol mist containing the pneumonic plague.**

McAlester-area residents participated in the Sooner Spring exercise in such large numbers that the goal of distributing 10,000 doses of mock antibiotics had been surpassed by 11 a.m. on Saturday.

The exercise in McAlester and at the McAlester Army Ammunition Plant has been called the most extensive bioterrorism drill in U.S. history. Officials said McAlester is leading the nation on how to respond to such an attack.

"They will look to McAlester as a model for the way to do things right," Cathey said

That's not simply Cathey's opinion. Among those who traveled to McAlester to observe the exercise was U.S. Army Lt. Col. Jim Sahli, of Fort Monroe, Va.

"I work for the Joint Task Force for Civil Support," Sahli said. "If it exceeded the local and state facilities, they would call us here. About a half-dozen of us came down to watch.

"Just seeing it in action ... being in the field like this, gives us a good feel."

Sahli watched in the McAlester Regional Health Center, where hospital personnel set up a triage to treat volunteer "victims" of the pneumonic plague.

Ambulances and buses had unloaded groups of volunteers who were serving as victims to be treated at the hospital. They were carried inside the hospital on gurneys and whisked inside on wheel chairs ([Rense, 2000](#)).

**Title:** Grounding Of Crop-Dusters Extended After Bio-Terror Alert

**Date:** September 24, 2001

**Source:** [SF Gate](#)

**Abstract:** Federal authorities, worried about the possibility of further terror from the sky, extended the grounding of crop-dusting planes nationwide today, after learning that terrorists might have been planning to spray fast-killing toxins into the atmosphere.

During their probe of the Sept. 11 attacks on the World Trade Center and the Pentagon, FBI agents learned that one man under investigation had manuals about crop dusting and that at least one of the hijackers had visited a crop- dusting business in rural Florida.

This was the third time that crop dusters had been grounded since the hijackings. They were grounded with all other aircraft Sept. 11 and allowed to fly again on Sept. 14; abruptly grounded Sept. 16 and allowed to fly Sept. 17; then grounded again yesterday.

"It's still in effect," Federal Aviation Administration spokeswoman Laura Brown said of the grounding. "It's extended until just after midnight tonight. " It is a rolling deadline of midnight local time.

Asked about the new grounding, the FBI said it was one of the steps the bureau has taken out of "an abundance of caution" and "in reaction to every bit of information and threats received during the course of this investigation."

Sources told Time magazine that Zacarias Moussaoui, a suspected terrorist with possible links to the hijackers who commandeered jetliners and crashed them into the World Trade Center and the Pentagon, possessed manuals showing how to operate crop dusting equipment.

Moussaoui was arrested in August for immigration violations after flight school officials in Minnesota reported him to the FBI. He raised suspicions when he offered to pay cash to learn how to fly jumbo jets, but said he was only interested in learning how to steer, not how to land, according to published reports.

J.D. "Will" Lee, 62, general manager of South Florida Crop Care in Belle Glade, Fla., said today that groups of two or three Middle Eastern men visited that city's airport several times before the Sept. 11 terrorist attacks. A co- worker of Lee's, James Lester, identified one of the men as Mohamed Atta, the 33-year-old Egyptian who the FBI believes was at the controls when an American Airlines flight from Boston hit the World Trade Center ([SF Gate, 2001](#)).

**Title:** Planes to Be Sprayed Before Departure

**Date:** February 14, 2002

**Source:** [All Africa](#)

**Abstract:** Deadly insects such as mosquito will no longer fluke flights into or out of Uganda.

All planes passing through Uganda or other tropical countries are to be sprayed with insecticides, a health ministry official has said ([All Africa, 2002](#)).

**Title:** Federal Agencies Begin Bioterrorism Test

**Date:** March 25, 2003

**Source:** [UCLA](#)

**Abstract:** A crop-duster sprayed a harmless substance above a field of cattle and oil pumps Monday in a test to see if weather radar could detect a bioterrorist attack.



It was the first spray of a three-week Army test over central Oklahoma. The plane will make 261 runs, dropping grain alcohol, clay dust and a mix of water and polyethylene glycol -- a common ingredient in lotions and mascara.

The harmless materials were chosen to produce a mist resembling the airborne particles that might be produced by a bioterrorism attack.

The test, taking place in Oklahoma because of the state's advanced weather radar system, will help Army and Environmental Protection Agency scientists determine how well radar can detect such materials.

The new system would keep track of small planes and tiny puffs of particles that typical radars ignore. It will take weeks to analyze the data and determine how successful the test was, Army officials said.

The goal is to develop computer technology for a nationwide bioterrorism detection system, said Robert Lyons, with the Army's nuclear, biological and chemical detection program. The government hopes to install high-tech software in about 150 radar stations across the country.

The EPA has conducted similar tests in Maryland, Utah and Florida since early 2001, before the Sept. 11 terrorist attacks.

The government planned to start the test Feb. 24. But after residents of Goldsby complained, officials re-evaluated the program and deleted two of the originally planned test materials -- powdered egg whites and a sterilized natural pesticide. Those materials were sprayed over the ocean near Key West, Fla., last April with no ill effects ([UCLA, 2003](#)).

**Title:** Death Sought for Animals In Monkeypox Case

**Date:** July 3, 2003

**Source:** [New York Times](#)

**Abstract:** Moving to prevent monkeypox from reaching wild animals in the United States, the Centers for Disease Control and Prevention recommended yesterday that all 850 animals from a contaminated shipment of exotic pets from Africa in April be destroyed, along with all prairie dogs that might have been exposed to them.

The agency warned pet owners not to release any sick or potentially exposed animals into the wild.

Other mammals in homes or pet shops that might have been exposed should be killed or should be quarantined for six weeks and watched for symptoms — fever or cough, cloudy or crusty eyes, swollen lymph nodes or rash, the agency said. Bodies should be burned, not buried or thrown out, and the premises disinfected, it added.

An outbreak of monkeypox tentatively traced to a Gambian giant pouched rat in the shipment has caused 81 confirmed or suspected cases in humans, mostly in the Midwest. Its spread seems to have stopped, and no cases of human-to-human transmission were found. But the disease spreads easily to rodents.

A spokesman for the agency acknowledged that the authorities did not know the whereabouts of many of the estimated 850 animals in an April 9 shipment from Ghana to Texas, nor do they know if any were released.

"That's one of the things we're really worried about," said David Daigle, a spokesman for the agency. "Tracking them all down is darn near impossible."



Nonetheless, a "very aggressive" effort is on now, said Dr. Martin Cetron, the agency's deputy director for quarantine. But many were sold at informal pet swaps, he said, "and then things end without a good paper trail."

Monkeypox — so called because it was first diagnosed in monkeys — is a less virulent cousin of smallpox, and vaccination against smallpox appears to protect against it. There were no deaths in the June outbreak, but in West Africa, up to 10 percent of cases are fatal.

At the beginning of the outbreak, the centers and the Food and Drug Administration banned importing of all African rodents and the sale or distribution of six species from the April shipment: tree squirrels, rope squirrels, dormice, Gambian giant pouched rats, brush-tailed porcupines and striped mice. They also banned the transport, sale or release of prairie dogs.

Yesterday's directive was ambiguous about what constituted contact with an infected animal, and it confused some pet shop owners. Details of the directive are at [cdc.gov/ncidod/monkeypox/quarantineremoval.htm](http://cdc.gov/ncidod/monkeypox/quarantineremoval.htm).

Eileen Whitmarsh, an owner of Rainbow Pets in Shorewood, Wis., who caught monkeypox from a prairie dog in her store, mistakenly thought the order meant she had to kill the 60 apparently healthy hamsters, rats and gerbils she now has quarantined.

"Our animals are checked by the Health Department daily, and they are having babies," Ms. Whitmarsh said. "Sick animals do not have babies."

David Crawford of Boulder, Colo., acting director of the Prairie Dog Coalition, which defends wild prairie dog habitats and opposes keeping the animals as pets, called the euthanasia suggestion "a classic case of blaming the victim."

"This problem was caused by human beings, and it's easy for us to take the 'kill them all' approach," he said. "But if this was a human population, we'd be aghast at an order to kill. This calls for quarantine and testing, not euthanasia."

Two weeks ago, at a meeting of the Advisory Committee on Immunization Practices at the centers, Dr. Gregory A. Poland, a committee member and the chief of vaccine research at the Mayo Clinic in Minnesota, asked why the agency had not already ordered all possibly exposed animals killed.

An official of the centers replied that people became attached to their pets.

"So what?" Dr. Poland said. "I know what we'd do if this was an outbreak of mad cow disease. We'd kill the whole herd" ([New York Times, 2003](#)).

**Title:** Plan To Spray Toxic Biological Chemicals Over San Francisco Announced

**Date:** March 11, 2008

**Source:** [Natural News](#)

**Abstract:** People of the world, the US Government is planning to poison more than two million people, in California, using an untested biological "pesticide" this summer. The chemical to be sprayed is classified by the EPA as a "pesticide" and the plan is to douse cities with this chemical designed to stick on everything for 90 days or longer. This application is not a one time event, but will continue every 1-3 months for as long as five years. The pesticide to be sprayed is not designed to harm the light brown apple moth's who it is designed for, but merely to confuse its mating habits. While harmless to moths, the pesticide has been documented to harm humans.

Side effects range from vomiting and flu like systems, to male and female reproductive cycle disruption. One child nearly died from the exposure, and some people have developed asthma from being exposed to this chemical concoction. It is cause for *alarm* that a chemical being labeled as harmless and "safe" even in minute doses, causes severe health effects in some people. The government is racing to cover up and hide the dangerous health effects so that they can continue their aerial spray plans this summer. Your attention and action on this subject is needed in the most important way.

On January 24th, 2008, United States Department of Agriculture (USDA) Secretary Chuck Conner announced the availability of \$74.5 million in emergency funding to combat the light brown apple moth (LBAM) infestation in California (1). President Bush's recent budget proposal sent to Congress sets aside \$330 Million to eradicate plant pests, like the Light Brown Apple Moth. With crime, prison crowding, pollution, poverty, budget problems and the like, why should the government go through the effort to try to control the reproductive habits of a moth? While most people say the answer is money, a far more sinister plan seems to be at hand. It is unprecedented to design a long term plan to spray chemicals on people, which are untested for safety. This plan violates a myriad of state, federal and international laws.

On February 13th, 2008, the CDFA and USDA, in conjunction, announced their action plan for aerial spraying untested poison on people. This is from the CDFA Press Release "Aerial treatments are expected to begin June 1 in the infested areas of Monterey and Santa Cruz counties, with subsequent aerial treatments expected to begin August 1 in San Francisco, Daly City, Colma, Oakland, Piedmont, Emeryville, Albany, El Cerrito, El Sobrante, Tiburon and Belvedere. The treatments in these areas are designed to be reapplied at 30- to 90-day intervals while the moths are active." (4)

In late 2007, there were 643 documented health complaints ([www.1hope.org/SPRAYCOMPLES.PDF](http://www.1hope.org/SPRAYCOMPLES.PDF)) from the aerial spray program conducted in Santa Cruz and Monterey Counties. Keep in mind that this documentation is a mere fraction of the real health effects, as no legitimate effort was made to inform even doctors on how to recognize pesticide poisoning. Many doctors also refused to report suspected pesticide poisoning as required by law, and in order for a report to get officially filed, many times the patient had to insist upon it. These health injuries are not being honored in any way, because if they are honored, this sick chemical spray will be seen for what it is. It is a poison to many humans and likely to many other animals as well. I have a difficult time swallowing that a chemical compound designed to disrupt a moth's mating cycle can accidentally create reproductive health problems.

There are many who believe that this spray is not directed at the moth population which the government says is the goal of the spray, but rather that it is directed at humans. There is a growing body of evidence to support this claim, considering that the moth itself does not cause any crop damage. It is similar to the government deciding that we must eradicate all the ants, because ants cause millions of dollars of damage. Like ants, the light brown apple moth is a harmless pest. Another strange observation is the name of the mating disruption chemical Checkmate. In order to pull off the deployment of this biological chemical, a hoax, or reason for aerial spraying had to be created. That reason is called the Light Brown Apple Moth infestation. The second requirement to pull off releasing a massive chemical cloud of disease, is to trick people into believing it is safe. This whole aerial spray program depends on the belief that the chemicals to be sprayed are safe.

Since the chemicals planned to be deployed have never been sprayed over cities before, and are even being developed as I write, and thus have not been proven safe for humans, this is by the facts a large scale experiment. The question people should ask is, "why?" While it may be just coincidence, a recent article displays this headline: "Top-secret Livermore anti-germ lab opens." (2) This same lab, has routinely exploded thousands of pounds of lethal, chemically toxic, and radioactive Depleted Uranium in the greater San Francisco Bay area's air for the past fifty years (3).

When people hear about this aerial spray, many people experience a sinking feeling in the pit of their stomach. This is truly a sickening action. The government is willfully breaking countless laws in order to combat a stupid leaf rolling moth that curls up into the leaves of some plants and that doesn't cause any crop damage. It has not caused crop damage or embargo's in Hawaii over the past 100 years, so why would it cause damage in California?

No ounce of sanity can explain why the government must insist on violating countless laws to spray people with never before tested chemicals, except as to realize a deadly game is being played.

Unlike the horrible malathion spraying over 20 years ago, which was a one-time ordeal with chemicals that evaporate, this spraying is a time release microscopic device, which will be continuously applied, short of the winter months, for up to five years. Even five years of spraying will at best reduce slightly the moth population, as pest control experts explain that mating disruption technology is used as a small part of an overall pest management plan. Pretty much any pest control expert, except for those on the government take, will tell you that the light brown apple moth cannot be eradicated, and that even if it could, the mating disruption technology is not the best means to do it. Since aerial spraying is to be the sole method of controlling the light brown apple moth in many locations, then even after many years of spraying, the moth will still be alive. It is not sane to spray people with chemicals. That begs attention, there is not any hard evidence that the spray even works at all. In fact on the EPA's own website, there's an article about pheromones released from microcapsules, it states: "The studies show that only a small proportion of the microcapsules actually release any pheromone." (5)

This is now clear and reprehensible evidence of State and Federal Governments attempting to commit a large scale crime against the American people. Let us forget about supposed terrorists for a second whose propagandized images are placed on the television, and lets pay attention to this biological attack planned on our fellow neighbors. The presence of a minuscule pest, is no excuse to douse millions with chemicals. There are NO CROPS IN CITIES! So why are they going to spray cities?

### **This Is A Cover-Up**

The LBAM infestation is a monumental hoax designed as a cover for an operation of devious goals to expose people to dangerous chemicals over several years. Following is a link to a recently published proposal of spray boundaries, the yellow lines indicating the proposed spray zones ([www.hopefortruth.com/lbam\\_2008.jpg](http://www.hopefortruth.com/lbam_2008.jpg)) . More than two million people who live in these and other targeted cities are scheduled to be exposed this summer to chemicals that have never been tested on humans or animals before. Let me repeat: the government of the United States is conducting a human biological experiment, on a massive scale, breaking State, Federal and International laws. Children, pregnant women, and the sick and elderly will be most at risk to this increased exposure to long lasting chemicals. Chemicals which are newly designed, chemicals which have not been proven safe. Just like the reproductive health effects reported from the spray, it is important to realize that a large team of "experts" working on this project do not mistakenly douse people with chemicals. This is done on purpose, with a purpose.

Does it make sense to douse over two million people with literally hundreds of billions of microscopic balls of volatile chemicals over an extended period of time to try to limit the mating habits of a few thousand moths? Is it legal to do this? Is it ethical? Is it moral? Yet rather than halting the spray plans to investigate the damage it has done to many people, the spray plans continue to grow exponentially.

To see this insanity clearly, let's examine the moth population. In San Francisco County, 3,501 moths total have been trapped and killed over an eight month period. The entire city of San Francisco, whose population is 744,041, is in the proposed spray boundaries. About 744,000 people are to be exposed to 'never tested safe for humans, microencapsulated pheromones' for several years. This is really a needle in the haystack approach to pest control. Keep in mind, each moth found is a moth that has been trapped and exterminated (6). In Alameda County, 431 moths have been found in the past 8 months out of 2,327 traps. The moth population in Alameda County is thus sparse at best. Just look out your window. Imagine how many insects are in the tree, the yard, or the local park. I have seen more than 431 ants crawl into my kitchen on a rainy day. So in a giant area of 141 square miles, and the tens or hundreds of millions of insects in that zone, to try to eradicate a few hundred moths by just spraying chemicals everywhere is both ludicrous and unsafe.

When I learned that Santa Cruz, my previous hometown was to be aerially sprayed, I was in a state of

shock. This was followed by a long period of disbelief.

Apparently the CDFA or the USDA, or both, decided that the previous chemical formulas used, Checkmate LBAM-F and Checkmate OLR-F were not good enough, which really points to the fact that the past two aerial sprays in Monterey, and the one in Santa Cruz County, were a waste of time and money. Not to mention the tragedy of the many severe health reactions experienced by thousands of people from chemical exposure. It doesn't matter to those in charge at the CDFA, EPA, or USDA, if a new chemical is needed to be used, because the goal is not to stop the moth, the moth cannot be stopped, it can only be controlled. This is known. The goal may be to coat people with a toxic mesh of disease causing microcapsules.

The chemicals that were sprayed, and that are planned on being sprayed, have not undergone thorough safety evaluations. And they won't undergo such evaluations in a legitimate way, because if they did, they would prove only one thing - that these chemicals are potentially deadly.

The chemicals planned to be sprayed will no doubt be similar to the ones used in Santa Cruz and Monterey Counties in 2007. They are a plastic encapsulated microtechnology, a microscopic plastic dust. The reported microcapsule size of the aerial mating disrupter is as small as 10 microns and averages 25-35 microns in size for an undeployed moth spray. For comparison, a human hair is approximately 70 microns in thickness. The size of these chemical containing plastic balls comes suspiciously close to micro-sized particles that are used to evade the body's defensive systems for biological weapons, those are reported to be 3-4 microns in size. Miniature particles between 2.5-10 microns in size, especially from pesticides, are known to cause both short term and long term health effects, including decreased overall life span.

A University of California at Davis report confirmed that some unsprayed and undegraded microcapsules are indeed 10 microns in size. The small particle size explains the severe reactions, that I, along with countless others have had when being exposed to minute dosages of the chemical. Minute dosages of chemicals designed for moth's, advertised as harmless, *do not accidentally make people sick*. In other words, the people who designed these chemicals and manufactured them had to have an intimate understanding of what each chemical does, and how they react with each other. So, too, should the EPA have this understanding. It is not unreasonable to assume that a chemical designed to stop moths, that is being sprayed on humans, would have such drastic health effects, but it does. The only conclusion is that this is intentional in the design. Imagine someone designing a "safe" car. If this "safe" car had no brakes, then nobody would assume that the car accidentally had no brakes. Likewise, chemicals designed for moths, in minuscule doses, cannot accidentally harm people. It is more than just chance.

Again, nobody in the public as of yet knows how small the degraded microcapsules are, or how this will effect people in the short and long term, because no such testing exists. Once sprayed, these microscopic balls can easily enter deep into the mouth, eyes, skin and lungs. Even after 90 days and several rains, some people in Santa Cruz and Monterey Counties are still experiencing symptoms of spray poisoning. When they leave the counties, their symptoms many times abate. This aerial program is a real sword through the heart of democracy and decency. The government has really gone too far and it must be stopped now.

I must inform you that through a freedom of information request, a local newspaper has learned that the CDFA has hired media spin doctor extraordinaire Porter Novelli at the tune of almost \$500,000 tax payer dollars to convince the public that it is okay for the state to dump chemicals all over them, their gardens, their pets, and their neighbors. The state of California is in a budget crisis, and this is one example that explains why. Here the state is using tax payer dollars to lie to and mislead the public, to try to convince the public that the state should be spending millions of dollars of resources on polluting the air, sea, and land with chemicals that the public in general does not want or need. Since a majority of spray funding is coming from the federal arm, know that your tax paying dollars are going to a government sponsored large scale crime.

Originally, the USDA announced that the moth might cause \$100 million in crop damage if allowed to multiply. Then they keep expanding their figures to create false reasons to justify this unethical chemical assault. The most recent estimate of LBAM damage is \$160 million to \$640 million just in California. Mind you this moth has a hard time finding its way into crop fields and seems for some very bizarre reason to live only in cities. The estimate of this level of crop damage is absurd. The figures used to estimate the damage came from one particular year in Australia and have little meaning in California, as the climate is different. Even if this \$160 million crop loss did come true, one has to consider that \$90 million has now been earmarked to contain the moth, primarily the funds are for aerial spraying chemicals on cities which contain people, and not crops like apples, oranges and grapes. One expert estimates that if the CDFA stays on this track, by the time the aerial treatment is complete after five years, close to \$500 million will be spent on aerial eradication. With little to no impact on the apple moth population.

The pheromone being used, (E)-11-Tetradecen-1-yl Acetate is identical to pheromone's which many native moths and perhaps other species also contain. So this spray will effect other non-target species. The pheromone only represents between 10-20% of the ingredients of the aerial spray.

Now, organizations like the Breast Cancer Fund, Center For Environmental Health, Calpirg, and the Sierra Club are issuing statements opposed to aerial spraying.

### **What to Expect Next**

The CDFA, USDA, and EPA will do anything and everything to convince, lie, cajole and get people to agree with the plan to spray chemicals. The facts of this situation are irrelevant to those in charge because the goal is to spray people, not to operate under the laws of this constitutional government of checks and balances. They are going to go to meetings, pretend it is safe, have doctors testify it is safe, pretend to listen to the public, ignore any health complaints, and try to lull people into complacency on the matter. They have even gone as far as promising an environmental review, which will contain a giant pile of documents again to try to prove that it is okay to spray people with chemicals. The CDFA will continue to find more moth finds, and create more fake evidence of how much harm the moth will do. They will get more money from Mr. Bush's pesticide funds and continue to enlarge their aerial spray program. Strangely the moth will continue to spread, finding its way into other cities, and in the coming years, cities like Los Angeles and San Diego will be targeted.

Knowing that the government is actively lying, hiding evidence, manipulating the public, and that they are spraying chemicals illegally on people should be enough evidence to convict these felons under Racketeer Influenced and Corrupt Organizations (RICO) laws.

### **Freeing Yourself From the Government's Pro Spray Propaganda**

These 643 health injury reports represent a fraction of the real injuries. The actual spray has surely caused thousands to be poisoned from this biochemical formulation. See my related article ([www.naturalnews.com/022434.html](http://www.naturalnews.com/022434.html)) . Despite these reports which include 330 official illness claims filed with the CDFA, the CDFA states the following lies on their website, "Pheromones are extremely safe" and "Public safety is the primary concern." The statement that pheromones are safe is a misleading distorted truth. Sure, pheromones can be safe when used responsibly, for example a benign moth sticky trap in an apple orchard (away from people) that contains pheromones to attract the moths. But when you create a microscopic biodegradable ball of volatile chemicals, and then place within it a synthetic moth pheromone, which itself is described as an explosive chemical, you have more of a drug which can interact and create changes within the human body, than a pesticide. Furthermore, no thorough investigation has been done of these 330 official illness complaints, and some of these people have not yet recovered. And a further investigation won't be done, because a legitimate investigation would find that the spray made people sick, and thus, the aerial spray program would be halted.

One must realize that any documentation regarding the safety of pheromones reported is from non-aerial applications, such as a moth sticky trap that is scented with pheromones and stuck on a tree, or a pheromone laced twist tie applied to apple orchards or vineyards. These safety assertions also do not

relate to the aerial method of application. A sticky trap laced with pheromones is a different entity than a microscopic ball that can easily enter the body and then biodegrade and release chemicals within the body. Part of the less dangerous aspect to pheromone laced traps is the fact that the pheromone is so volatile that it rapidly evaporates, so the chemical won't travel too far. The microcapsules are the opposite, they are designed to stick around in the air for months. They are infinitely more dangerous than sticky traps, and you cannot really compare them. It's like saying that a tank is the same as a motorcycle because they are both vehicles. Microcapsulated pheromones are a different beast than pheromone laced moth traps.

The newly designed chemicals, which are scheduled for June and August deployment will not have their ingredients disclosed to the public. We do not even know what this stuff is? How can the government say the chemicals are safe, and then hide the ingredients from scrutiny? If these chemicals are so safe why not tell us honestly what they are? Clearly the intention of the CDFA, USDA, and EPA, is to cover up the real nature of this biochemical assault. They are trying to hide what they do from the public's eye. They do not want you to know the truth. The truth is people get sick. Not everybody gets sick from the moth spray, but many people do. Its effects can be strong and violent. The truth is, the US Government is a vehicle being used to poison us.

The CDFA reports that they want their newest moth weapon deployed this summer, to be even longer lasting, which to me means that the microcapsules will be even more dangerous, possibly indefinitely sticking in the environment, and irritating people's sensitive ducts and glands; much like allergies from pollen. In each aerial application, spray planes are contracted through Dynamic Aviation ([www.dynamicaviation.com/home.htm](http://www.dynamicaviation.com/home.htm)), which has other specialties beyond aerial application of pesticides. They also do "Intelligence, Surveillance and Reconnaissance." The spraying is conducted at a height of between 500-800 feet and residents in the sprayed area report feeling like they are in a war zone. Once in contact with residential neighborhoods, parks, and playgrounds, the balls slowly disintegrate over time. The hope is that during this time, they release pheromones and limit the moth's mating patterns. Again, this is a whimsical hope because no legitimate studies exist proving this new technology is effective at either releasing pheromones, or at stopping the moth's mating habits.

Typically a drug takes many years for the Food and Drug Administration to approve for safety for humans. Under an emergency declaration, the EPA can exclude new chemicals from rigorous testing. The catch to this exception is that these laws were designed for agricultural emergencies and are being violently misused because they are planning on spraying large urban populations and not agricultural zones. These laws cannot lawfully apply to cities. Among other things, we have legal control and authority of our bodies, and our properties. We can say "No" to the spray, and if necessary, defend ourselves from this highly toxic assault. The EPA and USDA have flagrantly crossed legal and ethical boundaries by applying laws designed for agricultural fields to densely inhabited city centers.

Further, consider that the testing of these chemicals is not done to make sure that it is safe for humans, as the safety is merely an untested assumption. As an example, it took several months after the first aerial spray of Monterey County for the CDFA to pay the University of California Davis to see if the Checkmate formula was toxic to certain very small ocean insects. It took several months for this first test of the Checkmate formula to be conducted. This test only happened after the chemical was sprayed on well over two hundred thousand people. The testing being conducted in New Zealand is not to ensure safety for humans, but to see if the mating habits of the moths are disrupted. This spraying is illegally approved by the EPA because Congress passed legislation to legally prevent the EPA from conducting human experiments. "EPA's rules make it clear that all pregnant women, all nursing women, and all children are excluded from all studies involving intentional exposure that are intended for submission under the pesticide laws." ([www.epa.gov/oppfead1/guidance/human-test.htm](http://www.epa.gov/oppfead1/guidance/human-test.htm)) **If the EPA cannot test pesticides on pregnant women, nursing women, and children, then under what jurisdiction and authority can they simply endorse and approve the exposure of pregnant women, nursing women and children with untested pesticides?**

How many more children do we need to see poisoned by these indefensible government actions until we wake up and say, *enough!* How many more of our friends, relatives and neighbors do we need to see



develop chronic health conditions due to exposure to aerially sprayed chemicals until we take effective action to stop this insanity? How much longer are we going to allow the government that is created for the people, to represent the people, to break its own laws and poison its own people and then disregard any reported health concerns?

I call for the arrest and trial of the appropriate employees in the CDFA, EPA, and USDA, for conspiring to poison people of the State of California, for lying and deceiving the public, and for polluting our environment ([Natural News, 2008](#)).

**Title:** Drone Technology Could Be Used To Spray Bioweapons

**Date:** October 12, 2011

**Source:** [Bio Prep Watch](#)

**Abstract:** Experts have warned that as remote-controlled drone technology produces smaller and cheaper units, terrorists could seek to use them to potentially spray biological weapons.

The U.S. military is currently the undisputed leader in drone warfare, but many world powers are quickly acquiring and adapting the technology, which presents a challenge to American security experts, according to [TheAustralian.com.au](#).

"I think of where the airplane was at the start of World War I: at first it was unarmed and limited to a handful of countries," P. W. Singer, the author of the book *Wired for War*, said, [TheAustralian.com.au](#) reports. "Then it was armed and everywhere. That is the path we're on."

The recent arrest of Rezwan Ferdaus, a 26-year-old man accused of plotting to fly an explosives-laden remote controlled airplane into the U.S. Capitol, shows that a scenario where an unmanned vehicle could be used to attack a city is not farfetched.

To date, only the United States, Israel and Britain are thought to have used drones for air-to-ground strikes, but more than 50 countries have bought or developed their own unmanned aerial vehicles, according to the [New York Post](#).

The same qualities that make U.A.V.'s appealing to the Obama administration for counterterrorism make them appealing to the terrorists themselves. They can be used for surveillance or strikes, are cheap and no danger is posed to their operator, who could be located on the other side of the world ([Bio Prep Watch, 2011](#)).

**Title:** Texas Nearly Ends Rabies With Aerial Vaccine Drops

**Date:** January 18, 2012

**Source:** [Fox News](#)

**Abstract:** Three King Air planes are lined up on a small runway in the town of Del Rio preparing to bomb south Texas—not with explosives, but with hundreds of thousands of packets of rabies vaccine. The packets, each about the size of fast food ketchup, contain enough vaccine to inoculate the coyotes that roam the southwest Texas brush country against rabies, which until the last two decades was threatening livestock and humans alike.

"We had two outbreaks of rabies in coyotes and in foxes," recalls Dr. Ernest Oertli, a veterinarian who works with ranchers in this area. "There were a couple of human deaths from rabies, and it was spreading northward and eastward into the populated parts of the state, and was on the outskirts of San Antonio, Austin, [Waco](#) and Ft. Worth."



Oertli said that at the time, animal and human health experts were worried about an urban rabies epidemic, and were urgently telling residents to vaccinate their pets against rabies. Rabies in humans is almost always fatal unless the patient receives immediate and lengthy treatment.

A handful of human rabies cases are reported in the [United States](#) every year. A woman in South Carolina died from the disease in December and a case was recently reported in Massachusetts, both believed to be infected from bats.

Researchers with the [Texas Department](#) of State Health Services learned of an aerial vaccination program underway in [Canada](#), and decided to try it in the equally vast south and west regions of Texas. The results over the past 18 years have been dramatic, according to department spokesman Chris Van Deusen.

"Animal cases of the canine strain of rabies in southern Texas fell from 122 the year before the program began, to zero in 2000," Van Deusen said. "There have only been two cases since then, and both of them were within a mile of the Rio Grande."

He said the program is also concentrated against the fox strain of rabies, and those cases have been reduced from 244 animal cases in 1995, to zero cases in the past two years.

"We have effectively eliminated these two strains of rabies from Texas," Van Deusen said, adding that there have been no human cases of rabies in the region since the airdrop began.

"This is the same idea of the airborne attack against the Mediterranean Fruit Fly in California," Oertli said as he supervised the launch of the planes on one of the 12 flights they will make each day.

Flying at 500 to 1,000 feet elevation, they will drop a total of 1.8 million packets over about 7,700 square miles of rural south and west Texas before the program comes to an end later this month. The packets are dipped in fish oil and coated with fish meal to make them attractive to coyotes and foxes, which eat them and are automatically vaccinated.

"Now our goal is to put into place and maintain a barrier zone to prevent rabies from being reintroduced from [Mexico](#)," he said.

Over the 18 years of the program, a total of 36.7 million bait packets have been dropped. In the early years of the program, local media were asked to urge people in urban areas to watch out for falling bait and asked them not to touch the packets on the ground because animals could smell humans on the bait and would not eat it. Van Deusen said, as the rabies has been pushed back toward the Rio Grande and the operations now are taking place over largely rural stretches of west Texas, those warnings are less necessary.

Oertli said the idea of an aerial assault on rabies is spreading across the country. Health officials in several northeastern states are now using the same practice to fight against the spread of rabies in raccoons.

He noted that January is the best time to drop the bait in Texas for several reasons. Coyotes and foxes are short of food this time of year and are more likely to eat the bait, and spreading the baits makes them less susceptible to the roaming fire ants which crawl over everything in their path during hot weather.

"As a citizen, I am thrilled at what we have been able to accomplish with this program," Oertli said.

Now that fox and coyote rabies are nearly eradicated, crews are now planning a similar aerial assault against skunk rabies. He said a special bait packet has been developed for skunks.

Van Deusen stressed that the program is only successful because of laws requiring people who live in cities to vaccinate their pets against rabies.

"Vaccinating domestic animals is essential to stopping the spread of rabies," he said ([Fox News, 2012](#)).

**Title:** Vaccine Warfare! Texas Carpet-Bombs 7,000 Square Miles With Air-Dropped Rabies Vaccines

**Date:** January 19, 2012

**Source:** [Natural News](#)

**Abstract:** The weaponization of vaccines just took another leap forward in America with the recent air-dropping of rabies vaccines by the Texas Department of State Health Services. Using a battery of small planes based out of Del Rio, Texas recently dropped 1.8 million edible vaccine packets over 7,700 square miles of rural Texas.

The packets contain edible rabies vaccines dipped in fish oil and coated with fish meal to entice foxes and coyotes to eat them. Once consumed, the animal is "vaccinated" against rabies, researchers claim.

Of course, what these researchers don't yet understand in their scientific ignorance (and arrogance) is that they are also engaged in a rabies DNA / RNA bombardment of Texas. As even the Institute of Medicine has admitted, [MMR vaccines for use in humans actually cause measles](#) because many of the vaccines contain live viral strains.

Vaccine manufacturing is conducted under such poor quality control today that vaccines are routinely shipped out the door containing viable viral strains that often infect and sometimes even kill human victims. For example, in 2009 [Baxter Pharmaceuticals was caught red-handed](#) shipping out live avian flu viruses to 18 countries.

What Texas Dept. of State Health Services workers probably don't yet grasp is that vaccine manufacturers routinely use vaccines to spread the very disease they claim to be preventing. By injecting live rabies strains into a small percentage of the vaccines dropped on Texas (say, one percent), they are effectively engaging in a DNA carpet-bombing run that will absolutely guarantee rabies continues to remain endemic throughout feral animal populations in the state. This, of course, will result in yet more rabies vaccines being purchased to "combat the problem," thereby achieving the goal of the entire scam: To sell more vaccines to the government.

### **Vaccines become Weapons to be Inflicted on Innocents**

This air-dropping of vaccines over Texas is all part of the militarization of modern medicine taking place today. In just the past few months, we've seen the AMA calling for "mandatory participation" in vaccine trials, where you would be "volunteered" by the government to be injected with an experiment vaccine, at threat of arrest.

We've also seen cases where police have been called and CPS workers threatened to take children away from parents who refused to vaccinate their children (

The [Bill & Melinda Gates Foundation has already conducted bizarre experiments on genetically engineered mosquitoes that carry vaccines](#) to be silently injected into unsuspecting humans. And that same foundation has also invested heavily in covert vaccination technology that could, for example, vaccinate you with a spray mist used at airport security checkpoints.

As these examples show, vaccines are increasingly being used in the context of weapons: air-dropped, covertly injected or even forcibly injected at gunpoint. These are signs of a system of medicine that operates like a police state, where people are stripped of their rights and freedoms "for the good of society." The individual is sacrificed, in other words, to serve the interests of the state. Such a philosophy is fully consistent with the entire history of secret government-funded medical experiments against blacks

(Tuskegee), Guatemalans and even criminal [medical experiments involving Dr. Jonas Salk](#) and the polio vaccine.

Here's a list of just a few of the criminal, inhuman medical experiments that have been conducted on innocent people by the U.S. government:

All this adds up to classic eugenics -- especially given that vaccines in humans are strongly tied to lifelong infertility, spontaneous abortions and birth defects. It's all part of a human de-population agenda that [Bill Gates has openly admitted](#) to in his public speeches about "reducing world population" with the help of vaccines.

### **The Law of Unintended Consequences will come back to Haunt Texas**

The state of Texas, of course, claims its air-dropped rabies vaccines have been a huge success. Rabies cases have plummeted in every area targeted by the vaccine carpet-bombing runs, they insist. But even if you believe those numbers, you must ask: At what cost?

What are the unintended consequences of air-dropping viral fragments of rabies over 7,000 square miles of open terrain? Engaging in such an act is just *begging to be humbled by nature* as that viral material gets recombined into some other deadly pathogen that exists in the wild, creating a hybrid "Franken-virus" that never would have existed without this arrogant "scientific" intervention. Can you imagine a "rabies bird flu pandemic?" Mother Nature can!

Add to this the fact that many deer in Texas are being fed genetically modified corn (GMOs), and you now have engineered genetic material from bt corn residing in the flesh of deer that might be consumed by the very same coyotes who are eating the air-dropped rabies vaccines. What might be the consequences of such a dangerous genetic experiment involving tens of thousands of animals in the wild?

No one knows. And that's the point, because the Texas scientists don't know either. They were all educated at Texas A&M which is still stuck in the era of chemical agriculture, and they think spraying everything with Roundup is the solution. (Seriously, Texas A&M graduates are totally infatuated with the use of chemical pesticides on everything...) They don't know anything about the dangers of GMOs, nor the recent research [published in Cell Research](#) that shows how microRNA (small fragments of genetic code) can pass through the digestive system, attach to organs such as the liver, and alter the physiology of those organs.

These "scientists" do not know what they are doing. They are narrow-minded and short-sighted. They play God with Mother Nature and hope they don't make a mistake. They risk the future integrity of Texas agriculture and wildlife on their bizarre Frankensteinian schemes that run the risk of wreaking total havoc with the biosphere. They are, like most other conventional scientists, blinded by their arrogance.

It's too late to stop them, of course. This program has been going on for 18 years, they say. And they claim it's an amazing success! It's so successful, in fact, that now they're moving on to develop an airdrop vaccine for *skunks*. So in 2012 and beyond, they'll be carpet-bombing Texas with skunk rabies vaccines.

Gee, did they ever consider the possibility that the reason skunks have so much rabies is because they've been dropping rabies DNA / RNA onto the landscape for nearly two decades? And after they treat the skunks, they still have a long list of animals to target with yet more vaccines, see? What about a raccoon vaccine? How about wild pig vaccines? Deer vaccines? At what point does this effort vaccinate all the wild animals of the world ever end?

If they keep this up, before long Texas will become a DNA battlefield where the entire natural ecosystem is massively contaminated with genetic intervention at every level.

But of course, it keeps the vaccine companies in business, doesn't it? And as [Rick Perry proved with his](#)

[HPV Gardasil scandal](#), Texas loves to force vaccines on innocent people while collecting payoffs from the drug companies that make them.

You can bet someone in the Texas Department of State Health Services is receiving a nice, fat payoff for all this [\(Natural News, 2012\)](#).

# Bio Terror Bible

## EXPOSING THE COMING BIO-TERROR PANDEMIC

**BIOTERRORBIBLE.COM:** If and when a full-scale bio-terror attack occurs, the live pathogens or agents responsible for the pandemic will likely be dispersed via A) [chemtrails](#) by government [airplanes or drones](#), B) by the [U.S. Postal Service](#) via [Tide detergent samples](#), C) by the government and medical establishment via [tainted vaccines](#), or by D) the portable petri dish commonly known as a [Trojan condom](#).

Recent news and events related to airplanes and drones suggests that it is possible that aerial spraying vehicle could be used in a biological attack on an unsuspecting public, especially if they refuse to line up and take the deadly vaccines. Chemtrails, the name given to toxins emitted from aerial machines such as drones, planes and rockets, is a cocktail of deadly toxins which could be further laced with a bio-terror pathogen.

**Title:** Chemtrails Conspiracy Theory

**Date:** 2012

**Source:** [Wikipedia](#)

**Abstract:** The chemtrail conspiracy theory holds that some trails left by aircraft are actually [chemical](#) or [biological agents](#) deliberately sprayed at [high altitudes](#) for purposes undisclosed to the general public in clandestine programs directed by government officials. This theory is not accepted by the scientific community, which states that they are just normal [contrails](#), and that there is no scientific evidence supporting the chemtrail theory.

As a result of the popularity of the conspiracy theory, official agencies have received thousands of complaints from people who have demanded an explanation. The existence of chemtrails has been repeatedly denied by scientists around the world, who say the trails are normal [contrails](#).<sup>[3]</sup> The [United States Air Force](#) states that the theory is a hoax which "has been investigated and refuted by many established and accredited universities, scientific organizations, and major media publications". The United Kingdom's [Department for Environment, Food and Rural Affairs](#) has stated that chemtrails are not scientifically recognized phenomena. The Canadian [Leader of the Government in the House of Commons](#) has rejected the idea of chemtrails as being a "popularised expression", adding that "there is no scientific evidence to support their existence."

The term chemtrail is derived from "chemical trail", in the similar fashion that contrail is a [portmanteau](#) of [condensation trail](#). It does not refer to other forms of aerial spraying such as [crop dusting](#), [cloud seeding](#), [skywriting](#), or [aerial firefighting](#). The term specifically refers to aerial trails allegedly caused by the systematic high-altitude release of chemical substances not found in ordinary contrails, resulting in the appearance of characteristic sky tracks. Supporters of this conspiracy theory speculate that the purpose of the chemical release may be for [solar radiation management](#), [population control](#), [weather control](#), or [biological warfare/chemical warfare](#) and claim that these trails are causing respiratory illnesses and other health problems ([Wikipedia, 2012](#)).

**Title:** Denying Chemtrails Is Dangerous For Your Health

**Date:** March 17, 2012

**Source:** [Natural News](#)

**Abstract:** Statistical evidence shows that lung issues such as asthma and COPD have risen considerably over the past two decades. While there may be a few factors behind this, hardly anyone includes chemtrails as one of them.

Scientists and governments have allowed some "limited hangouts" (partial disclosures) on chemtrails or stratospheric geo-engineering, framing it as "experimental." They openly discuss geo-engineering as "potential" solutions for weather control and protection against global warming.

Apparently, they've been doing a lot of open "experimenting" since the early 1990s. They don't really have to deny much. There's plenty of denial from those on the ground who don't look up to see anything different. Or upon noticing chemtrails, they will argue that they are contrails.

There are even internet pages devoted to "scientifically" debunking chemtrails as erroneous conspiracy theories, similar to "Quackwatch" sites that go after medical practitioners who successfully treat disease without drugs.

### **The Obvious differences between Chemtrails and Contrails**

Contrails appear from aircraft propulsion systems of all types at stratospheric altitudes, 30,000 to 40,000 feet up. They are exhaust vapors that become ice crystals in high altitude, low pressure frigid air.

Contrails are harmless and dissipate quickly. They don't linger. They usually extend from 20 to 50 plane lengths behind the aircraft. They are very white and somewhat thinly textured. Sometimes high altitude planes can be seen as silver specks without any trail at all. Chemtrails, however, are very different.

Chemtrails often extend from one horizon to the other. They tend to be thicker and wider than contrails, and their white plumes can be tainted with slight discolorations. **Chemtrails linger for hours or whole days.**

They tend to fan out and mingle with themselves or actual clouds, forming larger clouds or a haze that covers the sky. At higher ground levels, they can be observed drifting downward to earth.

Their paths do not correspond with normal commercial airline flight paths. They often turn around and continue their smoky plumes. Sometimes they will create grid patterns or Xs. See examples here (<http://youtu.be/eEFITGpXwZk>).

Do you recall meeting other aircraft while on a commercial flight, and deviating from the prescribed route to doodle in the sky with the other planes? Of course not. Chemtrails are usually emitted by non-commercial planes.

### **Back on the Ground**

Several sky watchers throughout the world have had residue samples analyzed after collecting them in water containers, air traps, and on shrubby twigs. **They have all come up with two common elements: barium and aluminum.**

Barium is very toxic. Reportedly, it was sprayed from aircraft during Gulf War I to weaken the enemy on the ground. Some consider barium salts more toxic than lead. It affects the lungs directly.

Aluminum is a toxin that leads to dementia and neurological diseases. The nasal passages and lungs enable aluminum to have easy entry into our blood streams and affect tissues, including the heart and brain.

Even if not breathed in to cause immediate respiratory and other long term health problems, these

two metals are absorbed into drinking water and crop soils. Interestingly, Monsanto has recently genetically engineered an aluminum resistant gene that can be inserted into crop seeds.

A pathogen has been found in some chemtrail analyses. *Mycoplasma Fermetens Incognitus*, which was observed to be in half the Gulf War Syndrome victims by Dr. Garth Nicholson.

The first thing to do is **take time to observe and recognize the differences in aircraft trails**. Research more, starting with source links below, while detoxing metals regularly. Then get involved on some level to help curb chemtrail activities ([Natural News, 2012](#)).

**Title:** What In The World Are They Spraying?

**Date:** December 20, 2010

**Source:** [YouTube](#)

**Title:** Aerosol Crimes

**Date:** December 17, 2010

**Source:** [YouTube](#)

**Title:** Government Admits Secretly Spraying Poison On Us!!!

**Date:** December 10, 2011

**Source:** [News 12](#)

**Title:** Spraying San Francisco, Exposing The Geo-Engineers.

**Date:** January 13, 2012

**Source:** [YouTube](#)

**Title:** US-Military Weather Warfare Chemtrails Aerosol Crimes Explained

**Date:** November 14, 2011

**Source:** [Massachusetts School Of Law](#)

**Title:** US-Military Weather Warfare Chemtrails Aerosol Crimes Explained

**Date:** March 19, 2008

**Source:** [YouTube](#)

**The following U.S. patents are in respect to chemtrail related technologies.**

**United States Patent and Trademark Office:** Click [here](#) in order to execute a number search.

1338343 – April 27, 1920 – Process And Apparatus For The Production of Intense Artificial Clouds, Fogs, or Mists

1619183 – March 1, 1927 – Process of Producing Smoke Clouds From Moving Aircraft

1631753 – June 7, 1927 – Electric Heater – Referenced in 3990987

1665267 – April 10, 1928 – Process of Producing Artificial Fogs

1892132 – December 27, 1932 – Atomizing Attachment For Airplane Engine Exhausts

1928963 – October 3, 1933 – Electrical System And Method



1957075 – May 1, 1934 – Airplane Spray Equipment

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# Bio Terror Bible

## EXPOSING THE COMING BIO-TERROR PANDEMIC

**BIOTERRORBIBLE.COM:** If and when a full-scale bio-terror attack occurs, the live pathogens or agents responsible for the pandemic will likely be dispersed via A) [chemtrails](#) by government [airplanes or drones](#), B) by the [U.S. Postal Service](#) via [Tide detergent samples](#), C) by the government and medical establishment via [tainted vaccines](#), or by D) the portable petri dish commonly known as the [Trojan condom](#).

As the legend [states](#), a massive wooden horse was once used by the Greeks defeat the people of Troy by hiding a deadly surprise (soldiers) inside the "Trojan" horse itself.

Condoms, which are usually free to the public in most inner city clinics, colleges and universities, provide the perfect way for rogue governments or corporations to infect millions of people with a deadly disease without the public suspecting a thing.

**A condom is quite similar to a petri dish in that it is:**

1. Shallow
2. Plastic
3. Sealed
4. Storable at room temperature
5. Could allow for the culture of bacteria

While there is no conclusive evidence to date that condoms are laced with bacteria, STD's or bio-terror pathogens, it is theorized that if a government wanted to start a pandemic, lacing a few thousand condoms with a biological agent would be one way to do it. The following two news reports is a recent example of how it a pandemic could start based on condom usage.

**Title:** Rio Faces Dengue Epidemic: Brazil Health Minister

**Date:** February 16, 2012

**Source:** [France 24](#)

**Abstract:** Brazilian Health Minister Alexandre Padilla on Thursday warned that Rio de Janeiro faced a major dengue epidemic, although he said the virus strain prevalent was not fatal.

"I believe that Rio could this year face one of the worst dengue epidemics in its history, in terms of number of cases," he said in a television interview.

Padilla said the dengue virus strain prevalent in Rio was not the most serious and was not fatal.

The official Agencia Brasil said since the start of the year, 3,499 dengue cases have been recorded in Rio, compared with 2,322 last year, but none were fatal.

The government said that nationally cases dropped 62 percent this year to 40,486.

Dengue affects between 50 and 100 million people in the tropics and subtropics each year, resulting in fever, muscle and joint ache.

But it can also be fatal, developing into hemorrhagic fever and shock syndrome, which is characterized by bleeding and a loss of blood pressure.

The news comes as Carnival frenzy sweeps Brazil and the South American powerhouse prepares for a week of sizzling samba dancing, glittering parades and unabashed merry-making in Rio and other cities ([France 24, 2012](#)).

**Title:** Brazil Plans Giveaway Of 3 million Free Condoms For Carnival Revelers

**Date:** February 17, 2012

**Source:** [CNN](#)

**Abstract:** Revelers in Brazil's most famous city will enjoy more than just sun, live music and dancing when Carinval festivities start this week. Rio de Janeiro state officials are also giving away 3 million free condoms.

The new government initiative aims to stop the spread of AIDS and other sexually transmitted diseases during the five-day event, the state health department said.

This year's campaign targets gay men between the ages of 19 and 24, Brazilian Health Minister Alexandre Padilha said, according to state-run Agencia Brasil.

"There is a new generation that has not had the experience of seeing idols who fought at the beginning of the AIDS (epidemic) and who died, and therefore (they) are less sensitive to the risks of HIV infection," Padilha said, referring to two Brazilian rock stars who died of AIDS in the 1990s.

In addition to condoms, health officials also plan to hand out 330,000 paper fans with catchy slogans against STDs, 55,000 small bags party-goers can use to carry condoms and more than 160,000 informational pamphlets to crowds at samba dance performances and block parties during the legendary annual celebration.

Other major cities in the country will have similar programs, according to Agencia Brasil. Sao Paulo, Salvador and Florianopolis have entered into partnerships with block parties and artists.

Tents also will be set up throughout the cities to perform rapid testing for HIV and hepatitis.

Despite widespread awareness of condoms, 40% of young people in Brazil do not use condoms in all sexual relations, according to the health department ([CNN, 2012](#)).

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Recent news and events in respect to Tide detergent thefts and allegations that Tide detergent samples could contain Anthrax spores, may indicate that Tide products may be used for sinister purposes in the near future. These free samples are plastic, sealed and could be theoretically be laced with Anthrax. Tide samples are sent out all over America, and if tainted, could potentially infect millions of people.

By dispersing highly contagious pathogens via the U.S. Postal Service, the bio-terror pandemic will appear highly contagious and able to spread great distances without intimate contact. One the public panic is in play, people will line up all across America to take the tainted vaccines which will ultimately be the cause of millions of deaths.

**Title:** Tide With Anthrax: Urban Legend Again Making The Rounds

**Date:** January 6, 2012

**Source:** [KRTV 3 News](#)

**Abstract:** Last year during the first week of January, we received several comments on the [KXLH Facebook page](#) about whether we know anything about samples of the laundry detergent Tide being contaminated with anthrax.

"My mom just gt a forward saying that theres anthrax in tide samples coming in the mail....do you know if its true?"

Have you heard anything about Anthrax poison in the Tide packet being sent in the mail. CNN has reported that just want to know if it true!"

And this year - again, during the first week of January - the number of search queries about this urban legend have spiked.

You can relax and continue doing the laundry: there are no reported instances of Tide - or any other common household cleaning products - being contaminated with anthrax.

This urban legend has been making the rounds via e-mail for several years, and started shortly after the real anthrax attacks in 2001.

**For some reason, it has started circulating again - this time via e-mail, text message, and online forums - as [reported at Snopes.com](#), one of the leading sites in debunking urban legends:**

"A variant of this scare which began circulating in mid-2010 cautioned about mailed samples of Tide brand detergent supposedly containing anthrax. In January 2011, that scare was spread by text messages sent to cell phones, some of them asserting "It was on CNN today!"

**Here are several variants of the message, as reported on the [Urban Legends section of About.com](#):**

"IMPORTANT FWD: Anthrax poison in Tide detergent packs coming thru the mail do not open or use. 7 ppl dead already. Plz pass it on!!!

Anthrax Poison in Tide Detergent packs coming thru the mail do not open or use. 7 people dead already. Please pass it on. IT WAS ON CNN

Just got a forward saying "Anthrax poison in Tide detergent packs coming thru the mail. Do not open or use, 7 people dead already. Please pass this on. It was on CNN yesterday." Has anyone else heard this?"

I was informed that if you get any Tide samples don't open it. Its contaminated with Anthrax. 7 people have died so far. CNN is reporting don't open any sample of washing powder.

**So many people have fallen victim to believing that the message is true that even Tide officials weighed in last year, posting on a Tide online message board (since deactivated):**

All,

As many of you have noticed, the Tide Anthrax Hoax message has started to circulate again.

I would like to confirm that this is definitely a hoax, any Tide samples coming through the mail are completely safe.

We appreciate your support in helping us eliminate this rumor by sharing the fact that it is a hoax or directing people to this page for more information.

If you are concerned or want further reassurance please contact our Consumer Relations team on: 1-800-879-8433.

Many thanks,

Mandy

[\(KRTV 3 News, 2012\)](#).

**Title:** "Anthrax In Tide Detergent" Rumor Is Just A Hoax

**Date:** January 7, 2011

**Source:** [Examiner](#)

**Abstract:** A rumor being seen on social networking sites like Twitter and Facebook is absolutely false according to a Proctor and Gamble representative.

The rumor that is being spread is that Tide samples have been sent out which contain the bioterrorism agent, [anthrax](#), which has killed at least 7 people. It has even been claimed that it was reported on CNN. A search of the CNN website came up empty of such a story.

**According [to a statement](#) from one P&G employee:**

"I work for the Tide brand, I can 100% confirm that the text message going around is not true. From time to time people do this kind of thing as a prank, unfortunately there is little we can do other than to share the fact that this is completely unfounded. If you are concerned or want further reassurance please contact our Consumer Relations team on: 1-800-879-8433" ([Examiner, 2011](#)).

**Title:** Anthrax In Tide Urban Legend Resurfaces

**Date:** January 10, 2012

**Source:** [Bio Prep Watch](#)

**Abstract:** An urban legend about the existence of samples of Tide laundry detergent containing anthrax has resurfaced again in internet queries and online forums.

Despite there being no reported instances of Tide or any other household cleaning products being tainted with anthrax, the legend has resurfaced via email, text message and social media websites, according to [KRTV.com](#).

The first instances of the rumor are believed to have occurred shortly after the 2001 anthrax attacks. The legend faded, only to resurface again nearly a decade later.

"A variant of this scare which began circulating in mid-2010 cautioned about mailed samples of Tide brand detergent supposedly containing anthrax," [Snopes.com](#), a website dedicated to debunking urban legends, reports. "In January 2011, that scare was spread by text messages sent to cell phones, some of them asserting 'It was on CNN today!'"

Tide officials, concerned by the potential negative impact of the rumors, released a statement in order to reassure customers that their product was entirely safe.

"As many of you have noticed, the Tide Anthrax Hoax message has started to circulate again," a Tide public relations official said, [KRTV.com](#) reports. "I would like to confirm that this is definitely a hoax, any Tide samples coming through the mail are completely safe" ([Bio Prep Watch, 2012](#)).

**Title:** Police Take On Rising Wave Of Tide Detergent Theft

**Date:** March 12, 2012

**Source:** [Fox News](#)

**Abstract:** Law enforcement officials across the US have been left baffled by a crime wave targeting an unlikely item -- Tide laundry detergent.

Theft of Tide detergent has become so rampant that some cities are setting up special task forces to stop it and retailers like CVS are taking special security precautions to lock down the liquid.

One Tide thief in West St. Paul, Minn., stole \$25,000 of the product over 15 months before he was arrested last year.

"That was unique that he stole so much soap," said West St. Paul Police Chief Bud Shaver.

"The name brand is [all] Tide. Amazing, huh?"

Tide has become a form of currency on the streets. The retail price is steadily high -- roughly \$10 to \$20 a bottle -- and it's a staple in households across socioeconomic classes.

Tide can go for \$5 to \$10 a bottle on the black market, authorities say, and some thieves even resell it to stores.

"There's no serial numbers and it's impossible to track," said Detective Larry Patterson of the Somerset, Ky., Police Department, where authorities have seen a huge spike in Tide theft. "It's the item to steal" ([Fox News, 2012](#)).

**Title:** Police Say Reports Of Nationwide Spike In Tide Thefts Doesn't Wash

**Date:** March 13, 2012

**Source:** [Fox News](#)

**Abstract:** Police and retailers are pushing back against a report claiming that theft of Tide laundry detergent is on the rise nationwide and that some cities are devising special task forces to crack down on the alleged phenomenon.

The Daily, an iPad publication, reported Monday that authorities from New York to Oregon are combating a new wave of Tide theft at popular retail stores, like CVS and Walmart. The story quickly spread virally across the Internet, and was even the subject of a segment Tuesday on [ABC's "Good Morning America."](#)

While police acknowledge that name-brand household items are commonly swiped from store shelves, authorities in at least two states referenced by the publication say they have not seen a specific rise in stolen Tide detergent.

Lt. Matt Swenke of the West St. Paul Police Department in Minnesota described laundry detergent as a "needed commodity" – much like baby formula and toilet paper – that he said is often a target for shoplifters looking to profit by reselling the items to privately-owned retail stores.

He referenced one case of a man suspected of stealing \$25,000 worth of Tide detergent from a Walmart in West St. Paul over a 15-month period. He said the man, identified as 53-year-old Patrick Costanzo, was seen on [surveillance video](#) stocking up his shopping cart with various items, including Tide, and walking out of the store without paying.

But, Swenke said, "We haven't noticed anything in terms of this being a rising problem." He said of the five major retailers in the West St. Paul area, only one store – Walmart – came forward to police about thousands of dollars of missing Tide inventory believed to have been taken by Costanzo.

"As of yet, we have not been contacted by any of our larger retail establishments," Swenke told FoxNews.com. "I don't know any other jurisdictions in Minnesota that have had that volume."

Authorities in Kentucky also backed away from the claim that Tide theft is on the rise.

Lt. Shannon Smith of the Somerset Police Department recalled a case from 2011 in which three individuals were charged with shoplifting from Cincinnati-based Kroger stores as well as from a local Walmart. Smith says the alleged shoplifters made off with several items, including Tide detergent, and then sold them on the black market to small, privately-owned stores.

"People are stealing to resell the items to other less professional retail establishments," he said.

Smith and other law enforcement officials acknowledge that name-brand goods, like Tide, are easily converted to cash on the black market. A \$20 shoplifted bottle of Tide, for instance, could be sold illegally for \$10 – more than the sale of a lesser-known, generic brand.

"Tide is highly recognizable," former FBI Special Agent Brad Garrett told ABC's "Good Morning America" on Tuesday. "It's very difficult to trace and it's easily resold."

"It's the demand that the retail establishments are putting out there on the black market that drives this whole thing," added Smith. "They can demand more money at the point of sale for a bottle of Tide than they can for a generic brand," he said, though he stressed that Tide theft, in particular, is no more widespread in the Somerset area than theft of other popular household items.

Retailers, meanwhile, also are denying reports of a new spike in stolen Tide products.

"We are not experiencing a 'wave' of Tide thefts," CVS/pharmacy public relations director Mike DeAngelis wrote in email to FoxNews.com.

"In a few markets, we've placed security devices on Tide bottles that will trigger an alarm if a shoplifter tries to remove it from the store without paying," DeAngelis said. "However, theft of Tide is not a new issue in the retail industry."

The Daily had no comment on the story. The Daily and FoxNews.com are both owned by News Corporation ([Fox News, 2012](#)).

**Title:** Tide Theft Tied To Drug Trade?

**Date:** March 13, 2012

**Source:** [ABC News](#)

**Abstract:** It's being called a "grime wave," a rash of thefts targeting Tide laundry detergent.

Near Minneapolis, cameras caught 53-year-old Patrick Costanzo stealing more than \$25,000 worth of the product over the course of 15 months.

"It's like he put the pieces in there like Tetris pieces. He maximized that cart, there's no wasted space," said investigator Sean Melville of the West St. Paul police.

Costanzo would load up his cart and push right past workers. He'd also take paper towels, soda and toilet paper.

"There's no way he can be using," said Melville. "I hope for his own sake he's not using that much toilet paper everyday."

Authorities finally put an end to the sudsy spree, but with a retail price from \$10 to \$20 this household laundry staple has become a kind of currency of the streets. It can sell on the black market for half the price and with no serial number it's impossible to track.

"Tide is highly recognizable, it's very difficult to trace and it's easily resold," said Brad Garrett, former FBI special agent.

According to law enforcement officials, the Procter & Gamble clothes cleaner has become part of the dirty drug trade. A recent drug sting in Maryland turned up more Tide than cocaine and according to police it was not just one guy, but an organization that would hit four to five stores a day.

"It may be more financially viable for the drug dealer to exchange Tide for drugs and then resell the Tide," Garrett told ABC News.

Using video surveillance and undercover officers, police in Prince George's County, Md., arrested 18 people after being contacted by a Safeway about thefts.



CVS stores have even put Tide on lockdown, saying drug users have targeted Tide in much the same way they have targeted flu medications ([ABC News, 2012](#)).

**Title:** Prince George's County Police Bust Tide Laundry Detergent Theft Ring

**Date:** March 23, 2012

**Source:** [CBS News](#)

**Abstract:** A bizarre theft ring is broken up by police in Maryland. Tide laundry detergent was stolen and sold on the black market. Thieves have been cleaning out stores across the country.

Kai Jackson has more on the arrests.

Across the country, thieves are targeting laundry detergent and other store items. But in Prince George's County, it was no clean getaway. The thieves were caught.

Laundry detergent is a key product in a major theft ring in Prince George's County.

Police seized \$125,000 worth of merchandise at a barber shop. Among the items confiscated was Tide detergent.

"There are some stores that will no longer sell the product because it gets stolen just that often," said Julie Parker, director of Media Relations for the Prince George's County Police Department.

In some cities, the detergent has become like liquid gold on the streets.

Over the years, the containers of suds have gotten bigger and more expensive. Police say the money made from selling it on the street is often used for drugs or simply to make a buck.

"If they're stealing it to sell, they must be trading the profit for drugs," East Baltimore resident Gloss Moore said.

Detergent may be popular among thieves right now but residents **WJZ** spoke with say anything of value could be a target during tough economic times.

"If there's a market for it, they're gonna take it and they're gonna try and sell it," John Manna, a resident of East Baltimore, said.

Some stores are considering putting sensors on laundry detergent and other store items to protect more of their merchandise.

Police say stolen detergent is so hard to trace because the bottles don't carry serial numbers ([CBS News, 2012](#)).

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**BIOTERRORBIBLE.COM:** If and when a full-scale bio-terror attack occurs, the live pathogens or agents responsible for the pandemic will likely be dispersed via A) [chemtrails](#) by government [airplanes or drones](#), B) by the [U.S. Postal Service](#) via [Tide detergent samples](#), C) by the government and medical establishment via [tainted vaccines](#), or by D) the portable petri dish commonly known as the [Trojan condom](#).

Recent news and events in respect to the U.S. Postal Service (USPS) and bio-terror indicate that the U.S. government will be using the USPS as either the deliverer of the initial bio-terror pandemic agent (the disease), the deliverer of the bio-terror vaccine (the cure), or both. Numerous drills in multiple states all indicate that the USPS will be used in a bio-terror pandemic and may have been funded and maintained specifically for this special occasion.

By dispersing highly contagious pathogens via the USPS, a pandemic will appear highly contagious and able to spread great distances without intimate contact. One the public panic is in play, people will line up all across America to take tainted vaccines that will likely result in the death of millions.

**Title:** Bioterror Drill To Test Distribution Of Drugs

**Date:** September 7, 2007

**Source:** [Boston.com](#)

**Abstract:** White cardboard boxes small enough to fit in a medicine cabinet will be delivered Sept. 23 to the mailboxes and doorsteps of more than 23,000 Boston households.

The packages will be empty, but the purpose of their delivery will be deadly serious.

The parcels will be tangible evidence of how effectively and swiftly antibiotics can be delivered if terrorists attack with anthrax. Boston will be the third US city to participate in such an exercise, pairing mail carriers, police officers, and public-health specialists.

The fake pill boxes will be delivered to every residence in two ZIP codes: 02132, in West Roxbury, and 02118, which covers most of the South End and a sliver of Roxbury.

The exercise will yield clues about how medication could be dispensed during other health emergencies.

"We feel that it is a way to get an initial push of life-saving medications out to residents on a very fast basis and allaying, hopefully, any sense of panic among the public," said John Jacob, acting director of the city's Public Health Preparedness Office.

Since the Sept. 11, 2001, terrorist attacks and the arrival of rogue letters containing anthrax a month later, big cities such as Boston have been engaged in campaigns to prepare for assaults involving biological

agents such as anthrax, plague, and tularemia. Antibiotics work stunningly well against those bacteria, but they have to be administered within 48 hours of exposure.

Typically, doctors would be loathe to even consider blanketing a city with drugs without first assessing patients individually. That would change, though, in the midst of a bioterror attack.

"Normally, we prefer to have a health professional do it, but when we're dealing with the prospect that there could be thousands or tens of thousands of deaths and speed could mitigate that, for me and many of my colleagues, the ethical calculus is pretty clear," said Dr. William Raub, science adviser to Mike Leavitt, US secretary of Health and Human Services.

In the event of a biological attack, cities would establish drug-dispensing centers in schools and community centers. In Boston, the city's Public Health Commission would open 30. But because it would take time to get those centers running, health authorities became intrigued by the possibility of using mail carriers to deliver an initial supply of antibiotics. The drug of choice against anthrax would be Doxycycline.

The federal government is underwriting the cost of the exercises, which cost "well under \$100,000" each, Raub said.

"The idea is you can hit a lot of households fast," said James Apa, communications manager for Public Health - Seattle & King County, where the first drill was held in Washington state in November. "It actually went quicker than expected; it ran ahead of schedule."

In Boston, more than 30 pairs of US Postal Service carriers and Boston police officers will venture onto the streets of the two ZIP codes at 7 a.m., Sept. 23.

Those two areas were selected because of their diversity and differences. In West Roxbury, the residents tend to be older, and mail is often ferried by vehicles. In the other ZIP code, carriers travel on foot, and, Jacob said, "the South End is just a really great, widely varied demographic."

Authorities decided to conduct the experiment on a Sunday, in part because they did not want to disrupt mail delivery on regular service days. They also figured that if terrorists struck, regular mail delivery would stop and people would stay indoors.

Health agencies quickly identified mail carriers as their best option for emergency deliveries, and the Postal Service agreed.

"Getting these medications out to people as fast as possible will be of utmost importance," said Bob Cannon, spokesman for the Postal Service in Boston. "The letter carriers know the streets, they know where the mailboxes are, they know how to walk these routes."

The mail service did have one major concern: the safety of their carriers if they're dropping off medication that could be widely coveted during an emergency. That's why a police officer is being paired with each letter carrier.

The boxes are meant to simulate containers that would carry 20 pills of Doxycycline. Once the drill is completed, recipients of the boxes can recycle them or, Jacob said, save them as a keepsake ([Boston.com](http://Boston.com), 2007).

**Title:** Unknowning Residents To Take Part In Terror Drill

**Date:** September 7, 2007

**Source:** [WCVB TV](#)

**Abstract:** About 23,000 Boston residents are weeks away from taking part in a bioterror drill, and many probably don't even know it.

Health officials plan to have mail carriers deliver tiny white cardboard boxes to the doorsteps and mailboxes of thousands of residents in the city's West Roxbury and South End neighborhoods on Sunday, Sept. 23.

"Anytime you are talking about a release of anthrax in the city, you are talking about pretty much a worst case scenario where you need to get medications to people as quickly as possible," said John Jacob of the Boston Public Health Commission.

The empty boxes will be used to simulate how quickly antibiotics could be delivered to residents in the event of a bioterror attack.

"No one knows the streets, knows the deliveries, knows where the houses are and the sequence they are set up in better than letter carriers do," said Bob Cannon of the U.S. Postal Service.

In the event of a real emergency when the antibiotics are highly coveted, the mail carriers will have a police escort.

"There is no emergency whatsoever. This is just a test, and this is a way for us to figure out if this particular delivery option is a good fit for Boston," Jacob said.

If it were a real emergency, each box would hold 20 pills ([WCVB TV, 2007](#)).

**Title:** U.S. Postal Service To Be In Charge Of Drug Delivery In The Event Of A Bioattack

**Date:** December 21, 2009

**Source:** [Bio Prep Watch](#)

**Abstract:** Following an executive order released Wednesday, the U.S. Postal Service will be put in charge of delivering drugs and other medical aid to Americans in the event of a large-scale biological weapon attack.

President Obama's order states that the postal service will be in charge of dispensing "medical countermeasures" for biological weapons in the event of an attack because of its ability to deliver to U.S. citizens rapidly.

Federal agencies are required to develop a response plan within 180 days including possible law enforcement escorts for postal service workers under the order, which cites anthrax as a primary threat consideration. The order would see local law enforcement supplemented by local federal law enforcement officers.

The Secretaries of Homeland Security and Health and Human Services, acting in coordination with the Secretary of Defense, must develop a concept for operations and establish requirements for dispensing medical countermeasures to an affected population through a federal rapid response program.

The order, President Obama says, does not supersede the authorities of other agencies and seeks to "mitigate illness and prevent death; sustain critical infrastructure; and complement and supplement state, local, territorial, and tribal government medical countermeasure distribution capacity."

The plan is to be developed by the Secretaries of Homeland Security, Health and Human Services, and Defense, and the Attorney General working in coordination with the U.S. Postal Service in consultation with state and local public health, emergency management and law enforcement officials ([Bio Prep Watch, 2009](#)).

**Title:** In Bio Attack, US Post Office Could Distribute Aid

**Date:** December 30, 2009

**Source:** [AFP](#)

**Abstract:** The US Post Office could play a key role in distributing medical aid in the event of a biological attack, according to an executive order released by the White House.

The order signed by President Barack Obama directs government agencies, local law enforcement and the US Post Office to work on a model for distribution of medical countermeasures in the wake of a biological attack.

"This policy would seek to: (1) mitigate illness and prevent death; (2) sustain critical infrastructure; and (3) complement and supplement State, local, territorial, and tribal government medical countermeasure distribution capacity," the order said.

"The US Postal Service has the capacity for rapid residential delivery of medical countermeasures for self administration across all communities in the United States," the order added.

The US Health and Human Services Secretary Kathleen Sebelius and Homeland Security Secretary Janet Napolitano were instructed to work with the post office to develop a "dispensing model for US cities to respond to a large-scale biological attack, with anthrax as the primary threat consideration."

The order calls for the model to be drawn up within 180 days, but gives no details as to whether the idea of using the US postal system to assist Americans in the wake of a biological attack is a new one.

The United States has sought to bolster its capacity to respond to biological attacks since 2001, when anthrax-laced letters mailed to people across the United States led to five deaths ([AFP, 2009](#)).

**Title:** Obama Spurs Plans To Deliver Drugs By Mail After Bio Attack

**Date:** December 31, 2009

**Source:** [CIDRAP](#)

**Abstract:** President Barack Obama, giving a push to a proposal that has been in the works for years, yesterday ordered federal agencies to develop a plan for the US Postal Service (USPS) to deliver medical countermeasures to households in the wake of a biological attack.

In an executive order, Obama said the federal government "shall pursue a national U.S. Postal Service medical countermeasures dispensing model to respond to a large-scale biological attack."

The president ordered the departments of Health and Human Services (HHS) and Homeland Security (DHS) to work with the USPS to develop a countermeasures delivery plan within 6 months, focused on anthrax as the primary threat. An attacker who sent anthrax spores by mail was blamed for killing five people and sickening 17 more in the fall of 2001.

The White House order also calls on federal agencies to plan for the use of federal law enforcement officers, if needed, to help local law officers escort mail carriers delivering the medical supplies, most likely antibiotics.

Obama further ordered HHS, DHS, and the Department of Defense to develop a plan for helping state and local governments distribute medical countermeasures if necessary. The agencies are also ordered to plan for providing countermeasures to essential federal personnel so the government could keep functioning after an attack.

Assigning the USPS to deliver antibiotics after a bioterrorist attack is not a new idea. "The Postal Service has been working on this project for years," USPS spokeswoman Sue Brennan commented to CIDRAP News today.

Brennan noted that the agency conducted three proof-of-concept drills in 2006 and 2007—one each in Seattle, Philadelphia, and Boston. In those exercises, a total of 119 mail carriers delivered dummy boxes of antibiotics and explanatory fliers to 114,000 households, she said.

Another exercise is scheduled to take place in the Minneapolis–St. Paul area sometime in 2010, with mail carriers delivering packages to 205,000 homes, about 25% of the metro area. That drill will have a new dimension, she said, in that the mail carriers will be screened for special measures to protect themselves from anthrax. Plans for the exercise were first announced in October 2008.

"We have solicited volunteer letter carriers who had to be fit tested for masks and had to undergo physicals to ensure they could take [the antibiotic] doxycycline," Brennan said. "They and their families will be given antibiotics for the test period. They obviously won't need to take them since it's a test."

The first announcement of a proposal to have the USPS deliver antibiotics after a bioterrorist attack came in February 2004. USPS officials said then that the idea was to use mail carriers to deliver antibiotics from the Strategic National Stockpile as a way to supplement local public health efforts in response to a major incident.

Obama's order yesterday came less than a week after a man with alleged ties to al-Qaida tried to bring down an airliner bound for Detroit by setting off an explosive mixture in his clothing. As an Associated Press report noted, since that failed attack, the president has sought to assure the public that his administration is striving to protect the country from terrorists ([CIDRAP, 2009](#)).

**Title:** Postal Workers May Become Part Of Plan To Fight Anthrax Attacks

**Date:** May 24, 2010

**Source:** [Bio Prep Watch](#)

**Abstract:** Mail carriers in Minnesota may soon play a part in the war on terror, according to a news report by kstp.com.

The plan, which will be funded by a \$6 million grant through the federal government for anthrax emergency preparedness, will coordinate efforts of the state's mail carriers, lab technicians and law enforcement officers.

The state's Department of Health will be responsible for testing material for anthrax. Another part of the plan, according to the news report, could involve the distribution of antibiotic pill packs that would be supplied by the federal government.

Those pill packs would be sent to the state's Office of Emergency Preparedness within 12 hours of possible exposure and then distributed by mail carriers with state trooper escorts, according to the report.

Pam Donate is a Minnesota mail carrier who was one of 400 volunteers to be trained to deliver medications via mail during an anthrax attack.

"Letter carriers are very attached to the people they serve in the neighborhoods," Donate told kstp.com.

The report noted that approximately 50 state troopers would escort postal workers, offering protection, specifically in densely populated areas around the Twin Cities.

"We don't know when something will happen, if it will happen or what it'll be, but the last thing we want to do is get flat-footed," Minnesota State Patrol Captain Matt Langer told kstp.com ([Bio Prep Watch, 2010](#)).

**Title:** U.S. Postal Service Tests Bioterror Response

**Date:** August 20, 2010

**Source:** [Bio Prep Watch](#)

**Abstract:** Postal employees in Lansing, Michigan, conducted decontamination drills on August 18, simulating their response to a bioterror attack using anthrax.

Anthrax, caused by inhaling, digesting or breathing the bacteria or spores of *Bacillus anthracis*, killed five people in a 2001 mail attack in Washington, D.C. Among the dead were two postal workers. Since then, the U.S. Postal Service has taken better measures to protect its employees, including holding such drills, according to the Lansing State Journal.

The exercise, the first since 2007, was held at the Lansing post office and processing center, and included training in the use of an inflatable decontamination station and hazardous materials suits.

The Lansing police and fire departments and members of the Ingham County Health Department also played an active role in the drills, the Lansing State Journal reports. Marcus Cheatum, the assistant deputy health officer at the health department, told the Lansing State Journal that the training helps officials find and fix problems in their responses and teaches the different organizations to work together.

"Before 9/11 and before we started doing these drills, we never partnered with the post office or the Fire Department or the sheriff on things like this, and now we're doing stuff jointly all the time," Cheatum told the Lansing State Journal.

"It just gives us all an opportunity to get together, look at our processes ... and make sure everything works in an orderly fashion," Postal Service spokeswoman Sabrina Todd told the Lansing State Journal ([Bio Prep Watch, 2010](#)).

**Title:** Postal Service Preparing Bioterror Response

**Date:** November 17, 2010

**Source:** [Bio Prep Watch](#)

**Abstract:** The United States Postal Service has teamed up with state and local health departments to prepare for a mass distribution system by testing delivery of Centers for Disease Control and Prevention medication in case of anthrax attack.

In December 2009, President Barack Obama signed an executive order for the U.S. Department of Health and Human Services and the USPS to create a national dispensing model within 180 days that would allow U.S. cities to respond to a large anthrax attack, [Emergencymgmt.com](#) reports.

**The program, known as the postal plan, uses letter carriers around the country to deliver medical countermeasures and information about how to take the medication. Since medication must be administered within 48 hours of infection, regular mail delivery would be halted and replaced with this important package.**



**The postal plan is currently being tested in the St. Paul/Minneapolis area within the 551 and 554 zip codes. Before the executive order, similar exercises had been performed in Philadelphia, Seattle and Boston to great success.**

“The process went well, and it only took about six to nine hours for them to cover their route and make sure all those folks – the 20, 40 and 50 thousand – received their mock antibiotics in a timely fashion,” John Koerner, chief of the CBRN branch of the HHS, said, according to [Emergencygmt.com](#). “The proof of concept showed that it can work.”

While most residents during an anthrax attack would receive antibiotics in a mass dispensing site, the postal plan might have to be enacted in high density zip codes to take pressure off the distribution sites.

According to the Military Vaccine Agency, an untreated inhalation of anthrax would lead to a higher than 99 percent death rate. After the antibiotics treatment is started for anthrax, it must be continued for approximately 60 days ([Bio Prep Watch, 2010](#)).

**Title:** Five Metro [U.S. Postal] Areas To Receive Grants To Fight Anthrax

**Date:** August 3, 2011

**Source:** [Bio Prep Watch](#)

**Abstract:** Five metropolitan areas that have demonstrated the ability to deliver anthrax antibiotics through the National Postal Model will receive a total of \$400,000 in grants from the U.S. Department of Health and Human Services.

The grants fund planning and exercises incorporating U.S. Postal Service workers into community plans to deliver medication after an anthrax bioterrorism attack, the News Eagle reports.

**The Boston Public Health Commission, the Philadelphia Department of Health, the Louisville/Jefferson County Metropolitan Board in Kentucky and the San Diego Health and Human Services Agency will each receive \$50,000 grants for initial planning and exercises. The Minneapolis Department of Health, will receive a \$200,000 grant to conduct a full-scale exercise simulating an anthrax attack in the metropolitan area.**

If a full-scale anthrax attack were to occur, everyone potentially exposed to anthrax would need to receive an initial supply of antibiotics within 48 hours. Under the NPM, volunteers from the USPS would pick up antibiotic packages at an established location and, protected by law enforcement officers, would deliver the antibiotics to homes in predetermined ZIP codes.

“The fatality rate for people whose lungs are infected with anthrax is extremely high if they do not receive antibiotic treatment, which means the quicker health professionals can get antibiotics into people’s hands, the quicker we can protect health and save lives,” Dr. Nicole Lurie, the assistant secretary for Preparedness and Response, said, according to the News Eagle. “The postal model offers an additional tool for local health departments to begin treating people potentially exposed to anthrax.”

This method would augment existing dispensing plans that ask residents and visitors to go to special medication dispensing sites ([Bio Prep Watch, 2011](#)).

**Title:** San Diego To Train Postal Workers On Bioterror Antibiotic Deliveries

**Date:** August 24, 2011

**Source:** [Bio Prep Watch](#)

**Abstract:** Postal workers in San Diego will soon be trained to deliver emergency antibiotics to all 3.2 million county residents in the event of a bioterrorist attack.

Jack Walsh, a coordinator for the county's Counterbioterrorism and Preparedness Task Force, said that during a full-scale anthrax attack, antibiotics would need to be delivered to residents within 48 hours from the federal Strategic National Stockpile, KPBS said. During an anthrax attack, the county would get doxycycline and ciprofloxacin antibiotics.

"Signs and symptoms for anthrax can show as early as 48 hours," Walsh said, according to KPBS. "So the survival rate for anthrax once signs and symptoms have popped up is not very good. If we can get meds delivered, then we can save 98 percent of the people. (Medication) would come to the county's warehouse where the Postal Service would come and pick it up and take it to their delivery units, load it up into their trucks and deliver it to everybody's address."

Each of the postal workers who volunteers for the training would have a security or police escort and be equipped with gloves and a mask. They would be given a supply of emergency medications for their families in advance.

San Diego is one of five U.S. cities that has been selected for a grant to pay for initial distribution training and exercises.

"There's a low probability of a bioterror attack, but a high likelihood of mass fatalities if we're not prepared," Walsh said, according to KPBS.

In 2001, anthrax-laced letters that were sent to media companies and congressional offices killed five people ([Bio Prep Watch](#)).

**Title:** Iowa Postal Employees Practice Anthrax Response

**Date:** September 1, 2011

**Source:** [Bio Prep Watch](#)

**Abstract:** Postal employees, first responders and local emergency officials in Waterloo, Iowa, recently conducted a biological attack drill that simulated an anthrax mail attack similar to the ones carried out in 2001.

During the scenario, authorities sealed off the post office and a group of student volunteers simulated potential anthrax victims. The exercise provided officials with new insights as to how to operate during an emergency, as well as new tools to use during a response, according to WCFCourier.com.

"It's as real as we can make it and still get it done," Sgt. Aaron McClelland of the Waterloo Police Department said, WCFCourier.com reports.

Though a real event would be most likely to unfold over a series of days, the recent exercise was compressed into a matter of hours.

Firefighters donned hazmat suits in order to rescue those inside the post office while members of the U.S. Postal Inspection Service began a more thorough investigation. Officials from the Iowa State Patrol, Black Hawk County Health Department and the Iowa National Guard also took part.

"There was a number of different agencies involved. We had federal, state and county and city resources," Jewell said, according to WCFCourier.com.

The National Guard provided a unique communications system for the event that tied together the radios from the different participants ([Bio Prep Watch, 2011](#)).

**Title:** Louisville Postal Carrier To Carry Antibiotics In The Event Of Bioattack

**Date:** March 21, 2012

**Source:** [Bio Prep Watch](#)

**Abstract:** More than 300 postal carriers in Louisville, Kentucky, have volunteered to carry antibiotics to nearby residents in the case of an attack using an airborne biological agent.

Louisville and Minneapolis-St. Paul were chosen to take the lead in a demonstration project program aimed at using postal workers to deliver supplies of the antibiotic doxycycline to residential addresses within 48 hours of an emergency, according to [Courier-Journal.com](#).

Edward Gabriel, the principal deputy assistant secretary for preparedness and response at the U.S. Department of Health and Human Services, said that the Louisville project could serve as example to other cities seeking to be better prepared for a biological attack.

"Other cities across the country will be watching closely to learn how to apply this model in their own communities," Gabriel said, [Courier-Journal.com](#) reports.

Louisville Mayor Greg Fischer, the U.S. Postal Service and HHS are expected to officially announce the program soon.

"Creating a safer city and a healthier city are two top priorities, and this agreement puts us at the cutting edge of national efforts to protect our citizens," Fischer said, [Courier-Journal.com](#) reports. "Louisville will become the national model in that our plan includes door-to-door delivery to citizens in both urban and rural ZIP codes."

Louisville was chosen because of its experience as a testing site for other disaster drills. So far, nearly 70 percent of available couriers have volunteered for the program ([Bio Prep Watch, 2012](#)).

**Title:** Minnesota Mail Carrier To Test Anthrax Antibiotic Delivery Program

**Date:** March 22, 2012

**Source:** [Bio Prep Watch](#)

**Abstract:** Mail carriers in St. Paul and Minneapolis, Minnesota, will deliver empty pill bottles to approximately 35,000 homes on May 6 to test a program that would deliver antibiotics in the event of an anthrax attack. U.S. Postal Service carriers will make the Sunday deliveries to four zip codes, one in the Minneapolis suburbs, one in Minneapolis and two in St. Paul. Operation Medicine Delivery will see how fast postal teams can deliver medicine to homes in case of an emergency, [CIDRAP News](#) reports.

"People will get an empty bottle, similar to what would be used in the real thing," Peter Nowacki, a Minneapolis USPS spokesman, said, according to [CIDRAP News](#). "There'll be an information sheet explaining what it's all about, that it's just a test to see how well it works. It'll have links and phone numbers for more information."

The Twin Cities area is one of at least five large cities in the U.S. planning federally funded programs to use the USPS to respond to bioterrorist attacks. The other areas include Seattle, Philadelphia, Boston and Louisville, Kentucky. While Boston, Philadelphia and Seattle have run limited exercises, the Minnesota test will use a fully developed team of trained volunteers. "This is the first metro area in the country to recruit a full complement of postal volunteers for this program, and set up a fully developed postal delivery system," the Minnesota Department of Health, said, according to [CIDRAP News](#).

If a real emergency were to occur, postal delivery would not be used for all residents of the Twin Cities, but as a way to relieve pressure from the medication centers in densely populated parts of the area ([Bio Prep Watch, 2012](#)).

# Bio & Terror Bible

## EXPOSING THE COMING BIO-TERROR PANDEMIC

**BIOTERRORBIBLE.COM:** If and when a full-scale bio-terror attack occurs, the live pathogens or agents responsible for the pandemic will likely be dispersed via A) [chemtrails](#) by government [airplanes and/or drones](#), B) by the [U.S. Postal Service](#) via [Tide detergent samples](#), C) by the government and medical establishment via [tainted vaccines](#), or by D) the portable petri dish commonly known as the [Trojan condom](#).

Research now indicates that vaccines are no longer safe and cause serious neurological problems, seizures, autism, and even death. There has even been a recent push by both the medical and government establishment in America to [make vaccines mandatory](#). This propaganda and conditioning is currently prepping the American people for the forced vaccinations that are sure to come in the wake of a full-blown TV generated bio-terror pandemic in which tainted vaccines that are hyped as the cure will likely result in the death of millions.

**Title:** Politicizing Vaccines

**Date:** November 18, 2002

**Source:** [UCLA](#)

**Abstract:** The production of vaccines against bioterrorism hardly seems like a partisan idea. But all of sudden it's emerged as a hot political controversy, as Democrats object to an effort to offer liability protection for companies that could protect Americans from smallpox or the West Nile virus.

We're delighted they brought it up. The state of the U.S. vaccine industry has been a national scandal for years, with needless shortages not just to immunize against bioterror threats but even against such routine childhood diseases as tetanus and whooping cough. The latest threat comes from a proliferation of lawsuits that enrich the tort bar but make vaccine production a masochistic exercise.

Democrats are protesting now because Republicans are trying to insert some liability protection for vaccine makers as part of the new homeland security legislation. "Leave it to the Republicans to sneak in a proposal that protects manufacturers of the vaccine, doctors and nurses and leaves the person who may be injured -- even by negligent action -- to bear the whole burden of their injury," declared Henry Waxman, the California Democrat. This sure sounds terrible, if it were only true.

The real story here is about thimerosal, a mercury-based preservative that vaccine makers once used. Though there was no evidence that thimerosal caused neurological disorders or other harm, the Clinton Administration recommended that companies stop using it -- and the tort follies began.

As of June lawyers had hit vaccine makers with 68 thimerosal lawsuits, 11 of them class actions. One in Florida is claiming as many as 175 million victims. Another is said to be asking for \$30 billion in damages; the entire vaccine industry is only worth about \$6 billion in global revenue.

Congress has already tried to stop this kind of thing once. In the mid-1980s plaintiffs' suits had driven all but three companies out of the vaccine business. Congress responded by creating the Vaccine Injury Compensation Program. VICP set up a no-fault alternative to the tort system, which would compensate families for the rare, but inevitable, side effects of government-recommended vaccines.

Parents could still sue in court, but only after they first went through VICP -- which was designed to be quick, generous and require lower burdens of proof. Since 1986 the government has awarded some \$1.3 billion in compensation to more than 1,700 families. Vaccine makers and health providers received liability protection to stabilize the industry, and families received just compensation. Few went on to sue.

The only unhappy party was the tort bar, which has tried to get around the legislation ever since. The government's thimerosal recommendation was their opening. Some of today's suits claim thimerosal is a "contaminant" and thus doesn't fall under VICP's side effects. Others are suing not the vaccine manufacturers covered under VICP, but the companies that made the preservative. And since VICP only covers claims of more than \$1,000, lawyers are aggregating claims of under \$999.

If these lawsuits are allowed to proceed, forget about a stable supply of vaccines. As it is today, only four major vaccine companies supply preventive medicines against such diseases as whooping cough or measles. Most manufacturers have been driven out by skyrocketing regulatory costs and a government that uses its monopoly buying clout to pay a minimum for products.

In sum, the GOP liability effort is an essential part of homeland security that will save lives. Republican Bill Frist has been pushing this legal protection with the support of the federal Advisory Commission on Childhood Vaccines, the American Academy of Pediatrics and the physicians' community. Mr. Waxman and his Senate allies (Joe Lieberman intends to offer an amendment this week stripping out the Dick Armey provision that passed the House) have the trial lawyers' lobby. Americans can figure out who is really playing politics with vaccines ([UCLA, 2002](#)).

**Title:** Compensating A Must For Vaccine Injuries

**Date:** November 25, 2002

**Source:** [UCLA](#)

**Abstract:**

*In reaction to your Nov. 18 editorial "[Politicizing Vaccines](#)":*

The homeland security bill contains several liability protection provisions. One provision concerns the smallpox vaccine. It limits the liability of manufacturers and health-care providers for injuries caused by this vaccine -- but does nothing to compensate the Americans who we know will be injured by the vaccine. This omission is inexcusable, and I stand by my comment that Republicans have protected everyone but the people who need protection the most.

Your editorial, however, took my comment on the smallpox liability program and applied it to an entirely unrelated provision in the homeland security bill. This second provision provides new liability protection for makers of thimerosal, a preservative that was previously used in some childhood vaccines. You accuse me of opposing this provision in order to foster litigation. You then approvingly cite the Vaccine Injury Compensation Program, a government initiative that provides compensation outside of the tort system for children injured by vaccines.

In fact, I authored the legislation creating the Vaccine Injury Compensation Program. My belief that we should apply this successful model to smallpox vaccine is exactly why I am so disappointed that the homeland security bill does nothing to compensate those injured by the vaccine.

I oppose the thimerosal provisions because they have nothing to do with homeland security and do not belong in the bill. There was no debate on these provisions and virtually no House members even knew they were in the bill. When Congress approves provisions of this import, it should be by a deliberative process and not by the legislative fiat of one member who refuses even to acknowledge responsibility for these provisions.

These liability protections should be considered in separate legislation along with many other changes to the childhood vaccine program also recommended by the independent HHS advisory panel that oversees this program.

Rep. Henry A. Waxman (D., Calif.)

Ranking Minority Member

Committee on Government Reform

Washington ([UCLA, 2002](#)).

**Title:** Serious Side Effects, Deaths Likely From Vaccine

**Date:** December 12, 2002

**Source:** [UCLA](#)

**Abstract:** The decision to begin widespread vaccination for smallpox, starting with 500,000 military personnel and an equal number of "first-responder" health-care workers, will probably cause a few hundred serious adverse reactions and perhaps some deaths — a dark side of vaccination unseen in the world for 25 years.

Most people tolerate the smallpox vaccine with only minor effects, such as fever and body aches. But a survey of those inoculated in 1968 found about 1 person per million died of the vaccine's side effects, and as many as 52 of every million people suffered life-threatening reactions, including fever, serious infections and brain swelling.

The side effects are viewed by most public health experts as an acceptable trade-off against smallpox itself, which kills about 30% of its victims. And according to a national survey released Wednesday, most Americans agree. In the poll conducted for the Robert Wood Johnson Foundation, 65% of respondents said they would take the smallpox vaccine — up from 59% polled in May. Only 22% said they would refuse the vaccine, down from 33% in May. However, pollsters did not offer details about the vaccine's risks.

For three millennia before its eradication, smallpox regularly ravaged nations across the globe, killing millions with high fevers and an excruciating blanket of erupting pustules across the entire body, including the palms, eyelids and inside the nostrils. Survivors were often left with horrific scars as a lifelong reminder.

The last known case of smallpox occurred in Somalia in 1977. After a global vaccination campaign, the disease — caused by the *variola* virus — was declared eradicated in 1980. In this country, routine smallpox vaccination was ended in 1972, meaning that most people who were inoculated before that time have long since lost their immunity to the disease and would need to be reinoculated. Today's vaccine is derived from stockpiles frozen for decades.

## **Produced From Calves**

The smallpox vaccine is made from *vaccinia*, a virus related to the *variola* virus but far less dangerous. The vaccine is mass-produced in cultures of lymph cells from calves.

Vaccination involves dipping a two-pronged needle into the vaccine, then using it to make 30 shallow skin punctures on the upper arm. In most cases this causes a red, itchy bump that eventually forms a pus-filled blister that heals in about three weeks.

The inoculation gives full immunity for three to five years but gradually wears off over the next decade, according to the federal Centers for Disease Control and Prevention in Atlanta.

Among the most serious side effects of the vaccine is a skin infection known as progressive vaccinia. The disease, which kills tissue around the vaccination site and can spread to other parts of the body, affects 1 to 2 people per 1 million vaccinations.

A more common but still serious reaction is a similar skin infection known as eczema vaccinatum. The infection causes a painful rash across the body and can be fatal. The problem occurs in about 39 cases out of every 1 million vaccinations.

## **Other Side Effects**

Another serious side effect is post-vaccinial encephalitis, an infection that swells the brain, causing headaches, vomiting, high fevers and, in rare cases, paralysis and death. It affects about 12 people per 1 million vaccinations.

In addition to these side effects, the 1968 study found that about 935 of every 1 million first-time vaccinations result in serious but not life-threatening infections — particularly on the face, eyelids or genitals.

All of these side effects are less common among people who were previously vaccinated for smallpox. Virtually no Americans under the age of 25 — about 97 million people born after the date of eradication — have been vaccinated.

Some of the side effects, including eczema vaccinatum, progressive vaccinia and the less serious generalized vaccinia, can be treated with vaccinia immune globulin — a vaccine derived from the antibody-rich blood plasma of recently inoculated donors. It must be injected into muscle tissue. Severe cases can require massive doses — as much as a liter injected into multiple muscles for a 220-pound person. Only 700 doses of vaccinia immune globulin are available, enough to treat cases expected from no more than 6 million vaccinations, according to the CDC.

## **Reserves Sought**

Researchers are working to expand that supply within a few months, using a new vaccinia immune globulin formulation that can be administered intravenously in much lower doses. The antiviral drug cidofovir has also shown experimental promise for treating vaccinia infections, but it would be used only when vaccinia immune globulin is not available.

Individuals who have ever been diagnosed with eczema or who currently suffer from immune deficiency diseases, such as AIDS or certain cancers, including lymphoma and leukemia, should avoid vaccination. Pregnant women, small children and anyone taking medications that suppress the immune system also should not be vaccinated — and should shun direct contact with anyone healing from a recent vaccination.



"After someone has received the vaccine, for a period of time they are suffering from a viral infection," said Steven Block, a Stanford University biologist and an advisor to the government on biological warfare defenses.

"At that point, they can give the live virus to someone who is immune-compromised and who was never given the vaccination at all."

About 500 such incidental infections, often to sensitive parts of the body, such as the eyes, would probably occur per 1 million inoculations, the 1968 survey suggests.

However, anyone who has been exposed to smallpox, regardless of their risk profile, should be vaccinated — the dangers of the disease invariably outweigh those of the vaccine. Even a few days after exposure to smallpox, the vaccine confers a degree of immunity.

In the current vaccination campaign, complications might be more rare than previous studies showed. The relatively healthy and young military population is thought to be less susceptible to serious side effects than the general population. Experts add that careful screening will help lower the risks as well.

But Margaret Hamburg, a biological warfare expert and former New York City commissioner for public health, said there is a possibility that the rate of adverse reactions could be higher than in 1968. Immune-deficiency ailments are more common now.

### **Different Than in '68**

And unlike today, many of those receiving the vaccine in 1968 had previously been in contact with family members or others who had recently been inoculated. Such casual exposure, even when it does not cause a vaccinia infection, can help the body fight off the vaccine's side effects, she said.

"The absolutely critical thing is that we need to carefully collect information of the adverse consequences of the vaccination as we move forward" in order to plan for widespread vaccination programs, Hamburg said.

After smallpox was eradicated, most stocks were destroyed.

By international agreement, only small quantities for research were to be retained, and only by the Soviet Union and the U.S. in highly secure labs.

Revelations that the Soviets, and later the Russians in the post-Soviet era, manufactured and maintained massive smallpox stocks in violation of the Biological Weapons Convention came to light in the 1990s.

Samples of the virus are thought to have been obtained by Iraq and other nations suspected of maintaining illegal biological weapon programs, and may even be in the hands of terrorists — leading to the sense of urgency about the current vaccination campaigns ([UCLA, 2002](#)).

**Title:** Smallpox Shots: Make Them Mandatory

**Date:** December 23, 2002

**Source:** [TIME](#)

**Abstract:** The eradication of smallpox was one of humanity's great success stories. After thousands of years of suffering at the hands of the virus, the human race gathered all its wit and cunning and conquered the scourge, eradicating it forever. Well, forever lasted less than 25 years. It does not bode well for the future of our species that it took but a blink of the eye for one of history's worst killers to make a comeback — not on its own, mind you, but brought back by humans to kill again.

During the age of innocence — the '90s, during which it seemed history had ended — the big debate was whether the two remaining known stocks of smallpox in the world, one in Russia and the other in the U.S., should be destroyed. It seemed like a wonderful idea, except that no one could be absolutely sure that some smallpox stores had not fallen into other hands. In fact, we now think Iraq is working on weaponizing smallpox, and perhaps North Korea and others too.

The danger is greater now than ever — first, and ironically, because of our very success in eradicating it in the past. People today have almost no experience with, and therefore no immunity to, the virus. We are nearly as virgin a population as the Native Americans who were wiped out by the various deadly pathogens brought over by Europeans. Not content with that potential for mass murder, however, today's bad guys are reportedly trying to genetically manipulate the virus to make it even deadlier and more resistant to treatment. Who knows what monstrosities the monsters are brewing in their secret laboratories.

What to do? We have enough vaccine on hand, some diluted but still effective, to vaccinate everyone in the U.S., with more full-strength versions to come. President Bush has just announced that his Administration will take the concentric-circle approach: mandatory inoculations for certain soldiers, voluntary inoculations for medical and emergency workers, and then inoculations available to, but discouraged for, everybody else.

It sounds good, but it is not quite right. If smallpox were a threat just to individuals, then it could be left up to individuals to decide whether or not they want to protect themselves. When it comes to epidemic diseases, however, we don't leave it up to individuals to decide. The state decides.

Forget about smallpox. This happens every day with childhood diseases. No child can go to school unless he's been immunized. Parents have no choice. Think of it: we force parents to inject healthy children with organisms — some living, some dead — that in a small number of cases will cripple or kill the child. It is an extraordinary violation of the privacy and bodily integrity of the little citizen. Yet it is routine. Why? Because what is at stake is the vulnerability of the entire society to catastrophic epidemic. In that case, individuals must submit.

Which is why smallpox vaccines were mandatory when we were kids. It wasn't left up to you to decide if you wanted it. You might be ready to risk your life by forgoing the vaccine, but society would not let you — not because it was saving you from yourself but because it had to save others from you. The problem wasn't you getting smallpox; the problem was you giving smallpox to others if you got it. Society cannot tolerate that. We forced vaccination even though we knew it would maim and kill a small but certain number of those subjected to it.

Today the case for mandatory vaccination is even stronger. This is war. We need to respond as in war. The threat is not just against individuals, but against the nation. Smallpox kills a third of its victims. If this epidemic were to take hold, it could devastate America as a functioning society. And the government's highest calling is to protect society — a calling even higher than protecting individuals.

That is why conscription in wartime is justified. We violate the freedom of individuals by drafting them into combat, risking their lives — suspending, in effect, their right to life and liberty, to say nothing of the pursuit of happiness — in the name of the nation.

Vaccination is the conscription of civilians in the war against bioterrorism. I personally would choose not to receive the smallpox vaccine. I would not have my family injected. I prefer the odds of getting the disease vs. the odds of inflicting injury or death by vaccination on my perfectly healthy child.

Nonetheless, it should not be my decision. When what is at stake is the survival of the country, personal and family calculation must yield to national interest. And a population fully protected from smallpox is a supreme national interest.

If it is determined that the enemy really has smallpox and might use it, we should vaccinate everyone. We haven't been called upon to do very much for the country since Sept. 11. We can and should do this ([TIME, 2002](#)).

**Title:** Selected Vaccine Authorities From CDC, FDA, And Manufacturers Discuss, In A Closed Meeting, The Possibility Of Neurodevelopment Disorders Resulting From Vaccine Components.

**Date:** 2003

**Source:** [AAPS](#)

**Abstract:** The CDC published a study in late 2003, repudiating any possible link between thimerosal and developmental problems such as autism, but the CDC did have data supporting such a link which it secretly kept from the public.

Documents released through the Freedom of Information Act detail the transcript of a meeting held in June of 2000 between members of the CDC, the FDA, and representatives from the vaccine industry.

This top secret meeting was held to discuss a study done by Dr. Thomas Verstraeten and his co-workers using Vaccine Safety Datalink data as a project collaboration between the CDC's National Immunization Program (NIP) and four HMOs. The study examined the records of 110,000 children.

The transcript is titled "Scientific Review of Vaccine Safety Datalink Information," June 7-8, 2000, Simpsonwood Retreat Center, Norcross, Georgia, but it was also the first official meeting of the ACIP (Advisory Committee on Immunization Practices which sets CDC policy) work group on thimerosal and immunization. In attendance were Walter Orenstein, Director of the National Immunization Program (NIP) at the CDC; John Modlin, Chair of the ACIP and on the faculty at Dartmouth Medical School; and 50 other distinguished members of the government (11 consultants from the CDC), academia and the pharmaceutical industry. Vaccine industry representatives were: Harry Guess, M.D., Merck, Chief of Epidemiology; Jo White, M.D., North American Vaccine, Clinical Dev. & Research; Barbara Howe, M.D., Smith, Kline-Beecham, Clinical Research Group; Mike Blum, M.D., Wyeth, Safety and Surveillance for Vaccine Development.

Although this conference is apparently concerned with the effects of mercury in the form of thimerosal on infant brain development, participants seemed to have limited knowledge about mercury. None of the well known experts were invited, such as Dr. Ascher from Bowman Grey School of Medicine or Dr. Boyd Haley, who has done extensive work on the toxic effects of low concentrations on the CNS.

The conference followed a study that showed that mercury in vaccines may have caused neurodevelopment problems.

**The following are in context excerpts of this 260 page transcript:**

**Dr. Orenstein pg 1-2** "(For) those who don't know, initial concerns were raised last summer that mercury, as methylmercury (thimerosal) in vaccines, might exceed safe levels. As a result of these concerns, CDC undertook, in collaboration with investigators in the Vaccine safety Datalink, an effort to evaluate whether there were any health risks from mercury on any of these vaccines. Analysis to date raise some concerns of possible dose-response effect of increasing levels of methylmercury in vaccines and certain neurologic diagnosis. Therefore, the purpose of this meeting is to have a careful scientific review of the data."

**Dr. Bernier pg 8** : (Associate Director for Science in the NIP) "There was a Congressional Action in 1997 requiring the FDA to review Mercury in drugs and biologics...in October of 1999 the ACIP looked this situation over again and... said the vaccines could be continued to be used."

**Dr. Johnston, pg. 14-15 & 19-20:** (Chair of the meeting and a pediatrician-immunologist at the University of Colorado): “Thimerosal is cleaved (in the body) into ethylmercury and thiosalicylate which is inactive... The data on its toxicity (shows) it can cause neurologic and renal toxicity, including death.”

“It is particularly a concern in multi-dose vials because of the issue of re-entry multiple times in the vials, and it is also important in the manufacturing process for a number of vaccine including inactivated influenza and some of the earlier DPT vaccine, and is a constituent of all DPT vaccines, but not all DTAP vaccines.”

“There are three licensed preservative in the United States, Thimerosal, ethyl and phenol. We won't talk about the other two today, but I thought I should mention them. Thimerosal is the most active and it has been utilized in vaccines since the 1930's.”

“Acutely, it can cause neurologic and renal toxicity, including death, from overdose...”

“Dr. Halsey made a very impassioned plea that we do carefully controlled studies to in fact address the issues specifically, and that such studies be conducted by neurodevelopmentalists and environmental scientists employing specific endpoints of their study...”

“We just recently had another meeting that some of you were able to attend dealing with aluminum in vaccines. I would like to just say one or two words about that before I conclude.”

“We learned at that meeting a number of important things about aluminum, and I think they also are important in our considerations today. “Aluminum salts are important in the formulating process of vaccines, both in antigen stabilization and absorption of endotoxin.”

“Aluminum and mercury are often simultaneously administered to infants, both at the same site and at different sites.”

“However, we also learned that there is absolutely no data, including animal data, about the potential for synergy, additively or antagonism, all of which can occur in binary metal mixtures that relate and allow us to draw any conclusions from the simultaneous exposure to these two salts in vaccines...”

**Dr. Weil, pg. 24:** “I think it's clear to me anyway that we are talking about a problem that is probably more related to bolus acute exposures, and we also need to know that the migration problems and some of the other developmental problems in the central nervous system go on for quite a period after birth. But from all of the other studies of toxic substances, the earlier you work with the central nervous system, the more likely you are to run into a sensitive period for one of these effects, so that moving from one month or one day of birth to six months of birth changes enormously the potential for toxicity. There are just a host of neurodevelopmental data that would suggest that we've got a serious problem. The earlier we go, the more serious the problem.”

“The second point I could make is that in relationship to aluminum, being a nephrologist for a long time, the potential for aluminum and central nervous system toxicity was established by dialysis data. To think there isn't some possible problem here is unreal.”

**Dr. Verstraeten, pg. 31:** “It is sort of interesting that when I first came to the CDC as a NIS officer a year ago only, I didn't really know what I wanted to do, but one of the things I knew I didn't want to do was studies that had to do with toxicology or environmental health. Now it turns out that other people also thought that this study was not the right thing to do, so what I will present to you is the study that nobody thought we should do.”

**Dr. Verstraeten, pg. 40:** "...we have found statistically significant relationships between the exposure and outcomes for these different exposures and outcomes. First, for two months of age, an unspecified developmental delay, which has its own specific ICD9 code. Exposure at three months of age, Tics. Exposure at six months of age, an attention deficit disorder. Exposure at one, three and six months of age, language and speech delays which are two separate ICD9 codes. Exposures at one, three and six months of age, the entire category of neurodevelopmental delays, which includes all of these plus a number of other disorders."

**Dr. Verstraeten, pg. 42:** "But for one thing that is for sure, there is certainly an under-ascertainment of all of these because some of the children are just not old enough to be diagnosed. So the crude incidence rates are probably much lower than what you would expect because the cohort is still very young."

**Dr. Verstraeten, pg. 44:** "Now for speech delays, which is the largest single disorder in this category of neurologic delays. The results are a suggestion of a trend with a small dip. The overall test for trend is highly statistically significant above one."

**Dr. Verstraeten, pg. 45:** "What this represents is the overall category of developmental delays, of which I have excluded speech delays because of the impression we had was some of the calculations were driven by this speech group, which was making up about half of this category. After excluding this speech group, the trend is also apparent in this group and the test for trend is also significant for this category excluding speech."

**Dr. Weil, pg. 75:** "I think that what you are saying is in term of chronic exposure. I think that the alternative scenario is that this repeated acute exposures, and like many repeated acute exposures, if you consider a dose of 25 micrograms on one day, then you are above threshold. At least we think you are, and then you do that over and over to a series of neurons where the toxic effect may be the same set of neurons or the same set of neurologic processes; it is conceivable that the more mercury you get, the more effect you are going to get."

**Dr. Verstraeten, pg. 76:** "What I have done here, I am putting into the model instead of mercury, a number of antigens that the children received, and what do we get? Not surprisingly, we get very similar estimates as what we got for Thimerosal because every vaccine put in the equation has Thimerosal. So for speech and the other ones maybe it's not so significant, but for the overall group it is also significant....Here we have the same thing, but instead of number of antigens, number of shots. Just the number of vaccinations given to a child, which is also for nearly all of them significantly related."

**Dr. Guess, pg. 77:** "So this essentially is a 7% risk per antigen, an antigen is like in DPT you've got three antigens."

**Dr. Verstraeten, pg. 77:** "Correct."

**Dr. Egan, pg. 77:** "Could you do this calculation for aluminum?"

**Dr. Verstraeten, pg. 77:** "I did it for aluminum...Actually the results were almost identical to ethylmercury because the amount of aluminum goes along almost exactly with the mercury one."

**Dr. Verstraeten, pg. 78-79:** "Then the last slide I wanted to show, there was a question of if there was any way from this data that we could estimate what would happen in the future if there is Thimerosal-free Hep B and Thimerosal-free haemophilus influenza vaccine and only DTP has Thimerosal"

"The second column would be the same scenario but now at six months. Assuming they have received two additional DPTs, so between three and six months of age they have increased their ethylmercury amounts by 50 micrograms. If I do in this current cohort with all its limitations, because there is also the

Hep B that exists in the cohort\*, I can't really take it out. It is significant for this one disorder which is language delay and is a combination of these two disorders, also becomes significant."

*\* Dr. Verstraeten could not determine which children got Hep B at birth in some cases so it was difficult to back the birth dose of Hep B out of the data.*

**Dr. Bernier, pg. 113:** "We have asked you to keep this information confidential. We do have a plan for discussing these data at the upcoming meeting of the Advisory Committee of Immunization Practices on June 21 and June 22. At that time CDC plans to make a public release of this information\*, so I think it would serve all of our interests best if we could continue to consider these data. The ACIP work group will be considering also. If we could consider these data in a certain protected environment. **So we are asking people who have a great job protecting this information up until now, to continue to do that until the time of the ACIP meeting.** So to basically consider this embargoed information. That would help all of us to use the machinery that we have in place for considering these data and for arriving at policy recommendations."

*[\*This never happened. SafeMind.org obtained this transcript via the Freedom of Information Act. Data published later were diluted into insignificance by including additional data from an HMO that had very uncharacteristic results.]*

**Dr. Keller, pgs. 116 & 118:** "...we know the developing neurologic system is more sensitive than one that is fully developed..."

**Dr. Verstraeten, pg. 142:** "But if I can have the next slide, here instead of the proportional hazard model, we did a logistic regression model. I didn't use person time here and it's a bit tough to define exactly the control group. However, if I do it for all ages and not looking at different years, and this is for speech, the outcome is almost identical to the proportional hazard model, which suggests to me that it is not a question of bringing the diagnosis forward, but it is really the overall number that drives this estimate."

**Dr. Rapin, pg. 143:** "I would like to make a comment. We have been focusing on all these acquired causes including mercury and prematurity, and you had a list of confounding variables that should be considered in future studies. What we know today about all of the developmental disorders is that environmental factors are in fact rather unimportant in the case of these deficits and the major cause is genetic...I find it a little difficult knowing this and putting in autism. The major cause is not environmental, it is genetic and that we are focusing just on these environment events or adventitious events when we haven't considered, and you told us that you don't have data for example on siblings, your study does not lend itself to considering the major variable."

**Dr. Johnson, pg 144:** "Well, I think the assumption is that those genetic predispositions would be randomly distributed."

**Dr. Rapin, pg. 144:** "But you don't know that."

**Dr. Johnson, pg. 144:** "No, that's an interesting assumption."

**Dr. Rapin, pg. 144:** "I understand that, but you don't know that."

**Dr. Johnson, pg. 144:** "just on principle, Dr. Rapin, it seems to me that the more we learn about genetics or the more we learn about let's say autism, the more we shift towards focusing on genetic causes, but would you rule out the possibility, and let's move away from autism, that some of these are genetic predisposition and then the second hit?"

**Dr. Rapin, pg. 144:** "Not at all. I think that it is in fact an attractive hypothesis."

**Dr. Johnson, pg. 145:** "Right, thank you."

**Dr. Chen, pg. 151:** "One of the reasons that led me personally to not be so quick to dismiss the findings was that on his own Tom independently picked three different outcomes that he did not think could be associated with mercury and three out of three had a different pattern across different exposure levels as compared to the ones that again on a priority basis we picked as biologically plausible to be due to mercury exposure."

**Dr. Brent, pg. 161:** "Wasn't it true that if you looked at the population that had 25 micrograms you had a certain risk and when you got to 75 micrograms you had a higher risk."

**Dr. Verstraeten, pg. 161:** "Yes, absolutely, but these are all at the same time. Measured at the same age at least."

**Dr. Brent, pg. 161:** "I understand that, but they are different exposures."

**Dr. Verstraeten, pg. 161:** "Yes."

**Dr. Brent, pg. 161:** "What is your explanation? What explanations would you give for that?"

**Dr. Verstraeten, pg. 161:** "Personally, I have three hypotheses. My first hypothesis is it is parental bias. The children that are more likely to be vaccinated are more likely to be picked and diagnosed. Second hypothesis, I don't know. There is a bias that I have not recognized, and nobody has yet told me about it. Third hypothesis. It's true, it's Thimerosal. Those are my hypotheses."

**Dr. Brent, pg. 161:** "If it's true, which or what mechanisms would you explain the finding with?"

**Dr. Verstraeten, pg. 162:** "You are asking for biological plausibility?"

**Dr. Brent, pg. 162:** "Well, yes."

**Dr. Verstraeten, pg. 162:** "When I saw this, and I went back through the literature, I was actually stunned by what I saw because I thought it is plausible. First of all there is the Faeroe study, which I think people have dismissed too easily, and there is a new article in the same Journal that was presented here, the Journal of Pediatrics, where they have looked at PCB. They have looked at other contaminants in seafood and they have adjusted for that, and still mercury comes out. That is one point. Another point is that in many of the studies with animals, it turned out that there is quite a different result depending on the dose of mercury. Depending on the route of exposure and depending on the age at which the animals, it turned out that there is quite a different result depending on the dose of mercury. Depending on the route of exposure and depending on the age at which the animals were exposed. Now, I don't know how much you can extrapolate that from animals to humans, but that tells me mercury at one month of age is not the same as mercury at three months, at 12 months, prenatal mercury, later mercury. There is a whole range of plausible outcomes from mercury. On top of that, I think that we cannot so easily compare the U.S. population to Faeroe or Seychelles populations. We have different mean levels of exposure. We are comparing high to high in the Seychelles, high to high in the Faeroe and low to low in the U.S., so I am not sure how easily you can transpose one finding to another one. So basically to me that leaves all the options open, and that means I can not exclude such a possible effect."

**Dr. Orenstein, pg. 184:** "Well, the second issue is we don't know causality. We don't know about causality, but is this something that really warrants some urgent attention?"

**Dr. Clover, pg. 187:** "...no one around here is going to say that mercury per say is not a concern."



**Dr. Weil, pg. 187 & 188:** "Although the data presents a number of uncertainties, there is adequate consistency, biological plausibility, a lack of relationship with phenomenon not expected to be related, and a potential causal role that is as good as any other hypothesized etiology of explanation of the noted associations. In addition, the possibility that the associations could be causal has major significance for public and professional acceptance of Thimerosal containing vaccines. I think that is a critical issue. Finally, lack of further study would be horrendous grist for the anti-vaccination bill. That's why we need to go on, and urgently I would add.\*"

**Dr. Brent, pg. 188-191:** "I am impressed with the fact that some people here have information and believe that like the incidence of learning difficulties, behavior disorders and attention deficit is increasing in our population. I don't know whether it is or it isn't, but that kind of information you just can't throw around and say it's true or isn't true without data. And it is such an important area in our society. I mean it is the thing that makes a human being different from the other species, so it is such an important area of research..."

"...(thimerosal) Causing learning disabilities and behavioral disorders. ADD is a tremendous problem in our society and I think it is one that we should be very concerned about."

"Finally, the thing that concerns me the most, those who know me, I have been a pin stick in the litigation community because of the nonsense of our litigious society. This will be a resource to our very busy plaintiff attorneys in this country when this information becomes available. They want business and this could potentially be a lot of business."

**Dr. Koller, pg. 192:** "...As you increase the vaccination, you increase effects, but you don't know. You have modified live viruses. You have different antigens. There is a lot of things in those vaccinations other than mercury, and we don't know whether this is a vaccination effect or a mercury effect. But I am almost sure it is not a mercury effect. Positive as a matter of fact, and there are several experts particularly that have reviewed this, the methylmercury aspect who would agree with that due to dose response."

**Dr. Johnson, pg. 193:** "Are you really comfortable with the way the neurologic function was tested in the Seychelles?"

**Dr. Koller, pg. 193:** "I have to admit that there were many other tests that could have been conducted...We are talking about very subjective, very sensitive assays and yes, there could have been others done and there should be more done..."

**Dr. Johnson, pg. 198:** "This association leads me to favor a recommendation that infants up to two years old not be immunized with Thimerosal containing vaccines if suitable alternative preparations are available."

"My gut feeling? It worries me enough. Forgive this personal comment, but I got called out at eight o'clock for an emergency call and my daughter-in-law delivered a son by C-section. Our first male in the line of the next generation, and I do not want that grandson to get a Thimerosal containing vaccine until we know better what is going on. It will probably take a long time. In the meantime, and I know there are probably implications for this internationally, but in the meantime I think I want that grandson to only be given Thimerosal-free vaccines."

**Dr. Bernier, pg 198:** "the negative findings need to be pinned down and published."

**Dr. Weil, pg. 207:** "The number of dose related relationships are linear and statistically significant. You can play with this all you want. They are linear. They are statistically significant. The positive relationships are those that one might expect from the Faroe Islands studies. They are also related to those data we do have on experimental animal data and similar to the neurodevelopmental tox data on

other substances, so that I think you can't accept that this is out of the ordinary. It isn't out of the ordinary."

**Dr. Weil, pg. 208:** "The rise in the frequency of neurobehavioral disorders whether it is ascertainment or real, is not too bad. It is much too graphic. We don't see that kind of genetic change in 30 years."

**Dr. Brent, pg. 229:** "The medical/legal findings in this study, causal or not, are horrendous and therefore, it is important that the suggested epidemiological, pharmacokinetic, and animal studies be performed. If an allegation was made that a child's neurobehavioral findings were caused by Thimerosal containing vaccines, you could readily find junk scientist who would support the claim with "a reasonable degree of certainty". But you will not find a scientist with any integrity who would say the reverse with the data that is available. And that is true. So **we are in a bad position from the standpoint of defending any lawsuits** if they were initiated and I am concerned."

**Dr. Meyers, pg. 231:** "Can I go back to the core issue about the research? My own concern, and a couple of you said it, there is an association between vaccines and outcome that worries both parents and pediatricians. We don't really know what that outcome is, but it is one that worries us and there is an association with vaccines. We keep jumping back to Thimerosal, but a number of us are concerned that Thimerosal may be less likely than some of the potential associations that have been made. Some of the potential associations are number of injections, number of antigens, other additives. We mentioned aluminum and I mentioned yesterday aluminum and mercury. Antipyretics and analgesics are better utilized when vaccines are given. And then every body mentioned all of the ones that we can't think about in this quick time period that are a part of this association, and yet all of the questions I hear we are asking have to do with Thimerosal. My concern is we need to ask the questions about the other potential associations, because we are going to the Thimerosal-free vaccine. If many of us don't think that this is a plausible association because of the levels and so on, then we are missing looking for the association that may be the important one."

**Dr. Caserta, pg. 234:** "One of the things I learned at the Aluminum Conference in Puerto Rico that was tied into the metal lines in biology and medicine that I never really understood before, is the interactive effect of different metals when they are together in the same organism. It is not the same as when they are alone, and I think it would be foolish for us not to include aluminum as part of our thinking with this."

**Dr. Clements, pg 247- 249:** "I am really concerned that we have taken off like a boat going down one arm of the mangrove swamp at high speed, when in fact there was not enough discussion really early on about which way the boat should go at all. And I really want to risk offending everyone in the room by saying that **perhaps this study should not have been done at all, because the outcome of it could have, to some extent, been predicted, and we have all reached this point now where we are left hanging, even though I hear the majority of consultants say to the Board that they are not convinced there is a causality direct link between Thimerosal and various neurological outcomes.**"

"I know how we handle it from here is extremely problematic. The ACIP is going to depend on comments from this group in order to move forward into policy, and I have been advised that whatever I say should not move into the policy area because that is not the point of this meeting. But nonetheless, we know from many experiences in history that the pure scientist has done research because of pure science. But that pure science has resulted in splitting the atom or some other process which is completely beyond the power of the scientists who did the research to control it. And what we have here is people who have, for every best reason in the world, pursued a direction of research. But there is not the point at which the research results have to be handled, and **even if this committee decides that there is no association and that information gets out, the work that has been done and through the freedom of information that will be taken by others and will be used in ways beyond the control of this group. And I am very concerned about that as I suspect it already too late to do anything regardless of any professional body and what they say.**"

"My mandate as I sit here in this group is to make sure at the end of the day the 100,000,000 are immunized with DTP, Hepatitis B and if possible Hib, this year, next year and for many years to come, and that will have to be with Thimerosal containing vaccines unless a miracle occurs and an alternative is found quickly and is tried and found to be safe."

"So I leave you with the challenge that I am very concerned that this has gotten this far, and that having got this far, how you present in a concerted voice the information to the ACIP in a way they will be able to handle it and not get exposed to the traps which are out there in public relations. My message would be that any other study, and I like the study that has just been described here very much. I think it makes a lot of sense, but it has to be thought through. What are the potential outcomes and how will you handle it? How will it be presented to a public and media that is hungry for selecting the information they want to use for whatever means they in store for them?"

"...but I wonder how on earth you are going to handle it from here."

**Dr. Bernier, pg. 256:** "...As difficult as science is, there are two other equally tricky, complex challenges. The policy crafting has to take into consideration some very diverse and complex issues. There is another group that will deal with that, and then we have the communication and how we handle this, which I think I am no expert at, but seems equally daunting to me as the scientific and the policy issue."

"I don't think we can set a rule here because some people have gotten these documents. For example, some of the manufacturers were privileged to receive this information. It has been important for them to share it within the company with the experts there, so they can review it. Some of you may have questions. You may have given a copy, but I think if we will all just consider this embargoed information, if I can use that term, and very highly protected information, I think that was the best I can offer ([AAPS, 2003](#)).

**Title:** Forget The Advice -- Give Us Vaccinations

**Date:** March 2, 2003

**Source:** [LA Times](#)

**Abstract:** If you have followed the recent advice of the Department of Homeland Security, you have now laid in gallons of water, a battery-operated radio, duct tape, plastic sheeting and enough nonperishable food to last. For how long? No one knows. You have also prepared backpacks stuffed with warm clothes and blankets for each member of the family, and you have them all ready to go. Where? That's unclear.

If you feel inadequately prepared, don't expect much help from the Homeland Security Web site [www.ready.gov](#). You'll find basic tips, like to turn on a radio in the event of an attack. And there are some intriguing illustrations, like one of a man looking for the source of a chemical or biological attack while dead fish float nearby.

But to those of us who grew up in the '50s and '60s, the government advice seems eerily reminiscent of those senseless single-file trips to a dank school basement, where we sat waiting for the all-clear bell to sound. The basements were mysterious and a trip down there was more fun than a fire alarm, which sent you outside to freeze. But what was the point? The bombs, if they had come, would have reduced us to a powdery residue, or left us to die of radiation sickness. We were too young to understand the terrible futility of "duck and cover."

The new prescriptions are equally futile. Our government is once again treating us like docile second-graders in a dusty basement. Let's start with the concept of duct tape and plastic sheeting, an idea that comes from Israel, where it makes some sense. Scud missiles shrieking overhead are a real possibility in Israel, within easy striking distance of Iraq. Israelis are in a position, though we can hardly call it enviable, of having time to learn when a missile attack is coming, and to gather inside their sealed and sheeted rooms before a missile hits.

What enemy are we cowering from, in our sheeted rooms? Where will the Scud missiles be launched from, and how will we know to pull our children inside? Maj. Gen. Bruce Lawlor, chief of staff to Homeland Security Secretary Tom Ridge, recently told the *New York Times*, "People who are making fun of it don't know what they're talking about." In fact, he said, Israelis purchased large quantities of duct tape and plastic sheeting during the Gulf War. They "relied on it" for their safety, and "it has worked," he said.

Well, not exactly. The Scud missiles that Iraq launched at Israel during the Gulf War had no chemical or biological payloads, and so the sealed rooms saved no one. But four people died of heart attacks in their sealed rooms, and seven suffocated from incorrect use of gas masks; 229 people were apparently injured by inappropriate self-administered antibiotics, to protect against an anthrax attack that never came. Whether the sealed rooms would have saved lives had chemical or biological weapons been used, we have no way of knowing.

A U.S. government chemical weapons expert who asked not to be identified has little patience with the recommendations, which, developed for Israel, make no sense in the United States.

"What I think makes sense is to get away from contamination, which is what people do anyway. We run from fire, we run from hazards. People will know what to do. If you get the stuff on you, you'd shower it off," the expert said. "In most cases, with a chemical agent, you have time to get it off. And the effects of the more fearsome agents, such as cyanide, can be lessened with medical treatment. The worst-case scenarios are of enclosed spaces where people have no option to flee, but those would probably be limited in scope."

In any event, a large-scale chemical attack using military agents such as sarin or VX is most unlikely. Another expert says, "If bad guys can get enough chemical agent into the country to launch a major attack, you've got bigger problems than chemical weapons."

As for biological weapons, for your sealed room to do you any good, you'd have to know that an attack was coming. As a government scientist who wishes to remain anonymous puts it, the Homeland Security recommendations "give the illusion that you are doing something useful, but do not really address the problems. On the biological side, it's just totally ridiculous, because you are never going to know you've been attacked by a bio- agent cloud until it's over."

In the unlikely event you knew an attack was coming, just staying indoors would probably protect you. In 1979, a technician working in the ultrasecret biological weapons laboratory of [Sverdlovsk](#) in the Soviet Union forgot to replace a filter, causing an explosive release of dry anthrax powder into the air. Sixty-eight people downwind from the plant eventually died of anthrax. As Peter B. Jahrling of the U.S. Army Medical Research Institute of Infectious Diseases puts it, "In Sverdlovsk, the folks inside the leaky houses were not infected; only those who were outside in the early morning hours when the release occurred were infected. So dilution is the solution, and anything which cuts down on the dose ought to be beneficial."

Simple masks would work as well, even against smallpox and plague, the two contagious threat agents. In 1910-11 and again in 1920-21, plague experts stopped major natural outbreaks of deadly pneumonic plague in Manchuria simply by imposing a quarantine on the sick and their contacts, by keeping people at home and by wearing gauze masks whenever anyone was exposed to plague patients. Regarding smallpox, probably the most feared agent, Jahrling says, "N-100 masks probably work with 99% efficiency against smallpox. I'd opt for something that reduced my exposure one-hundredfold."

These simple suggestions may be better than nothing. But in any event, offering us the option of "protecting ourselves" is an easy way out for the administration. There is a real solution to the threat of biological agents, but it calls for force and direction that the administration does not seem to have. It is vaccination in advance of an attack, vaccination against the most serious threat agents, anthrax, smallpox and plague.

There is no safe, effective plague vaccine, although scientists are working to develop one. But where is the smallpox vaccine? After temporizing for nearly a year, the administration finally decided to offer vaccinations to health-care workers and public safety personnel. In the last month, with war probably imminent, fewer than 8,000 civilians have received the vaccine, and 100,000 troops.

Instead of giving the American people a real choice -- access to existing vaccines against smallpox and anthrax -- we've been offered duct tape and plastic sheeting and told to protect ourselves. One bioterror expert who insists on anonymity maintains that in the end "more people will die from suffocation from gas masks and sealed rooms than from chemical or biological attacks. The one thing that would prepare us would be mass vaccination, and they're not even talking about that."

Duct and cover? Thanks a lot ([LA Times, 2003](#)).

**Title:** Vaccine Link Raised In U.S Troops' Deaths

**Date:** August 5, 2003

**Source:** [UCLA](#)

**Abstract:** The U.S. Army should look at whether the anthrax vaccine is behind the unexplained cluster of pneumonia cases among soldiers in Iraq, according to the co-author of a government-sponsored study that last year found the vaccine was the "possible or probable" cause of pneumonia in two soldiers.

Dr. John L. Sever of George Washington University Medical School told United Press International Tuesday that he expects the military to consider the anthrax vaccine, among other possibilities, as it investigates pneumonia among soldiers in and around Iraq, where troops have been widely vaccinated against anthrax.

The Pentagon announced Tuesday it is investigating 100 cases of pneumonia among soldiers in Iraq and southwestern Asia. Two have died. Fifteen have had to be placed on respirators.

"As physicians, I would think they would be looking at all possible causes. I would think vaccines would be part of that," said Sever, a medical professor at George Washington who was one of six authors of the study.

Col. Robert DeFraitess from the Army Surgeon General's office told reporters at the Pentagon briefing Tuesday that biological warfare -- including smallpox or anthrax -- was unlikely to be the cause of the pneumonia. He did not mention vaccines as a possible cause, and the issue was not raised by reporters.

DeFraitess and spokeswoman Virginia Stephanakis of the Army Surgeon General's office did not return calls Tuesday asking whether the Pentagon was looking into a possible vaccine connection.

Sever said the anthrax vaccine study, printed in the May 2002 issue of *Pharmacoepidemiology and Drug Safety*, found that the vaccine was the "possible or probable" cause of pneumonia among two soldiers. The Department of Health and Human Services convened the group, called the Anthrax Vaccine Expert Committee, which studied 602 reports of possible reactions to the vaccine among nearly 400,000 troops who received it, Sever said.

In addition to identifying pneumonia and flu-like symptoms among troops who received the vaccine, the group also looked at four other cases of potentially serious reactions, including severe back pain and two soldiers who had sudden difficulty breathing in a possible allergic reaction to the vaccine.

Sever described the two cases of pneumonia as "wheezing and difficulty breathing going into a pneumonia-like picture."

To conduct the study, the Anthrax Vaccine Expert Committee examined reports from the U.S. military to the Centers for Disease Control and Prevention; they are anecdotal reports and do not necessarily show a cause-and-effect relationship.

DeFraitres said the two deaths under investigation by the Army Surgeon General occurred in June and July and that both soldiers had been in Iraq. He said the investigation began as soon as the first death occurred.

In a case apparently not included in that total, 22-year-old Army specialist Rachael Lacy of Lynwood, Ill., died at the Mayo Clinic in Rochester, Minn., on April 4 of what one doctor diagnosed as pneumonia, after receiving anthrax and smallpox vaccinations but without ever having been deployed.

Dr. Eric Pfeifer, the Minnesota coroner who performed the autopsy, told the *Army Times* that the smallpox and anthrax vaccines "may have" contributed to her death. "It's just very suspicious in my mind...that she's healthy, gets the vaccinations and then dies a couple weeks later." He listed "post-vaccine" problems on the death certificate.

Moses Lacy, Rachael Lacy's father, told the *Army Times* that she called in March and said she had chest pains and breathing problems and had been diagnosed with pneumonia.

One service member who was deployed to Kuwait and received the four-shot anthrax series told *United Press International* Tuesday he developed bronchitis and a severe cough after receiving his shots, and that about a fifth of the troops he was deployed with had similar symptoms and were prescribed medicine to treat them. His symptoms continued after he returned to the U.S., and he sought further treatment at a base clinic. He got better, but believes he nearly came down with pneumonia.

The Pentagon dispatched two teams to look into the pneumonia: one to Iraq and another to a U.S. military base in Landstuhl, Germany, where some sick soldiers are treated ([UCLA, 2003](#)).

**Title:** Private Study Links Vaccinations To Neurological Disorders

**Date:** February 14, 2008

**Source:** [Natural News](#)

**Abstract:** Studies financed by pharmaceutical corporations and government agencies - which are now largely under the control of big pharma - keep stating that there is no link between autism and vaccinations or thimerosal. As a previous News Target article, (<http://www.NaturalNews.com/022237.html>) Dissecting A Thimerosal Study demonstrates, these studies are often tainted by their funding. Nonetheless, parents find themselves under tremendous pressure, both overt and subtle, to have their children vaccinated, in spite of little or no documentation showing efficacy, let alone safety. Worse, information produced by the American Medical Association clearly demonstrates that vaccinations have done nothing to increase longevity, and may have caused increases in deaths from disease.

### **Vaccination's Smoking Gun**

More dramatic, though, is a virtual smoking gun - a study showing a clear connection between neurological disorders and vaccinations. The results are dramatic, showing that more than twice the number of vaccinated children had autism than those who had not been vaccinated. Worse, the rates of vaccinated children with other neurological problems are even higher.

Done in June 2007, the study was financed by Generation Rescue, a group of families with autistic children who have been working to find out why this has happened to their youngsters and how to help them. The study itself is a survey of 11,817 California and Oregon households, with a total of 17,674 children, 991 of whom had never been vaccinated. It was produced by SurveyUSA, an independent company.

## **The SurveyUSA Study**

There seems little likelihood of bias in favor of results showing a link between vaccinations and autism, as SurveyUSA includes several pharmaceutical firms among its clientele, including Abbott Laboratories, Alcon Laboratories, AstraZeneca Pharmaceuticals, Bayer Corporation, GlaxoSmithKline, Merck Laboratories, Monsanto Company, Nexium, Pfizer, and Schering Plough — all documented in the SurveyUSA list of clients (<http://www.surveyusa.com/index.php/who-does-surveyusa-poll-for/>). If SurveyUSA has a bias, it must be in favor of the pharmaceutical corporations. Yet, this study shows a result that does not benefit any of these businesses.

## **The Study's Methodology**

Nine counties in California and Oregon were selected for the study.

*California counties:* San Diego, Sonoma, Orange, Sacramento, Marin

*Oregon counties:* Multnomah, Marion, Jackson, Lane

Target households were those with children ages 4 through 17. Data were gathered for 9,175 boys and 8,499 girls. Information elicited whether each child had been vaccinated and, vaccinated or not, whether the child had one or more of the following disorders:

- \* Attention deficit disorder
- \* Attention deficit hyperactivity disorder
- \* Asperger's syndrome
- \* Pervasive developmental disorder - not otherwise specified
- \* Autism
- \* Asthma
- \* Juvenile diabetes

Data were analyzed according to sex and county, and broken down by age ranges 4 through 10 and 11 through 17. Percentages of children with these disorders were noted according to whether they'd been vaccinated or not, and the correlation between the two numbers, called the Risk Ratio (RR), was calculated.

The RR is a simple calculation that compares the percentage of vaccinated to unvaccinated children with each disorder. Thus, if 4.5% of vaccinated children have Asperger's and 2.7% of non-vaccinated children have the same disease, the RR is 4.5% divided by 2.7%, giving an RR value of 1.67. ( $4.5/2.7 = 1.67$ ) Thus, an RR over 1.0 indicates that vaccinations are related to a higher disease incidence, and an RR under 1.0 indicate that vaccinations are related to a lower disease incidence.

All results of the study were tabulated and have been made available to the public to assure complete transparency (<http://www.generationrescue.org/pdf/survey.pdf>). In other words, no attempt has been made to hide or otherwise manipulate the data.

The survey was automated, thus eliminating any chance that an individual might mislead a respondent. Responses were given via telephone touchpads. This is also the manner that the Centers for Disease Control says is most accurate. The survey questions used in Sonoma County can be found here (<http://www.generationrescue.org/pdf/questions.pdf>). In my reading of the survey, there is no language that could indicate a desired response either for or against vaccinations.

## **Survey Results**

The results are stunning. The data shows dramatic increases in neurological diseases and asthma in vaccinated children. Generation Rescue is cautious in its interpretations. They have taken a humble position, saying that, "We are a small non-profit organization. For less than \$200,000, we were able to complete a study that the CDC, with an \$8 billion a year budget, has been unable or unwilling to do. We think the results of our survey lend credibility to the urgent need to do a larger scale study to compare



vaccinated and unvaccinated children for neurodevelopmental outcomes."

On the other hand, a survey, taken randomly from 17,674 children and focused on nine counties in various areas separated by hundreds of miles, is a significant number by itself. Unless the CDC should do an equivalent study, done with the same rigor, over a larger population, then this one must stand as nothing less than a smoking gun for the link between childhood vaccinations and neurological disorders, plus asthma. The only disease in the survey that did not show an increase associated with vaccination was juvenile diabetes.

## **Results Summary**

### **Vaccinated boys:**

- \* Neurological disorder, RR = 2.55 (155% more likely to have neurological disorder than unvaccinated boys)
- \* ADHD, RR = 3.24 (224% more likely to have ADHD than unvaccinated boys)
- \* Autism, RR = 1.61 (61% more likely to have autism than unvaccinated boys)

### **Vaccinated boys ages 11-17:**

- \* Neurological disorder, RR = 2.58 (158% more likely to have neurological disorder than unvaccinated boys)
- \* ADHD, RR = 4.17 (317% more likely to have ADHD than unvaccinated boys)
- \* Autism, RR = 2.12 (112% more likely to have autism than unvaccinated boys)

The study notes that older children are more likely to have been diagnosed with a neurological disorder, because such diagnoses are often missed in younger children. Therefore, this is likely the more accurate figure.

All vaccinated boys and girls were 120% more likely to have asthma than unvaccinated children (RR = 2.20).

Vaccinated girls showed no significant difference from unvaccinated girls in neurological disorders. Whether this is due to the relatively small number of girls with these same disorders or because of the relatively small number of girls with such disorders in the study is unknown.

## **Conclusion: Stop Vaccinating Our Children!**

What more do you need to know? This study shows a clear link between neurological disorders and vaccinations. It indicates that autism rates may be more than double in vaccinated boys than in those who were not vaccinated.

The question needs to be asked: Why doesn't the CDC or the FDA or the AMA do a large-scale equivalent study to determine whether the pharmaceutically-funded studies are valid? The methodology is simple, and it adheres to the techniques that the CDC has approved. Rather than continuing to spend huge amounts of money on clearly flawed studies to placate the pharmaceutical corporations and give a false sense of security to parents, it's time for these organizations to put their money where their mouth is. It's well past time for them to use Generation Rescue's methods on a national scale. This is the sort of study that can definitively show whether there's a link between neurological disorders and vaccinations.

Until these agencies produce such a study, it's time for them to stop forcing vaccinations on our children. Let them try to prove, using transparent studies in which all children of all families contacted are included, without exception, unlike the recent one documented in Dissecting A Thimerosal Study (<http://www.NaturalNews.com/022237.html>), in which the vast majority of children were eliminated for specious reasons. Until they're willing to do this, they must stop destroying the lives of our young for their profits ([Natural News, 2008](#)).

**Title:** Homeless People Die After Bird Flu Vaccine Trial In Poland

**Date:** July 2, 2008

**Source:** [Telegraph](#)

**Abstract:** Three Polish doctors and six nurses are facing criminal prosecution after a number of homeless people died following medical trials for a vaccine to the H5N1 bird-flu virus.

The medical staff, from the northern town of Grudziadz, are being investigated over medical trials on as many as 350 homeless and poor people last year, which prosecutors say involved an untried vaccine to the highly-contagious virus.

Authorities claim that the alleged victims received £1-2 to be tested with what they thought was a conventional flu vaccine but, according to investigators, was actually an anti bird-flu drug.

The director of a Grudziadz homeless centre, Mieczyslaw Wacławski, told a Polish newspaper that last year, 21 people from his centre died, a figure well above the average of about eight.

Although authorities have yet to prove a direct link between the deaths and the activities of the medical staff, Poland's health minister, Ewa Kopacz, has said that the doctors and nurses involved should not return to their profession.

"It is in the interests of all doctors that those who are responsible for this are punished," the minister added.

Investigators are also probing the possibility that the medical staff may have also have deceived the pharmaceutical companies that commissioned the trials.

The suspects said that the all those involved knew that the trial involved an anti-H5N1 drug and willingly participated.

The news of the investigation will come as another blow to the reputation of Poland's beleaguered and poverty-stricken national health service. In 2002, a number of ambulance medics were found guilty of killing their patients for commissions from funeral companies ([Telegraph, 2008](#)).

**Title:** Vaccines As Biological Weapons? Live Avian Flu Virus Placed In Baxter Vaccine Materials Sent To 18 Countries

**Date:** March 3, 2009

**Source:** [Natural News](#)

**Abstract:** There's a popular medical thriller novel in which a global pandemic is intentionally set off by an evil plot designed to reduce the human population. In the book, a nefarious drug company inserts live avian flu viruses into vaccine materials that are distributed to countries around the world to be injected into patients as "flu shots." Those patients then become carriers for these highly-virulent strains of avian flu which go on to infect the world population and cause widespread death.

There's only one problem with this story: It's not fiction. Or, at least, the part about live [avian flu](#) viruses being inserted into [vaccine](#) materials isn't fiction. It's happening right now.

Deerfield, Illinois-based pharmaceutical company [Baxter](#) International Inc. has just been caught shipping *live avian flu viruses* mixed with vaccine material to medical distributors in 18 countries. The "mistake" (if you can call it that, see below...) was discovered by the National Microbiology Laboratory in Canada. The World Health Organization was alerted and panic spread throughout the vaccine community as [health](#) experts asked the obvious question: How could this have happened?

As published on LifeGen.de (<http://www.lifegen.de/newsip/shownews.php4?getnews=2009-02-26-5323&pc=s01>), serious questions like this are being raised:

*"Baxter International Inc. in Austria 'unintentionally contaminated samples with the [bird flu virus](#) that were used in laboratories in 3 neighbouring countries, raising concern about the potential spread of the deadly disease'. Austria, Germany, Slovenia and the Czech Republic - these are the countries in which labs were hit with dangerous viruses. Not by bioterrorist commandos, but by Baxter. In other words: One of the major global pharmaceutical players seems to have lost control over a [virus](#) which is considered by many virologists to be one of the components leading some day to a new [pandemic](#)."*

Or, put another way, Baxter is acting a whole lot like a biological terrorism organization these days, sending deadly viral samples around the world. If you mail an envelope full of anthrax to your Senator, you get arrested as a terrorist. So why is Baxter -- which mailed samples of a far more deadly viral strain to labs around the world -- getting away with saying, essentially, "Oops?"

But there's a bigger question in all this: How could this company have *accidentally* mixed LIVE avian [flu](#) viruses (both H5N1 and H3N2, the human form) in this vaccine material? ([Natural News, 2009](#)).

**Title:** Virus Mix-Up By Lab Could Have Resulted In Pandemic

**Date:** March 6, 2009

**Source:** [Times of India](#)

**Abstract:** It's emerged that virulent H5N1 bird flu was sent out by accident from an Austrian lab last year and given to ferrets in the Czech Republic before anyone realised. As well as the risk of it escaping into the wild, the H5N1 got mixed with a human strain, which might have spawned a hybrid that could unleash a pandemic. Last December, the Austrian branch of US vaccine company Baxter sent a batch of ordinary human H3N2 flu, altered so it couldn't replicate, to Avir Green Hills Biotechnology, also in Austria. In February, a lab in the Czech Republic working for Avir alerted Baxter that, unexpectedly, ferrets inoculated with the sample had died. It turned out the sample contained live H5N1, which Baxter uses to make vaccine. The two seem to have been mixed in error ([Times, of India, 2009](#)).

**Title:** Swine Flu Jab Link To Killer Nerve Disease: Leaked Letter Reveals Concern Of Neurologists Over 25 Deaths In America

**Date:** August 15, 2009

**Source:** [Daily Mail](#)

**Abstract:** A warning that the new swine flu jab is linked to a deadly nerve disease has been sent by the Government to senior neurologists in a confidential letter.

The letter from the Health Protection Agency, the official body that oversees public health, has been leaked to The Mail on Sunday, leading to demands to know why the information has not been given to the public before the vaccination of millions of people, including children, begins.

It tells the neurologists that they must be alert for an increase in a brain disorder called Guillain-Barre Syndrome (GBS), which could be triggered by the vaccine.

GBS attacks the lining of the nerves, causing paralysis and inability to breathe, and can be fatal.

The letter, sent to about 600 neurologists on July 29, is the first sign that there is concern at the highest levels that the vaccine itself could cause serious complications.

It refers to the use of a similar swine flu vaccine in the United States in 1976 when:

1. More people died from the vaccination than from swine flu.

2. 500 cases of GBS were detected.
3. The vaccine may have increased the risk of contracting GBS by eight times.
4. The vaccine was withdrawn after just ten weeks when the link with GBS became clear.
5. The US Government was forced to pay out millions of dollars to those affected.

Concerns have already been raised that the new vaccine has not been sufficiently tested and that the effects, especially on children, are unknown.

It is being developed by pharmaceutical companies and will be given to about 13million people during the first wave of immunisation, expected to start in October.

Top priority will be given to everyone aged six months to 65 with an underlying health problem, pregnant women and health professionals.

The British Neurological Surveillance Unit (BNSU), part of the British Association of Neurologists, has been asked to monitor closely any cases of GBS as the vaccine is rolled out.

One senior neurologist said last night: 'I would not have the swine flu jab because of the GBS risk.'

There are concerns that there could be a repeat of what became known as the '1976 debacle' in the US, where a swine flu vaccine killed 25 people – more than the virus itself.

A mass vaccination was given the go-ahead by President Gerald Ford because scientists believed that the swine flu strain was similar to the one responsible for the 1918-19 pandemic, which killed half a million Americans and 20million people worldwide.

Within days, symptoms of GBS were reported among those who had been immunised and 25 people died from respiratory failure after severe paralysis. One in 80,000 people came down with the condition. In contrast, just one person died of swine flu.

More than 40million Americans had received the vaccine by the time the programme was stopped after ten weeks. The US Government paid out millions of dollars in compensation to those affected.

The swine flu virus in the new vaccine is a slightly different strain from the 1976 virus, but the possibility of an increased incidence of GBS remains a concern.

Shadow health spokesman Mike Penning said last night: 'The last thing we want is secret letters handed around experts within the NHS. We need a vaccine but we also need to know about potential risks.'

'Our job is to make sure that the public knows what's going on. Why is the Government not being open about this? It's also very worrying if GPs, who will be administering the vaccine, aren't being warned.'

Two letters were posted together to neurologists advising them of the concerns. The first, dated July 29, was written by Professor Elizabeth Miller, head of the HPA's Immunisation Department.

It says: 'The vaccines used to combat an expected swine influenza pandemic in 1976 were shown to be associated with GBS and were withdrawn from use.'

'GBS has been identified as a condition needing enhanced surveillance when the swine flu vaccines are rolled out.

'Reporting every case of GBS irrespective of vaccination or disease history is essential for conducting robust epidemiological analyses capable of identifying whether there is an increased risk of GBS in defined time periods after vaccination, or after influenza itself, compared with the background risk.'

The second letter, dated July 27, is from the Association of British Neurologists and is written by Dr Rustam Al-Shahi Salman, chair of its surveillance unit, and Professor Patrick Chinnery, chair of its clinical research committee.

It says: 'Traditionally, the BNSU has monitored rare diseases for long periods of time. However, the swine influenza (H1N1) pandemic has overtaken us and we need every member's involvement with a new BNSU survey of Guillain-Barre Syndrome that will start on August 1 and run for approximately nine months.

'Following the 1976 programme of vaccination against swine influenza in the US, a retrospective study found a possible eight-fold increase in the incidence of GBS.

'Active prospective ascertainment of every case of GBS in the UK is required. Please tell BNSU about every case.

'You will have seen Press coverage describing the Government's concern about releasing a vaccine of unknown safety.'

If there are signs of a rise in GBS after the vaccination programme begins, the Government could decide to halt it.

GBS attacks the lining of the nerves, leaving them unable to transmit signals to muscles effectively.

It can cause partial paralysis and mostly affects the hands and feet. In serious cases, patients need to be kept on a ventilator, but it can be fatal.

Death is caused by paralysis of the respiratory system, causing the victim to suffocate. It is not known exactly what causes GBS and research on the subject has been inconclusive.

However, it is thought that one in a million people who have a seasonal flu vaccination could be at risk and it has also been linked to people recovering from a bout of flu of any sort.

The HPA said it was part of the Government's pandemic plan to monitor GBS cases in the event of a mass vaccination campaign, regardless of the strain of flu involved. But vaccine experts warned that the letters proved the programme was a 'guinea-pig trial'.

Dr Tom Jefferson, co-ordinator of the vaccines section of the influential Cochrane Collaboration, an independent group that reviews research, said: 'New vaccines never behave in the way you expect them to. It may be that there is a link to GBS, which is certainly not something I would wish on anybody.

'But it could end up being anything because one of the additives in one of the vaccines is a substance called squalene, and none of the studies we've extracted have any research on it at all.'

He said squalene, a naturally occurring enzyme, could potentially cause so-far-undiscovered side effects.

Jackie Fletcher, founder of vaccine support group Jabs, said: 'The Government would not be anticipating this if they didn't think there was a connection. What we've got is a massive guinea-pig trial.'

Professor Chinnery said: 'During the last swine flu pandemic, it was observed that there was an increased frequency of cases of GBS. No one knows whether it was the virus or the vaccine that caused this.'

'The purpose of the survey is for us to assess rapidly whether there is an increase in the frequency of GBS when the vaccine is released in the UK. It also increases consultants' awareness of the condition.'

'This is a belt-and-braces approach to safety and is not something people should be substantially worried about as it's a rare condition.'

If neurologists do identify a case of GBS, it will be logged on a central database.

Details about patients, including blood samples, will be collected and monitored by the HPA.

It is hoped this will help scientists establish why some people develop the condition and whether it is directly related to the vaccine.

But some question why there needs to be a vaccine, given the risks. Dr Richard Halvorsen, author of *The Truth About Vaccines*, said: 'For people with serious underlying health problems, the risk of dying from swine flu is probably greater than the risk of side effects from the vaccine.'

'But it would be tragic if we repeated the US example and ended up with more casualties from the jabs.'

'I applaud the Government for recognising the risk but in most cases this is a mild virus which needs a few days in bed. I'd question why we need a vaccine at all.'

Professor Miller at the HPA said: 'This monitoring system activates pandemic plans that have been in place for a number of years. We'll be able to get information on whether a patient has had a prior influenza illness and will look at whether influenza itself is linked to GBS.'

'We are not expecting a link to the vaccine but a link to disease, which would make having the vaccine even more important.'

The UK's medicines watchdog, the Medicines and Healthcare Products Regulatory Agency, is already monitoring reported side effects from Tamiflu and Relenza and it is set to extend that surveillance to the vaccine.

A Department of Health spokesperson said: 'The European Medicines Agency has strict processes in place for licensing pandemic vaccines.'

'In preparing for a pandemic, appropriate trials to assess safety and the immune responses have been carried out on vaccines very similar to the swine flu vaccine. The vaccines have been shown to have a good safety profile.'

'It is extremely irresponsible to suggest that the UK would use a vaccine without careful consideration of safety issues. The UK has one of the most successful immunisation programmes in the world.'

## **I Couldn't Eat or Speak...It was Horrendous**

But within hours, she was on a ventilator in intensive care after being diagnosed with Guillain-Barre Syndrome.

She spent three months in hospital and had to learn how to talk and walk again. But at times, when she was being fed through a drip and needed a tracheotomy just to breathe, she doubted whether she would survive.

The mother of two, 57, from Maryport, Cumbria, had been in good health until she developed a chest infection in March 2006. She gradually became so weak she could not walk downstairs.

Doctors did not diagnose Guillain-Barre until her condition worsened in hospital and tests showed her reflexes slowing down. It is impossible for doctors to know how she contracted the disorder, although it is thought to be linked to some infections.

Mrs Wilkinson said: 'It was very scary. I couldn't eat and I couldn't speak. My arms and feet had no strength and breathing was hard.

I was treated with immunoglobulin, which are proteins found in blood, to stop damage to my nerves. After ten days, I still couldn't speak and had to mime to nurses or my family.

'It was absolutely horrendous and I had no idea whether I would get through it. You reach very dark moments at such times and wonder how long it can last.

But I'm a very determined person and I had lots of support.'

After three weeks, she was transferred to a neurological ward, where she had an MRI scan and nerve tests to assess the extent of the damage.

Still unable to speak and in a wheelchair, Mrs Wilkinson eventually began gruelling physiotherapy to improve her muscle strength and movement but it was exhausting and painful.

Three years later, she is almost fully recovered. She can now walk for several miles at a time, has been abroad and carries out voluntary work for a GBS Support Group helpline.

She said: 'It makes me feel wary that the Government is rolling out this vaccine without any clear idea of the GBS risk, if any. I wouldn't wish it on anyone and it certainly changed my life.

'I'm frightened to have the swine flu vaccine if this might happen again – it's a frightening illness and I think more research needs to be done on the effect of the vaccine.'

## **Hotline staff given access to confidential records**

Confidential NHS staff records and disciplinary complaints could be accessed by hundreds of workers manning the Government's special swine flu hotline.

They were able to browse through a database of emails containing doctors' and nurses' National Insurance numbers, home addresses, dates of birth, mobile phone numbers and scanned passport pages – all details that could be used fraudulently.



And private and confidential complaints sent by hospitals about temporary medical staff – some of whom were named – were also made available to the call-centre workers, who were given a special password to log in to an internal NHS website.

It could be a breach of the Data Protection Act.

The hotline staff work for NHS Professionals, which was set up using taxpayers' money to employ temporary medical and administrative staff for the health service.

The not-for-profit company runs two of the Government's swine flu call centres – with 300 staff in Farnborough, Hampshire, and 900 in Watford, Hertfordshire.

Shadow Health Secretary Andrew Lansley described the revelations as 'disturbing'.

Anne Mitchell, a spokeswoman for Unison, said: 'There's no excuse for such a fundamental breach of personal security. Action needs to be taken as soon as possible to make sure this does not happen again.'

A spokeswoman for NHS Professionals would not confirm whether access to the confidential files had been granted ([Daily Mail, 2009](#)).

**Title:** Does Virus Vaccine Increase The Risk Of Cancer?

**Date:** August 21, 2009

**Source:** [Bild](#)

**Abstract:** The swine flu vaccine has been hit by new cancer fears after a German health expert gave a shock warning about its safety.

Lung specialist Wolfgang Wodarg has said that there are many risks associated with the vaccine for the H1N1 virus.

He has grave reservations about the firm Novartis who are developing the vaccine and testing it in Germany. The vaccination is injected "with a very hot needle", Wodarg said.

The nutrient solution for the vaccine consists of cancerous cells from animals and "we do not know if there could be an allergic reaction".

But more importantly, some people fear that the risk of cancer could be increased by injecting the cells.

The vaccine - as Johannes Löwer, president of the [Paul Ehrlich Institute](#), has pointed out - can also cause worse side effects than the actual swine flu virus.

Wodarg also described people's fear of the pandemic as an "orchestration": "It is great business for the pharmaceutical industry," he told the 'Neuen Presse'.

Swine flu is not very different from normal flu. "On the contrary if you look at the number of cases it is nothing compared to a normal flu outbreak," he added.

The chairman of the health committee in the European Council has urged for a careful and calm reaction to the virus.

Up until now, the producers of the vaccine did not know how many orders they would have by the autumn, but the German Government is now a guaranteed customer.

Even the pharmaceutical companies are trying to exploit the fear of the [swine flu](#) pandemic ([Bild, 2009](#)).

**Title:** In Germany, A Better Vaccine For Politicians?

**Date:** October 27, 2009

**Source:** [TIME](#)

**Abstract:** Critics are calling it a two-tier health system — one for the politically well connected, another for the hoi polloi. As Germany launched its mass-vaccination program against the H1N1 flu virus on Monday, the government found itself fending off accusations of favoritism because it was offering one vaccine believed to have fewer side effects to civil servants, politicians and soldiers, and another, potentially riskier vaccine to everyone else. The government had hoped that Germans would rush to health clinics to receive vaccinations against the rapidly spreading disease, but now rising anger over the different drugs may cause many people to shy away.

Amid growing fears of a possible global flu pandemic, the German government prepared for its mass-vaccination campaign earlier this year by ordering 50 million doses of the Pandemrix vaccine, enough for a double dose for 25 million people, about a third of the population. The vaccine, manufactured by GlaxoSmithKline, contains an immunity-enhancing chemical compound, known as an adjuvant, whose side effects are not yet entirely known. Then, after a report was leaked to the German media last week, the Interior Ministry confirmed that it had ordered a different vaccine, Celvapan, for government officials and the military. Celvapan, which is made by U.S. pharmaceutical giant Baxter, does not contain an adjuvant and is believed to have fewer side effects than Pandemrix. ([See how not to get the H1N1 flu.](#))

Anger at the news was widespread in Germany. "If mass vaccination is considered to be necessary, then everyone should be treated the same way," says Birgitt Bender, health spokeswoman for the Green Party. Ulrike Mascher, head of the VdK social-welfare association, says giving government officials a vaccine that's different from that given to the rest of the population sent the "wrong signal" and gives many people "the impression that they are second-class patients." A story on the front page of the mass-circulation *Bild* newspaper accused the government of giving "second-class medicine" to regular Germans.

Doctors and medical experts are divided over the safety of Pandemrix. While some say it's the best vaccine available, others have serious misgivings about it. "The Pandemrix vaccine can't be recommended for pregnant women or young children because it has an increased risk of side effects. Pandemrix has an adjuvant which hasn't been tested sufficiently up until now," Alexander Kekulé, a virologist at the University of Halle, tells *TIME*. "Celvapan is a whole-virus vaccine, which has fewer side effects than Pandemrix, but it leads more often to fever or local swelling when compared with the normal seasonal-flu vaccine," he adds. Although Kekulé calls the government's handling of the vaccination program a "scandal," he says government officials and soldiers are not necessarily getting a better deal with Celvapan. "Neither Celvapan nor Pandemrix are ideal," he says. ([See what you need to know about the H1N1 vaccine.](#))

The Interior Ministry hit back at suggestions of preferential treatment, saying it had ordered about 200,000 doses of the Celvapan vaccine from Baxter before the differences between the two vaccines were documented, and the government was bound by the terms of its contract. The government also points out that both Pandemrix and Celvapan have been approved by the European Union and that other countries, such as Britain and Sweden, are using the Pandemrix vaccine. In an attempt to put a lid on the simmering controversy, Chancellor Angela Merkel's spokesman, Ulrich Wilhelm, said the German leader would consult with her doctor in the next few days, and if she decided to receive a jab, it would be Pandemrix. ([See pictures of thermal scanners hunting for swine flu.](#))

At least 26,000 people have been infected with swine flu in Germany, resulting in three deaths. Although the majority of patients have experienced only mild flulike symptoms, a steady increase in the number of cases of H1N1 in recent months has raised alarm across the nation. In its latest report, the Robert Koch Institute, the federal agency for infectious diseases, said new cases in Germany have jumped to about 1,600 each week, double the 700 to 800 weekly cases reported in early autumn. With the onset of winter, when seasonal-flu infections typically peak, many experts are concerned that H1N1 infections will spike dramatically. Klaus Osterrieder, a virologist at the Free University of Berlin, now fears that with the worries over the possible risks associated with Pandemrix, many people will avoid getting a vaccine altogether. According to a survey conducted on Oct. 23 by the Emnid Institute, only 13% of Germans said they wanted to receive a swine-flu vaccine this winter. ([Read "Child-Care Centers and Parents Brace for Flu Season."](#))

"The public debate is bad because it raises questions about the whole vaccination program," Osterrieder says. If the government doesn't find some way to remedy the current public relations disaster and clear up the confusion over the different swine-flu vaccines, it could be faced with an even greater emergency, especially if the country's hospital wards start overflowing with flu patients in the coming months ([TIME, 2009](#)).

**Title:** Soldiers Nearly Killed With Military's Bioterrorism Vaccine

**Date:** November 3, 2009

**Source:** [Natural News](#)

**Abstract:** Approximately 200 soldiers have suffered from serious and even life-threatening complications from the government-mandated smallpox vaccine, and one has even died.

Starting in 2002, fears over a bioterrorist attack have led the U.S. government to require that all of its military servicepeople receive vaccination against a variety of diseases before deployment, including anthrax and smallpox. An estimated 1.7 million have been vaccinated against smallpox since then. Yet in a number of cases, the vaccine has led to severe complications such as inflammations of the brain or heart. In 2003, two expert panels concluded that Army Specialist Rachel Ray died in part due to complications from the deployment vaccines that she had been given.

"The reality is, we're never going to have zero risk on a vaccine," said Dr. Michael Kilpatrick of the Military Health System. "There's always going to be that individual that has some untoward event that would occur."

Awareness of the risks over the smallpox vaccine has prevented the government from requiring vaccination of civilians.

One potential side effect is infection with the virus used in the vaccine, a condition known as progressive vaccinia. Back when smallpox vaccination was widespread, the infection had a 15 percent fatality rate.

In a recent case, Lance Cpl. Cory Belken began to suffer from a persistent headache and unusual sleepiness one week after receiving the smallpox vaccine. He was diagnosed with acute myelogenous leukemia, which was destroying his circulatory system, and was immediately placed on chemotherapy.

The cancer treatment destroyed his immune system, leading to progressive vaccinia and no fewer than two infections with antibiotic-resistant bacteria. He broke out in a rash, had spreading vaccinia lesions all over his body, became delirious with a fever of 104.6 degrees, and began to suffer from organ failure.

Treating Belken required 30 times the dose of Vaccinia Immune Globulin that the Centers for Disease Control and Prevention has previously assumed would be needed for a single person.

Belken's family said that the leukemia would have been enough for their family to deal with, without vaccine complications on top of it.

"I think it's a big chance they're taking giving them the shots," his mother said ([Natural News, 2009](#)).

**Title:** How To Test The Anthrax Vaccine In Children

**Date:** October 27, 2011

**Source:** [ABC News](#)

**Abstract:** Later this week, a Federal advisory committee, the Health and Human Service Department's National Biodefense Science Board will recommend whether and how the anthrax vaccine should be tested in children. Why is the board, all MDs and PhDs, being consulted now?

1. Because the safe and effective vaccine that is used by the military has never been tested in children. If there were releases of anthrax, children would need protection. Quarantine or isolation might not keep them away from sources of the disease. Parents would be in the awful position of having a vaccine for themselves and nothing for their children.
2. Because the board has been told by the intelligence agencies that the threat of anthrax releases in the United States is "credible," even if not quantifiable.

The board will be making public health judgments about the risks of testing the vaccine in children. But the intelligence agencies alone will assess how likely it is that anthrax will be released in the United States. Even if the CIA or Defense Intelligence Agency provided classified information to the board's public health participants so they could understand what is new since the anthrax scare ten years ago, the latter will not be able to share that information with the public.

A vaccine trial to establish safety in young children whose immature immune system might respond differently than adults', would involve relatively few subjects, but their parents would have to "volunteer" them. On what basis would parents make that decision? Can they balance the risks and consequences of anthrax release against the risks and consequences of possible reactions to the vaccine for their children?

How can they assess the risk of releases? Parents offered a slot in the anthrax vaccine trial for their children would have to rely on the same experts who believed there were biological weapon stockpiles in Iraq. In the run-up to the invasion of Iraq, our government intelligence agencies invented a biological weapons threat, imagining Iraqi stockpiles of smallpox virus and anthrax spores; stockpiles that were never found.

Trust dissipated. And when the government launched a public health program to give smallpox vaccine to first responders and military personnel, most of them rejected it. The program floundered.

Civilian public health experts will be little help to parents. They are appropriately wary of saying "Trust me," particularly when it is unlikely that the intelligence agencies will share their information that support the claim that the threat is "credible." Surely they will not allowed to relay classified information to the public.

Can we get beyond our distrust of the intelligence community and meet the needs of public health professionals to explain their decisions to the public? Possibly not, but there may be a way around the problem, a way to find the right group of "volunteer" children.

You want to find the right children to receive experimental injections of the anthrax vaccine? How about the children of people who have the national security clearance required for the government to share with them all the evidence that adds up to a "credible threat?" With that information in hand, these parents would be able to make the choice-an informed decision for their children-that the rest of the public surely cannot ([ABC News, 2012](#)).

**Title:** Bedrock Of Vaccination Theory Crumbles As Science Reveals Antibodies Not Necessary To Fight Viruses

**Date:** March 27, 2012

**Source:** [Natural News](#)

**Abstract:** While the medical, pharmaceutical, and vaccine industries are busy pushing new vaccines for practically every condition under the sun, a new study published in the journal *Immunity* completely deconstructs the entire vaccination theory. It turns out that the body's natural immune systems, comprised of both innate and adaptive components, work together to ward off disease without the need for antibody-producing vaccines.

The theory behind vaccines is that they mimic infection by spurring B cells, one of the two major types of white blood cells in the immune system, to produce antibodies as part of the adaptive immune system. It is widely believed that these vaccine-induced antibodies, which are part of the more specific adaptive immune system, teach the immune system how to directly respond to an infection before the body becomes exposed to it.

But the new research highlights the fact that innate immunity plays a significant role in fighting infections, and is perhaps more important than adaptive immunity at preventing or fighting infections. In tests, adaptive immune system antibodies were shown unable to fight infection by themselves, which in essence debunks the theory that vaccine-induced antibodies serve any legitimate function in preventing or fighting off infection.

"Our findings contradict the current view that antibodies are absolutely required to survive infection with viruses like VSV (vesicular stomatitis virus), and establish an unexpected function for B cells as custodians of macrophages in antiviral immunity," said Dr. Uldrich H. von Andrian from *Harvard Medical School*. "It will be important to further dissect the role of antibodies and interferons in immunity against similar viruses that attack the nervous system, such as rabies, West Nile virus, and Encephalitis."

As explained by Dr. Russell Blaylock in a recent interview with Mike Adams, the Health Ranger, vaccines not only do not work as advertised, but they actually damage the body's innate immunity. Rather than teach the body how to respond to infections, vaccines actually inhibit the immune system's ability to produce TH2-type cytokines, and suppress cellular immunity, which is how the body protects itself against deadly viruses and bacteria.

So once again, the myth that vaccinations serve any sort of legitimate medical purpose has been deconstructed by breakthrough science. Regardless of whether or not the mainstream medical community wants to admit it, pro-vaccine ideology is increasingly finding itself in the dustheap of outmoded pseudoscience ([Natural News, 2012](#)).

**Title:** Real Or Fake? Pentagon Proposal To Lobotomize 'Terrorists' Using Virus

**Date:** April 2, 2012

**Source:** [Prison Planet](#)

**Abstract:** A video on You Tube appears to show a Pentagon briefing in which the idea of lobotomizing terrorists to remove their religious fanaticism using a manufactured virus containing a vaccine is seriously proposed, although debate has raged about whether the clip is authentic or not.

The footage shows a speaker giving a lecture to a handful of attendees and is accompanied by authentic-looking Department of Defense project ID numbers. According to the text on the clip, the lecture took place inside a Pentagon briefing room.

The speaker discusses how certain people are predisposed to be religious fundamentalists because they have an aggressive VMAT 2 (God) gene which causes them to act on their beliefs in fanatical ways.

After a member of the audience asks the speaker if the idea is to “by spreading this virus....eliminate individuals who are going on to a bomb fest, who are going into a market and blowing it apart,” the speaker confirms, “by vaccinating them against this, we’ll eliminate this behavior.”

The question of how to implement the vaccine is answered by the speaker when he responds to the man in the audience, who raises doubts over the feasibility of performing CT scans on suspected terrorists rather than just “putting a bullet in their head”.

“The virus would immunize against this VMAT 2 gene and that would....essentially turn a fanatic into a normal person, and we think that would have major effects in the Middle East,” states the speaker.

The audience member then asks, “How do you suggest this can be dispersed, via an aerosol?” – to which the speaker responds, “The present plan and the tests we’ve done so far have used respiratory viruses such as flu and we believe that’s a satisfactory way to get the exposure of the largest part of the population.”

The speaker confirms that the name of the proposal is “Funvax – the vaccine for religious fundamentalism.”

Debate over the video’s authenticity has raged over the course of the past year since the video was uploaded to You Tube.

[Skeptics argue](#) that the image of the brain scan used in the lecture, which according to the time stamp on the video took place in June 2005, is actually taken from a 2010 Neurology.org article on a completely different subject. The two images are also clearly the same brain, whereas the speaker in the clip claims they are from two different people.

The other point made by skeptics to illustrate that the clip is a hoax is the claim that the audio is not in time with the speakers on the video. This is a weaker argument – the audio would not be in perfect sync on a You Tube clip anyway, plus the back and forth exchanges between the two speakers allied with their hand gestures do appear to be authentic, in that the audience member is expressing genuine shock at the scope of the idea.

The only information about ‘Funvax’ comes from a single source, [a website](#) run by “supporters” of an individual named Joey Lambardi. There is no other confirmation or discussion of ‘Funvax’ from any official source or mainstream website.

Whatever the true providence of the video clip, the fact that brain eating vaccines which alter brain chemistry to perform a de facto lobotomy on the subject have been developed are now being promoted to the general public is a fact.

Back in 2010, Dr Robert Sapolsky, professor of neuroscience at Stanford University in California, [announced that he had created](#) a vaccine to impose a state of “focused calm” by altering brain chemistry.

The proposals ominously hark back to George Lucas’ 1971 dystopian chiller *THX 1138*, in which the population is controlled and subjugated through the use of special drugs to suppress emotion.

Feeling stress, getting angry, expressing emotion and displaying passion are all innate, natural and vital aspects of human behavior. Reacting with stress to dangerous or uncomfortable situations is an essential and healthy response, and is one shared by just about every living thing on the planet.

However, scientists are now telling us that getting angry, upset and passionate is abnormal and needs to be “treated” through a fresh dose of pharmaceutical drugs and injections that will virtually lobotomize us into submissive compliance.

Likewise, the notion that populations should be unwillingly vaccinated to lobotomize them of their religious beliefs is also clearly an abomination against free will and represents the ultimate tool of a scientific dictatorship ([Prison Planet, 2012](#)).



# Bio Terror Bible

## EXPOSING THE COMING BIO-TERROR PANDEMIC

**BIOTERRORBIBLE.COM:** Unbeknownst to most Americans, a massive terror plot to attack the Sears Tower in Chicago was subverted due to Army Captain Eric May who claims that Illinois governor Rod Blagojevich and Chicago mayor Richard Daley were co-conspirators in a May 2-4, 2006, attempt to sabotage Chicago's Sears Tower.

"Former Army intelligence officer Capt. Eric H. May, military/political editor of the *Lone Star Iconoclast*, recently repeated that the governor and mayor were co-conspirators in a May 2-4, 2006, attempt to sabotage Chicago's Sears Tower...May's allegations would seem outlandish – were they not backed up by a document trail connecting everyone from top government officials to media mainstays and even active-duty military intelligence. All of them coalesced into an informal alliance against the governor, the mayor and Homeland Security director Michael Chertoff, who was heading up exercises set to simulate the collapse of an unnamed downtown Chicago skyscraper. On April 26, 2006, advised of a possible attack by inside sources, May put in calls to Illinois National Guard Public Affairs Officer Col. Tim Franklin and Chicago Police Public Information Officer Laura Kubiak. Both confirmed the existence of terror exercises rehearsing the demolition of Sears Tower. Alarmed, May issued [RED ALERT: "CHICAGO 911" CONFIRMED](#), which was quickly posted worldwide."

Captain May sounded the false-flag alarm effectively and the Feds had to call off the terror attack. A few weeks later, the patsies, a group of black Americans from Florida, were indicted for the plot to blow up the Sears Tower. A few years later, Illinois governor Rod Blagojevich was indicted on federal charges and has been sentenced to federal prison in a likely attempt to silence him.

**Date:** June 23, 2006

**Suspect:** Burson Augustin, Rothschild Augustine, Naudimar Herrera, Stanley G. Phanor, Patrick Abraham, Lyglenson Lemorin

**Age:** 21-32

**Ethnicity:** 5 African-Americans, 2 Haitians

**Location:** Chicago, Illinois

**Target:** Sears Tower, FBI Offices

**Charges:** Convicted of plotting to blow up the Sears Tower and carry out attacks on FBI offices across the United States.

**Notes:** The plot to topple the Sears Tower in Chicago appears to be cover for the terror plot that Captain Eric May subverted.

**Title:** Sears Tower Arrests: US Government Creates Another Al-Qaeda Cell

**Date:** June 23, 2006

**Source:** [Prison Planet](#)

**Abstract:** Hot on the heels of a rash of staged terror alerts in both Britain and Canada, the announcement that seven men were arrested for planning to blow up the Sears Tower in Chicago and other prominent buildings is already taking the shape of another US government manufactured Al-Qaeda punch and Judy show.

As is usually the case, the alleged ringleader Nassir Batiste's family and friends are aghast that he could have any terrorist connections and uniformly deny the plausibility of an Al-Qaeda connection, describing him as a simple construction worker and a "nice guy."

ARIANE WEBSTER, SUSPECT'S GRANDMOTHER: I'm -- truly down in my heart I believe that's a stone lie. I been knowing Nassir (ph) better than five years. I never know him to get in any trouble. I never know him to have any problem with anybody. I always know him, he taught my son how to do karate. I have a son that is 18 years old. When he first met my son, my son was only about ...

ANDREWS (reporter) : So you don't think he's a terrorist, as the government's alleging?

WEBSTER: No, I don't. I really don't believe that.

MASTER G.H.G. ATHEA, SUSPECT'S FRIEND: Someone along the line offered to him some funds to do whatever he wanted to do if that's what he wanted to do. As far as some subversive work. And said they would give him whatever he needed.

ANDREWS: So somebody had approached him to give him money to blow up buildings?

ATHEA: To do whatever he wanted to do. But that was far from his mind. So he had no desire to interact with these men to accept anything they had to offer.

ANDREWS: So bottom line here, is your friend a terrorist?

ATHEA: No, he's not. Absolutely not.

The key comment here is from the suspects friend. It clearly looks as if the "someone" who tried to bend his ear and convince him to join Al-Qaeda was acting on behalf of the US government and running an entrapment sting.

Entrapment is the primary method used to expose supposed Al-Qaeda cells, the evidence of which they were dangerous terrorists later dissolves into thin air in every single instance. It was used in the [Canadian scare](#) earlier this month and also recently in the [Toledo arrests](#).

Attorney [General Gonzales said](#) that "the individual they thought was a member of al-Qaida was present at their meetings and in actuality he was working with the South Florida Joint Terrorism Task Force."

This is classic entrapment and the artificial manufacture of an Al-Qaeda boogeyman to wave in front of the American people.

Batiste was most likely told that he was part of an anti-terror drill to test the security of Chicago landmarks and that he had to recruit a mock group of followers. Either that or he was a hand-picked idiot who had severe mental deficiencies and couldn't spot an obvious set-up.

One of the repeating elements to emerge from every major terror sting or forged terror alert is the use of retarded individuals as patsies, informants and go-betweens. The terror raid in Forest Gate three weeks ago in which an innocent man was shot by the police was conducted on the whim of information provided by a man with an [IQ of just 69](#).

Similarly, it was [reported today](#) that the informant who sparked interest in alleged Ottawa terrorist Mohamed Harkat was "certifiably insane."

The group used by the [FBI to bomb the World Trade Center in 1993](#) were also clinically retarded. It's easier to frame people who lack any credibility and don't have any means to eloquently defend themselves.

Don't be surprised to learn of a connection to a retarded individual over the next few days.

We shouldn't be lapse in our understanding that the Sears Tower is indeed the target of deranged terrorist masters who want to destroy America. Internet speculation that the landmark would be attacked on April 19, 2004 was rubbished by many and yet a derailing of the plot was [quietly announced](#) that very day yet given no play in the establishment media.

In March 2004, Silverstein Properties bought the tower in an [\\$800 million deal](#). Larry Silverstein's penchant for large insurance pay outs, coupled with the strange coincidence of buildings only owned by him collapsing on 9/11, makes for a dangerous combination.

The Sears Tower is indeed under threat - not from government created patsies, but the elite itself ([Prison Planet, 2006](#)).

**Title:** F.B.I. Killed Plot in Talking Stage, A Top Aide Says

**Date:** June 24, 2006

**Source:** [New York Times](#)

**Abstract:** A plot to topple the Sears Tower in Chicago and attack the [F.B.I.](#) headquarters in Miami was "more aspirational than operational," a top bureau official said Friday, a day after seven Florida men were arrested on terrorism charges.

The official, John S. Pistole, deputy director of the F.B.I., and Attorney General [Alberto R. Gonzales](#) said at a news conference that authorities chose to head off the would-be plot, involving scouting potential targets in Florida, when it was largely at the discussion stage.

Mr. Gonzales acknowledged that the men, who had neither weapons nor explosives, posed "no immediate threat." But he added, "they did take sufficient steps that we believe does support this prosecution."

In general, Mr. Gonzales said, homegrown terrorists "may prove to be as dangerous as groups like [Al Qaeda](#)."

News of the arrests touched off widespread television coverage of the plot against the Sears Tower, one of the tallest buildings in the world. But details of the indictment disclosed Friday at news conferences in Washington and Miami presented a less alarming picture. The indictment made clear that a pivotal role was played by an unidentified undercover F.B.I. informer who posed as a Qaeda member and met repeatedly with the reported ringleader of the group, Narseal Batiste.

Last month, after months of meeting the fake Qaeda representative, Mr. Batiste told him that "he was experiencing delays because of various problems within his organization" but still hoped to continue his mission of building an "Islamic army" to wage jihad against the United States, the indictment said.

In Chicago, Police Superintendent Philip J. Cline said there was "never any imminent danger to the Sears Tower or to the city of Chicago."

Florida officials emphasized that the reported attack plans apparently never passed the discussion stage.

The seven defendants, 21 to 32 years old, include five Americans, a legal immigrant from Haiti and an illegal Haitian immigrant. They voiced grandiose goals in the yearlong investigation by the federal agents and the police, officials said.

The indictment charged that Mr. Batiste recruited the others beginning in November "to wage war against the United States government." Mr. Gonzales said the men said they wanted to "kill all the devils we can" in attacks that would be "just as good or greater than 9/11."

The men are accused of conspiring to blow up buildings and to provide "material support" to Al Qaeda. The indictment suggests that they mostly sought support from the fake Qaeda agent.

In one of the first acts, the court papers say, the conspirators gave the informer their shoe sizes so he could buy them military boots. Later, the documents continue, Mr. Batiste gave the informer lists of other items needed for the proposed war like uniforms, binoculars, radios, vehicles, bulletproof vests, machine guns and \$50,000 in cash.

The suspects received their boots, the indictment says, but it does not make clear which other items were delivered.

Neighbors said at least some of the men were in a religious group called the Seas of David that appeared to mix Christian and Muslim beliefs. The group wore uniforms bearing a Star of David and met for Bible study, prayer and martial arts in a one-story warehouse in the heart of the predominantly Haitian section of the impoverished Liberty City area.

Workers in Bar-B's Grocery next door said the men were always quiet and polite when they stopped in. But at least five men had been previously arrested on charges of assault, drug and weapons charges, Miami-Dade County records show.

"My husband had an idea that something was up in there," said Tonya Poole, who lives across the street from the warehouse. "He would tell me, 'Baby, something's going on.' We would see them in and out at all times at night."

In addition to Mr. Batiste, 32, who was known as Brother Naz or Prince Manna, the authorities identified others born in the United States as Burson Augustin, 21; Rothschild Augustine, 22; Naudimar Herrera, 22; and Stanley G. Phanor, 31. The two Haitian-born defendants are Patrick Abraham, 27, and Lyglenson Lemorin, 31.

All appeared briefly in court in Miami on Friday except Mr. Phanor, who was jailed for violating his probation on an earlier charge, and Mr. Lemorin, who was arrested in Atlanta.

At Mr. Phanor's neatly landscaped peach-colored house, relatives cried and wailed as they answered questions. "This is tearing this family to pieces," said Mr. Phanor's mother, Elizene Phanor. She said her son was a skilled construction worker and pointed to a tile floor he laid.

"My son would wake up every morning and say he loves Jesus," Ms. Phanor said. "Stan is my son, my friend, my life, and if he dies, I die with him."

Sylvain Poantin, 30, who said he grew up with Mr. Phanor, added, "I'm feeling confused and stressed, because Stan isn't that type of person."

Mr. Poantin said that a year and a half ago he was hanging out with Mr. Phanor when Mr. Batiste approached, wearing a long robe and a cap. "We were all intrigued by him," Mr. Poantin said. "He never spoke of violence, and he would call us beloved or brother."

Mr. Poantin said he attended a Bible study session but found Mr. Batiste "arrogant" and did not join the group.

The indictment follows by three weeks the arrest in Canada of 17 men accused of plotting attacks using fertilizer bombs. Some of those suspects were in contact with two Georgians previously charged in a terrorism investigation.

In his news conference at the Justice Department, Mr. Gonzales linked those cases to the Madrid train bombing in 2004 and the London subway attack last July, saying the attacks represented "a new brand of terrorism" from "smaller, more loosely defined cells that are not affiliated with Al Qaeda, but who are inspired by a violent jihadist message."

"The terrorists and suspected terrorists in Madrid and London and Toronto were not sleeper operatives sent on suicide missions," Mr. Gonzales said. "They were students and business people and members of the community."

At a later briefing, Deputy Attorney General Paul J. McNulty answered critics who have said terror prosecutions have often picked out seemingly unsophisticated extremists who are more talk than action. Mr. McNulty said the goal was "prevention through prosecution."

Rather than allow a genuine threat to take shape, he added, investigators move in as soon as there is sufficient evidence to prosecute.

"Today's example is a good example of that approach," he said.

Mr. McNulty said 261 people had been convicted or pleaded guilty in "terrorism or terrorism-related cases" since the Sept. 11, 2001, attacks. An additional 180 people have been charged and are awaiting trial or have been acquitted, had their charges dismissed, are awaiting extradition or are fugitives, according to statistics released Friday.

Mr. McNulty acknowledged that some of the convictions counted as "terrorism related" included crimes that turned out to have no link to terrorism. He said the statistics might be revised to give a more precise accounting of cases with true terrorist connections ([New York Times, 2006](#)).

**Title:** Chicago Cops Dodge Blagojevich/Sears Tower Investigation

**Date:** December 23, 2008

**Source:** [William B. Fox](#)

**Abstract:** A Chicago Police Department official, who refused to be identified by name, stated that city law enforcement would avoid investigating allegations against embattled Illinois Governor Rod Blagojevich and Mayor Richard M. Daley. Former Army intelligence officer Capt. Eric H. May, military/political editor of the *Lone Star Iconoclast*, recently repeated that the governor and mayor were co-conspirators in a May 2-4, 2006, attempt to sabotage Chicago's Sears Tower.

The 110-story building was bought on the day of the March 11, 2004, Madrid bombing by Larry Silverstein. Even with recent revelations of widespread corruption and conspiracy by Illinois and Chicago officials, the former NBC editorial writer's allegations would seem outlandish – were they not backed up by a document trail connecting everyone from top government officials to media mainstays and even active-duty military intelligence. All of them coalesced into an informal alliance against the governor, the mayor and Homeland Security director Michael Chertoff, who was heading up exercises set to simulate the collapse of an unnamed downtown Chicago skyscraper. All of them believed that the chance of an attack against the Silverstein property was real. The documents tell the tale.

On April 26, 2006, advised of a possible attack by inside sources, May put in calls to Illinois National Guard Public Affairs Officer Col. Tim Franklin and Chicago Police Public Information Officer Laura Kubiak. Both confirmed the existence of terror exercises rehearsing the demolition of Sears Tower. Alarmed, May issued [RED ALERT: "CHICAGO 911" CONFIRMED](#), which was quickly posted worldwide. The next day, April 27, the Illinois governor's office [issued a press release](#) confirming the just-exposed exercises, revealing that the exercises, involving up to 2,000 participants, had been in the works – unannounced – for seven months. Shortly afterwards, May [wrote](#) Blagojevich directly. He copied contacts in the Defense and State Departments, stating his conviction that there was a treasonous plot afoot. After two days of silence from the governor's office, May began to give interviews, expressing his doubts about Blagojevich and Daley.

The Chicago mayor was curiously absent from the city at the time on a first-ever visit to Israel, in the company of Israeli intelligence. "The Edge," hosted by radio journalist Daniel Ott, [spread word](#) about the suspicious exercises widely throughout the Midwest. It may seem inconceivable that Chicago police would still shy away from investigating or even discussing the possibility of an official conspiracy, but May isn't surprised. "We should remember just how dangerous government can be. Every great American since the Founding Fathers has agreed on that point. No one should be surprised that 'Blago' and company are part of a conspiracy."

It wasn't so long ago that Illinois officials conspired with Al Capone. The Chicago cops stood by and played dumb then, too." Decorated Vietnam combat veteran Merlin Neadows, who was part of what has since come to be called the "Chicago Mayday Mission," is even harsher with Windy City law enforcement: "They're a disgrace," the former infantryman said. "They know that we did their job while they hid back in 2006, and they're still hiding. If it hadn't been for us Internet infowarriors, Chicago would have had a terror attack for sure" ([William B. Fox, 2008](#)).

**Title:** Five Guilty In Chicago Bomb Plot

**Date:** May 12, 2009

**Source:** [BBC](#)

**Abstract:** Five men have been convicted in Miami of plotting to blow up the Sears tower in Chicago and carry out attacks on FBI offices across the United States. Prosecutors say the men conspired to provide material support to al-Qaeda, but defence lawyers argued the whole thing was an FBI set up. A sixth man was acquitted of all charges. It was the third trial for the men, who were arrested in 2006. Previous juries were unable to agree on whether their plot was genuine.

In the earlier trials, a seventh man was also acquitted of all of the charges he faced. The latest verdicts were handed down after six days of deliberations. The men - who were known as the Liberty City 7 after the poor area of Miami they operated in - now face 30 to 70 years in prison. Sentencing has been set for 27 July.

The men, most of whom have Haitian backgrounds, were caught on tape by an FBI informant discussing plans to cause an anti-government insurrection. The ringleader, Narseal Batiste, 35, is caught on audio and video tape saying that they should start a "full ground war" that would "kill all the devils".

Defence lawyers argued that the group had not been serious about the attacks, and that they went along with the plot in order to con the FBI agent out of \$50,000 (£32,700). Batiste, convicted on four terrorism-related conspiracy counts, faces up to 70 years in prison. His right-hand man, 29-year-old Patrick Abraham, was convicted on three counts and faces 50 years behind bars. Three others, Burson Augustin, Rotschild Augustine and Stanley Grant Phanor - aged 24, 25 and 33 respectively - face 30 years on two counts. Naudimar Herrera, 25, was cleared of all four charges ([BBC, 2009](#)).

**Title:** Illinois Governor Rod Blagojevich Indicted, Tried, Retried, Convicted, But Yet To Be Sentenced

**Date:** 2012

**Source:** [Wikipedia](#)

**Abstract:** Blagojevich was indicted by a federal grand jury in April 2009. Most of the charges related to attempts to sell the Senate seat vacated by then-President-elect [Barack Obama](#). On August 17, 2010, he was convicted on one of the 24 federal charges, a charge of lying to the FBI, and the [jury was hung](#) on 23 other counts. The defense did not call a single witness, claiming that prosecutors did not prove their case. Because the jury could not agree on the remaining charges, a mistrial was ordered for those counts. Within fifteen minutes after the mistrial was declared, the [prosecution](#) team announced that they would definitely pursue a retrial on the twenty-three mistrial counts. A post-[verdict](#) court date was set for August 23, 2010. Federal prosecutors reduced the number of counts for Blagojevich's retrial, and on June 27, 2011, he was found guilty of 17 of the 20 charges, not guilty on one, and no verdict was rendered by the jury on two counts. He was found guilty on all charges pertaining to the senate seat, as well as extortion relating to state funds being directed towards a children's hospital and race track. However, he was acquitted on a charge pertaining to the tollway extortion and avoided a guilty verdict (by split decision) on attempting to extort [Rahm Emanuel](#). On Wednesday, December 7, 2011, Blagojevich was sentenced to 14 years in federal prison. There is no parole in the Federal Prison System, however, under federal rules, Blagojevich will serve at least 85%, or 12 years, of his sentence, after which time he may be eligible for early release based on good behavior. He reported to prison on March 15, 2012 at [Federal Correctional Institution, Englewood](#) in Littleton, Colorado ([Wikipedia, 2011](#)).



# Bio Terror Bible

## EXPOSING THE COMING BIO-TERROR PANDEMIC

**BIOTERRORBIBLE.COM:** Like the 2006 Chicago terror plot, the fingerprints of the U.S. Federal government are all over the 2010 Chicago bomb plot which involved a young Lebanese immigrant, Patsy Sami Samir Hassoun, who by all account was and is mentally unstable. Hassoun was guided, funded, and arrested by the FBI in another pathetic attempt to bolster the bogus war on terror. "The FBI provided [Hassoun] with the camcorder he used to scout bombing locations, paid him \$2,700 so he could quit his job to work full time on his terrorism plot [and gave him the phony bomb](#) he left in the garbage bin outside Sluggers in the 3500 block of North Clark Street".

**Date:** September 19, 2010

**Suspect:** Sami Samir Hassoun

**Age:** 22

**Ethnicity:** Lebanese

**Location:** Chicago, Illinois

**Target:** Wrigley Field

**Charges:** One count of attempted use of a WMD, and one count of attempted use of an explosive device

**Notes:** Hassoun allegedly placed a backpack he thought contained a bomb near Chicago's Wrigley Field got the fake explosive from an FBI undercover agent, and talked of plans to unleash a biological virus on Chicago and bombing Sears Tower.

**Title:** Lebanese Immigrant Charged In Wrigleyville Bomb Plot

**Date:** September 20, 2010

**Source:** [Chicago Tribune](#)

**Abstract:** Sami Samir Hassoun carried what he thought was a bomb — fashioned from a paint can and hidden inside a shopping bag — on a street near Wrigley Field more crowded than usual Saturday night after a festive concert by the Dave Matthews Band, authorities say.

Moments before, the Lebanese immigrant had allegedly instructed his cohort to dial down the timer to detonate in 20 minutes, saying half an hour was too long.

Hassoun dropped the device in a trash can just feet from one of the neighborhood's popular bars, turned and headed back toward the vehicle when a swarm of FBI agents and Chicago police arrested him.

In the months before, authorities charged, Hassoun had plans ranging from the grandiose to the more simple, but his goal was chilling: inject terror into the hearts of Chicagoans and undermine city government with repeated attacks.

He talked of tainting the water supply, assassinating Mayor Richard Daley and attacking the city's hot spots downtown and on the North Side, according to a federal complaint filed Monday. And to rattle the city's nerves, he'd explode or ignite car bombs over and over, authorities said.

"You park the car and let it boom," the 22-year-old is alleged to have said to an informant.

But the FBI was onto him from the start, planting an informant and undercover agents to record Hassoun's every move. Hassoun never realized it, but the FBI provided him with the camcorder he used to scout bombing locations, paid him \$2,700 so he could quit his job to work full time on his



terrorism plot and gave him the phony bomb he left in the garbage bin outside Sluggers in the 3500 block of North Clark Street, according to the complaint.

Authorities said Hassoun wasn't motivated by religious or political views but rather by a bizarre desire to undermine the mayor's political support and allow an associate to take control of the city. He also hoped to profit from the scheme by being paid for his terrorism work by supporters, the charges alleged.

Hassoun allegedly timed the attack shortly after midnight to exact massive casualties, authorities said. He expected half the block destroyed in the blast, they said.

Steven Strauss, owner of Sluggers, said the entire neighborhood near Wrigley Field was overrun with concertgoers and college students Saturday night.

"It's scary to think of what could have happened," he said Monday night at the bar. "You have 40,000 people converge on Addison and Clark" on a busy night.

The slim, unshaven Hassoun smiled wanly at relatives seated in U.S. Magistrate Judge Susan Cox's court for his initial appearance at federal court in Chicago. Hassoun, of the 4700 block of North Kedzie Avenue, was charged with attempting to use a weapon of mass destruction and attempting to detonate an explosive device. A detention hearing was scheduled for Wednesday.

Hassoun's Facebook page listed him as a former student of American University of Beirut and said his favorite shows on TV included "Seinfeld" and "Scrubs."

The last entry on his page was at 11:24 a.m. Saturday. "Sami Hassoun working on his business strategy plan," it said.

The FBI and Chicago police said residents were in no danger during the months Hassoun allegedly plotted the bombing and made sometimes vague plans to poison the city's water supply, attack police officers, bomb Willis Tower or kill the mayor.

"He was acting alone," said Robert Grant, special agent in charge of the FBI's Chicago office. "He was not, I would say, highly skilled but definitely desirous of finding the material he needed to carry out his attack."

The criminal complaint revealed that a year and a half ago, Hassoun came to the FBI's attention for undisclosed reasons. Agents paid an informant to befriend him.

Early in June, the informant reported to authorities that Hassoun, a legal resident in the U.S., was voicing a desire to commit acts of terrorism in Chicago. The FBI recorded repeated meetings with Hassoun as he discussed his evolving plans and then introduced two undercover FBI agents who posed as terrorists interested in financing his plans.

According to the charges, Hassoun seemed eager to launch an attack, allegedly suggesting first nonlethal car bombs at the Daley Center downtown, then seeming to warm to the idea of casualties.

"Little by little, I'm building it up," the complaint quoted him as saying. "I will (expletive) Chicago. I will shake Chicago."

Hassoun was critical of Daley, telling the informant that the mayor's policies had weakened security in the city and once saying he wanted to foment a "revolution" in the city, according to the charges.

At one point, one of the undercover agents asked Hassoun how he would leverage the attacks to gain political power. "I have no idea," he is alleged to have replied.

In July, he quit his job to focus full time on his plot after the undercover agents agreed to pay him, authorities said. The FBI secretly paid him \$2,700 for work scouting bombing locations ([Chicago Tribune, 2010](#)).

**Title:** FBI Says It Supplied Fake Bomb In Chicago Plot

**Date:** September 21, 2010

**Source:** [Fox News](#)

**Abstract:** A man arrested for allegedly placing a backpack he thought contained a bomb near Chicago's Wrigley Field got the fake explosive from an FBI undercover agent, authorities say -- a tactic that has been used in other U.S. terrorism cases in recent years.

Sami Samir Hassoun, 22, a Lebanese citizen living in Chicago for about three years, was charged Monday with one count each of attempted use of a weapon of mass destruction and attempted use of an explosive device.

Hassoun was arrested early Sunday after planting the fake explosive device in a trash receptacle near Sluggers World Class Sports Bar, a popular bar steps from Wrigley Field, FBI Special Agent in Charge Robert Grant said. The Cubs were not playing at their home field; the stadium hosted Dave Matthews Band concerts Friday and Saturday nights.

It wouldn't be the first time FBI agents have posed as terror operatives and supplied suspects with bogus explosives. Last year, authorities arrested a Jordanian national after he allegedly attempted to detonate what he thought was a bomb outside a Dallas skyscraper. In an unrelated case, authorities in Springfield, Ill., arrested another man after he allegedly tried he tried to set off what he thought was explosives in a van outside a federal courthouse.

In a similar case in May 2009, four men were arrested after they allegedly tried to detonate fake explosives -- also provided by the FBI -- outside two synagogues in New York City.

In the Chicago case, the FBI said an informant tipped investigators about Hassoun nearly a year ago. Grant said Hassoun acted alone and that the undercover agents told him they were from California and unaffiliated with any group. He declined to offer specific details about Hassoun's motivations, but said he believed the agents were ready to give him money if he carried out the attack.

"He wanted to transform the city of Chicago, he wanted to make a statement and he wanted to replace the mayor of Chicago," Grant said. "He was unhappy with the way the city was running. He was also unhappy with things that were happening in other parts of world."

At a brief hearing Monday, Hassoun quietly told U.S. Judge Susan Cox that he understood the charges. Hassoun's federally appointed public defender Dan McLaughlin declined to comment on the case, as did several family members who attended the hearing. A message left on an answering machine at Hassoun's home telephone number wasn't returned.

Authorities say the informant befriended Hassoun over the course of a year, conducting conversations in Arabic, which were taped and shared with the FBI. Hassoun waffled greatly on his plans, authorities said.

Initially, he didn't want to cause violence, suggesting setting off smoking devices in downtown locations near City Hall, authorities said.

"No killing. There is no killing," he told the informant, according to the complaint.

But his plans became more grand, as he believed bigger acts would command public attention and embarrass the mayor, according to the complaint.

"Little by little, I'm building it up," he said, according to the complaint. "I will shake Chicago."

Hassoun's alleged plots ranged during the investigation. They included talk of plans to unleash a biological virus on Chicago and bombing the Willis Tower, formerly known as the Sears Tower, the complaint said.

Hassoun on one occasion told the informant he wanted to paralyze commerce in the city, according to the complaint. Asked how he intended to carry out various suggested attacks, Hassoun responded, "You park the car, and let it go 'boom,'" the complaint says.

Grant said Hassoun wanted to start his own organization and planned to flee to California after the device went off in Wrigleyville.

"He was not highly skilled, but I think he was definitely desirous of obtaining the material needed to carry out his attack," Grant said.

Shortly before the plot near Wrigley Field, the informant introduced Hassoun to the undercover agents who Hassoun believed were friends and would pay for the attack to be carried out.

Chicago authorities said Daley never was in any danger. Police said Daley -- who has been in China for a business trip -- was informed of the plot over the weekend.

"We were always in control of this investigation," said Chicago Police Superintendent Jody Weis ([Fox News, 2010](#)).

# Bio Terror Bible

## EXPOSING THE COMING BIO-TERROR PANDEMIC

**BIOTERRORBIBLE.COM:** The city of Chicago has a rich history of bio-terror related incidents and was recently depicted in the bio-terror propaganda film entitled [Contagion](#) as the first American city hit with and outbreak in the fictitious global pandemic that kills millions. Based on recent news and events surrounding terror drills in Illinois, it is possible that the Chicago area could be a staging ground for a massive bio-terror attack which would definitely have Chicago Mayor Rahm Emanuel's signature all over it. There will likely be massive protests against the NATO summit in which a provocateur could attack Obama or attack the Occupy Wall St. crowd with a bio-terror device.

**Title:** Chicago 1885 Cholera Epidemic Myth

**Date:** 2012

**Source:** [Wikipedia](#)

**Abstract:** The Chicago 1885 cholera epidemic myth is a persistent [urban legend](#), stating that 90,000 people in [Chicago](#) died of [typhoid fever](#) and [cholera](#) in [1885](#). Although the story is widely reported, these deaths did not occur.

[Lake Michigan](#) was the source of Chicago's drinking water. During a tremendous storm in 1885, the rainfall washed refuse from the [Chicago River](#) far out into the lake and locals feared the sewage would reach the city's water intake cribs, two miles offshore.

According to the legend, typhoid, cholera and other waterborne diseases from the contaminated drinking water killed up to 90,000 people. The Chicago Sanitary District (now [The Metropolitan Water Reclamation District](#)) was said to have been created by the Illinois legislature in 1889 in response to a terrible epidemic which killed thousands of residents of this fledgling city.

However, analysis of the deaths in Chicago shows no deaths from cholera and only a slight rise in typhoid deaths. In fact, no cholera outbreaks had occurred in Chicago since the 1860s. Typhoid deaths never exceeded 1,000 in any year in the 1880s. The supposed 90,000 deaths would have represented 12% of the city's entire population and would have left numerous public records as well as newspaper accounts. [Libby Hill](#), researching her book *The Chicago River: A Natural and Unnatural History*, found no newspaper or mortality records and, at her prompting, the [Chicago Tribune](#) issued a retraction (on September 29, 2005) of the three recent instances where they had mentioned the epidemic ([Wikipedia, 2012](#)).

**Title:** Institute Responsible For Anthrax Accident In California, In Charge Of Safety And Security At Chicago Biodefense Laboratory

**Date:** June 22, 2004

**Source:** [Sunshine Project](#)

**Abstract:** Southern Research Institute, the military biodefense contractor recently in the news for sending live anthrax to the Children's Hospital of Oakland (CA), is also in charge of safety and security for a major new \$30 million biodefense facility being built at the Department of Energy's Argonne National Laboratory near Chicago.

The new Ricketts Regional Biocontainment Laboratory is funded by the National Institute of Allergy and Infectious Disease (NIAID) and is named after Howard T. Ricketts, a celebrated pathologist who

acquired typhus in the course of research and died at age 39. It will begin biodefense work with studies of anthrax (Ames strain) and *Yersinia pestis*, the causative agent of plague.

Southern Research Institute, with major labs of its own in Frederick, Maryland and Birmingham, Alabama, has a \$75 million annual budget including biodefense contracts from an impressive roster of Pentagon agencies. Its Frederick, Maryland facility is located near the Army's biological weapons research headquarters at Fort Detrick, yet despite its biodefense prominence, Southern Research in Frederick does not maintain an institutional biosafety committee that complies with federal research rules. (And Southern Research in Birmingham has not honored requests for records of its institutional biosafety committee.)

"Southern Research's incompetence is plain to see. Its own house is in dangerous disarray and does not comply with federal research rules," said Edward Hammond, Director of the Sunshine Project. "That threat is bad enough; but even after leaking anthrax, the institute is still developing biosafety and operating procedures for new high containment labs."

According to a national coalition of biodefense watchdogs, formed in 2002 to monitor the US biodefense program, the Southern Research situation epitomizes their concern that biodefense laboratories are proliferating unsafely and with unsound planning, and that this could result in health, environment, and international security problems.

The watchdogs also point to Southern Research's links to classified biodefense research. (Southern Research's facilities and personnel have "secret" clearance.) "Public interest groups seeking information about military biodefense programs are being stonewalled by the Army and other agencies," says Steve Erickson of Citizen's Education Project in Salt Lake City, which monitors the Army's Dugway Proving Ground. "That Southern Research and other secretive military contractors are also insinuating themselves into civilian biodefense programs is cause for concern that we are witnessing a steady erosion of openness and accountability, not only at Pentagon labs; but at academic institutions and in work funded by the National Institutes of Health."

Two other Department of Energy (DOE) labs that design and develop the nation's nuclear weapons are also building new biosafety level three biodefense facilities. Both Lawrence Livermore and Los Alamos Labs have been sued by local community groups under the National Environmental Policy Act (NEPA). Inga Olson, Program Director at Tri-Valley CAREs, one of the groups that sued DOE, warns "Biodefense dollars are flowing like champagne at a wedding - into everywhere from nuclear weapons labs to children's hospitals - everyone wants a piece of the action. But a far more sober look is needed at whether the rapid spread of labs, pathogens, and bioweapons knowledge poses a greater threat than the problem we are trying to solve."

"After all," says Mary Wulff of Citizens for a Safe Lab in Hamilton, Montana (where NIH is building a new biosafety level four facility), "the Bush administration continues to rely on fear generated by the anthrax attacks and shaky allegations against other countries, like Iraq, to push billions and billions through Congress. Instead of an informed national discussion, the government's actions are based on fear and unsound information. The importance of reigning in knee-jerk reactions is underscored by the nearly tragic exposure of workers at Children's Hospital in Oakland, California."

The national coalition of nonprofit groups is calling for a moratorium on new biodefense labs until comprehensive national assessment is conducted, and transparency guarantees in place, and a binding and open federal system exists to review dual-use research with biological weapons agents ([Sunshine Project, 2004](#)).

**Name:** Malcolm Casadaban (60)  
**Specialty:** Molecular Genetics  
**Date:** September 13, 2009  
**COD:** Plague

**Abstract:** Malcolm Casadaban was as a renowned molecular geneticist with a passion for new research. He had been working to develop an even stronger vaccine for the plague, but allegedly died of plague prior to bringing his vaccine to market. The medical center says the plague bacteria he

worked with was a weakened strain that isn't known to cause illness in healthy adults. The strain was approved by the Centers for Disease Control and Prevention for laboratory studies.

**Title:** Plague Samples Suspected In Scientist Death

**Date:** September 21, 2009

**Source:** [Science Mag](#)

**Abstract:** An autopsy last week revealed that a geneticist who died mysteriously [might have succumbed to the plague](#). Malcolm Casadaban, 60, studied a weakened and reportedly benign form of the bacteria that causes plague, *Yersinia pestis*, in his lab at the University of Chicago. Casadaban died Sunday, 13 September, and an autopsy report 5 days later indicated high levels of *Y. pestis* in his blood. No other cause of death was apparent, the university said. A team of scientists at the university, with support from local health officials and the Centers for Disease Control and Prevention, is investigating the matter. So far, no one in contact with Casadaban has shown plague symptoms. The investigators are focusing on whether the strain Casadaban worked on was different than other benign strains of the bacterium and whether he had any inborn susceptibility to the microbe. Results are expected in a few weeks ([Science Mag, 2009](#)).

**Title:** Another Dead Microbiologist - The Coming Plague

**Date:** September 23, 2009

**Source:** [ABC 7 News](#) (VIDEO)

**Title:** Researcher's Death From Plague Prompts CDC Warning

**Date:** February 24, 2011

**Source:** [My Health News](#)

**Abstract:** The Centers for Disease Control and Prevention is reminding laboratory workers to be diligent about wearing protective gear, after it found that an Illinois researcher died in 2009 from exposure to plague-causing bacteria.

The 60-year-old researcher, a university employee, had been working with a strain of the bacteria *Yersinia pestis*. He died of cardiac arrest shortly after going to the hospital for what appeared to be flu symptoms, the CDC said in a report released today (Feb. 24).

After determining the cause of death, health agencies and the university began a safety investigation and learned that the man had inconsistently complied with the laboratory policy to wear gloves while handling the bacterial cultures, the CDC report said.

However, experts at the CDC did not rule out that the researcher could have been infected by the [bacteria](#) elsewhere on his skin or mucous membranes, such as his mouth or nose.

The CDC report did not identify the man or his university. According to a report from Chicago television station WLS in 2009, he was Malcolm Casadaban, a longtime professor of molecular genetics at the University of Chicago. His family said Casadaban had been seeking to develop a plague vaccine, and was working with a weakened strain of the bacteria.

The CDC report said he had hemochromatosis, a condition in which too much iron is absorbed into body tissues from foods in the gastrointestinal tract. Because *Y. pestis* bacteria are naturally iron-deficient, the extra iron in the man may have fed the bacteria and caused them to become virulent, the report said.

The researcher sought care from a physician Sept. 10, 2009, six days after he had last worked in the lab. But that doctor thought the problem was a respiratory infection or the flu, and referred him to an emergency department, the report said.

Three days later the researcher was brought by ambulance to an emergency department because of fever, cough, and worsening of his shortness of breath. He died there after suffering septic shock and cardiac arrest, the report said.

Blood tests later revealed he was infected with the bacteria . The Chicago Department of Public Health was then notified.

Before then, the last known laboratory-acquired infection with *Y. pestis* bacteria in the United States occurred in 1959, the CDC report said. That person, who inhaled the bacteria, did not die ([My Health News, 2011](#)).

**Title:** Illinois National Guard Chemical Unit Trains In Poland

**Date:** May 26, 2011

**Source:** [Bio Prep Watch](#)

**Abstract:** A team of Illinois National Guardsmen trained with soldiers from Poland in response to a simulated chemical attack on May 19 at the Prairie Warsaw Crisis Management Exercise in Warsaw, Poland.

The Illinois Army National Guard and the Polish force have trained together since 1993 as part of the State Partnership Program. Poland and Illinois have conducted exercises in both locations for the past 18 years.

Troops from the Illinois National Guard and Poland have deployed together in both Afghanistan and Iraq. The Illinois National Guard deploys soldiers with a Police Land Force Brigade on each Polish rotation into theater in Afghanistan.

The exercise included the application via a spraying apparatus of a simulated decontaminating solution to members acting as decontamination victims. Sgt. Matthew M. Krieger of Granite City, Ill., a chemical operations specialist with the 445th Chemical Co. played one of the casualties during the exercise. Sgt. Mike Skalisius of Troy, Ill., a chemical operations specialist with the 13th Chemical Co. played a casualty and was wrapped in a thermal blanket during the exercise.

Capt. Lukasz Krzowski, an officer with Poland's Epidemiological Response Center of the Armed Forces with Polish Land Forces, explained to soldiers in the Chemical, Biological, Radiological, Nuclear, and high-yield Explosive Enhanced Response Force Package, 44th Chemical Battalion out of Macomb, Ill., how to use the protective equipment that the Polish Army employs in case of an attack ([Bio Prep Watch, 2011](#)).

**Title:** Rush Medical Center Opening New Bio-Terror Wing

**Date:** August 3, 2011

**Source:** [My Fox Chicago](#)

**Abstract:** If you've driven on the Eisenhower recently, you couldn't have missed it -- "the Tower," a butterfly shaped addition to Rush University Medical Center. But it's much more than just another new eye-catching part of Chicago's skyline.

When the hospital opens in January, it will be specially equipped to handle a bio-terrorist attack, or a widespread outbreak of infectious disease.

The entrance is a shower zone.

"It becomes a decontamination area, where we can create the flow for people coming into our center, who can be decontaminated through showers in our emergency room safely," said Dr. Anthony Perry.

Perry, a Rush geriatrician, helped design the new facility. He said other sections of the hospital have similar capabilities. With a flip of a switch, the air flow systems in entire wings can be changed, trapping contaminants inside.

The hospital's unusual architecture grew from staff suggestion about how to best care for patients. Nurses will be closer to patients, patients will enjoy spectacular views, and doctors will find it easier to



reach out to their colleagues for assistance. Even in the middle of surgery, doctors will be able to use video hookups to talk with surgeons in other operating rooms.

Environmentally, the hospital is also cutting edge. It will be Chicago's first full-service green hospital, conserving energy and reducing waste; they're even planting some trees on the roof ([My Fox Chicago, 2011](#)).

**Title:** Master Of Science In Threat and Response Management

**Date:** 2012

**Source:** [University of Chicago](#)

**Abstract:** Will you make a difference? You will when you gain knowledge from instructors who have tactical experience in incident command, when you build firsthand familiarity with state-of-the-art software and hardware in surveillance and monitoring, and when you network and share lessons with colleagues, policy makers, and other officials.

The Master of Science in Threat and Response Management is designed to prepare public health professionals, law enforcement officials, fire and emergency personnel, medical and nursing professionals, and policy makers to respond to and recover from complex incidents regardless of their size or cause. These incidents can range from terrorist attacks; biological, chemical, radiological and nuclear threats; natural disasters; and disease outbreaks. Upon completion of the core requirements, students choose one of two concentrations—Scientific/Threat or Administrative/Response Preparedness—to further focus their studies.

The program is connected to the Great Lakes Regional Center of Excellence (GLRCE) for Biodefense and Emerging Infectious Diseases Research, a program supporting a consortium of 20 area institutions funded by the National Institute of Allergy and Infectious Diseases. Research at the GLRCE focuses on developing vaccines, treatments, and diagnostics for dreaded diseases such as anthrax, botulism, tularemia, hemorrhagic fever viruses, and plague. The collaborative efforts of the Biological Sciences Division of the University of Chicago and the GLRCE provide students with unparalleled experiential learning opportunities and help translate the findings from these research projects for policy makers and practitioners. Additional instruction is provided by the faculty, scientists, and scholars of the University of Chicago, as well as by practitioners from emergency preparedness community.

Apply to the Master of Science in Threat and Response Management program today. Position yourself as a leader in an emerging field ([University of Chicago, 2012](#)).

**Title:** Illinois Partnership Aims To Stop The Threat Of Agro-Terrorism

**Date:** February 3, 2012

**Source:** [Bio Prep Watch](#)

**Abstract:** An Illinois partnership between agriculture organizations and law enforcement agencies hopes to protect Illinois food systems, farms and consumers from the threats of agro-terrorism.

The Illinois Agro-Security Working Group looks to raise awareness of these issues among those in the food production and agriculture industries. The group, which is a service of the Illinois Farm Bureau, was created to educate farmers on how best to report, recognize and prevent terrorist and criminal activities related to Illinois agriculture, [Drovers](#) reports.

"Illinois farms are more vulnerable to terrorist activity than most people realize," Dave Patton, the field operations manager with the IFB, said, according to [FarmweekNow.com](#). "There have been some cases in other states where a person noticing suspicious behavior has helped capture a would-be terrorist, so we know agro-terrorism is a real threat."

A brochure has been given to agriculture producers in the state that provides information and resources in the battle against agro-terrorism, including how to report suspicious activities and the signs of illnesses.

"The brochure doesn't necessarily provide farmers with a comprehensive list of things to watch for, but it certainly gives them a good starting point," Jim Kaitschuk, the executive director of the Illinois Pork Producers Association, said, according to [FarmweekNow.com](http://FarmweekNow.com). "Ultimately, our producers know their animals and their operations better than anyone else and they need to be the instigators when it comes to reporting any potential threat."

Other organizations involved in the group aside from the FBI and the IFB include the Illinois Pork Producers, Illinois Beef Association and the Midwest Dairy Association ([Bio Prep Watch, 2012](#)).

**Title:** Chicago Set To Open Advanced Response Center

**Date:** January 5, 2012

**Source:** [Bio Prep Watch](#)

**Abstract:** The Robert R. McCormick Foundation Center for Advanced Emergency Response, is fully equipped for decontamination during a large-scale emergency or bioattack, will open on Friday in the Rush University Medical Center in Chicago.

The facility includes interconnected pods that are capable of isolation to prevent the spread of infectious agents, permanent decontamination showers and large storage tanks to collect contaminated water run-off from patients. It is the first facility of its kind in the United States.

"The center brings an unprecedented level of preparedness to Chicago in the event of a bioterrorist attack, a deadly pandemic or an industrial accident sending hazardous materials seeping into the streets," Dino Rumoro, the chairman of emergency medicine at Rush, said.

The idea behind the emergency response center came after the terrorist attacks of September 11, 2001, when the definition of a mass casualty was expanded to include inhalation problems, burns and the entire body being crushed.

"Our goal is to do what hospitals all over the country have been trying to do for years: give patients a place to go in a large-scale emergency," Rumoro said. "The concept of the new emergency room is not that novel, but putting together all the key elements of this center is novel. In an event of an emergency, we will closely coordinate all of our work with neighboring institutions and the city's office of emergency management and communications."

On a daily basis, the new facility will be a traditional emergency room with 60 treatment bays and a surge capacity of 133 percent. The inpatients that are currently at Rush will move to the new 40,000 square foot, 14-story facility on Sunday.

"Since we are committed to providing unprecedented disaster response and due to our affiliation with the military, being able to conduct coordinated large-scale decontamination inside and outside the hospital is a major public health responsibility," Rumoro said.

Rush received a \$7.5 million grant from the Robert R. McCormick Foundation as well as grants from other agencies, including the Department of Defense and the Department of Energy, to build the facility. The center is part of a \$654 million new hospital building called the Tower, which is a major component of a 10 year, \$1 billion campus redevelopment program called the Rush Transformation ([Bio Prep Watch, 2012](#)).

# Bio Terror Bible

## EXPOSING THE COMING BIO-TERROR PANDEMIC

**BIOTERRORBIBLE.COM:** The city of Chicago, probably more than any other city in America, has been drilling its citizens as well as local, state and federal law enforcement and emergency responders for a major bio-terror attack. Since mid-2011, the drills have occurred at greater frequency and have often involved the U.S. military. It is quite possible that the Chicago area could be a staging ground for a massive bio-terror attack which would definitely have Chicago Mayor Rahm Emanuel's signature all over it. After all, practice makes perfect.

**Title:** Chicago, Seattle Plan Drills To Test Terror Preparedness

**Date:** May 2, 2003

**Source:** [UCLA](#)

**Abstract:** On Mother's Day weekend, terrorists will spray unseen germs over Chicago airports, infecting thousands with a lethal pneumonia, while their counterparts in Seattle prepare to detonate a dirty bomb.

The Seattle bomb, exploding between Tully's Coffee shop and the Rainier Brewery on Interstate 5, will lead to overturned cars, buses and container vans in the five-acre blast zone.

But the principal role of the bomb, set to explode a day or so after the germs are released, will be to divert the nation's attention and resources from the deadlier act of the game: effects of Chicago's airborne bacterial cloud that will start to bring patients into the hospital.

Fortunately, it will all be an exercise, part of a national bioterror drill sponsored by the Department of Homeland Security. The goal of the drill, called TopOff2, is to give health workers and agencies practice responding to a terror attack, and to assess readiness, uncover planning gaps and remedy them.

Tens of thousands of Chicagoans are expected to participate in TopOff2, says Patrick Finnegan, director of clinical, administrative, professional and emergency services of the Metropolitan Chicago Healthcare Council, a group of more than 140 area hospitals. More than 1,200 volunteers from high schools and senior centers have signed up to act as victims pouring into emergency rooms. Another 2,600 paper victims will be faxed into hospitals for virtual treatment. Every Illinois hospital is expected to participate, either in the physical drill or tabletop exercise.

The drill is the sequel to TopOff1, in which a simulated aerosol plague attack in a Denver concert hall in May 2000 led to an estimated 4,000 sick and 2,000 dead in four days. Organizers say the point of such drills isn't to forecast casualties but to improve preparedness for a bioterror attack.

Margaret Hamburg, a former Clinton administration official who is now a bioterror expert with the Washington-based Nuclear Threat Initiative, says such drills force leaders to sharpen their decision-making and untangle lines of authority. "Somebody has to be in charge," she says.

As an added bonus, such drills might further hone the country's readiness for natural disease outbreaks such as severe acute respiratory syndrome, or SARS, now challenging a number of countries from China to Canada.

In TopOff2, the mist of plague bacteria will be released at five Chicago sites, including O'Hare and Midway airports. Pneumonic plague -- which results when the germ causing bubonic plague is inhaled -- is highly contagious. But because the symptoms can initially resemble other diseases, the infection can spread rapidly before health officials realize the problem on their hands.

After inhaling the germs over the weekend, the pretend victims will develop fever and chills, head and body aches, in one to three days. Breathing becomes labored. Death ensues quickly if the antibiotic treatment -- preferably streptomycin -- isn't begun within 18 to 24 hours of exposure.

"The first patients will develop respiratory symptoms and victims will start arriving in the hospitals," says James C. Hagen, deputy executive director of the DuPage County Health Department in suburban Wheaton, Ill., one site of the drill.

The true diagnosis may take a day to confirm. By the time tests are complete, the first wave of mock victims could be dead. Sparing the second wave a similar fate will depend upon several real-time computer systems being tested by participating hospitals and the Centers for Disease Control and Prevention in Atlanta.

Once the news is out, mock television crews under the logo VNN, for Virtual News Network, will cover the attack as if it were real. Law-enforcement officers will close in on the scene of the crime. "There will be a possible 'takedown' of the site of suspected terrorists growing the [germs] on either Thursday, May 15, or Friday, May 16," says Dr. Hagen.

It isn't known where the mock terror lab is located, and authorities wouldn't say whether actors would be enlisted as "terrorists." However, Canadian authorities are slated for a role in TopOff2, giving the drill international scope.

TopOff2 won't be a perfect simulation, because the players know the ultimate diagnosis ahead of time. People acting as victims must sign a consent and release form stating: "I understand that as a participant in the mock disaster drill, I may have makeup applied so as to look like a disaster victim; may have my clothing soiled or torn; and may be transported by stretcher [or] wheelchair."

The participants are coached on what symptoms to display -- all according to a script by Mr. Finnegan's group and Illinois poison-control experts, who jointly wrote the scenario.

Likewise, doctors and other health workers at hospitals know roughly when the game will begin and what germ their tests will disclose. But they must play according to the script, and await test results before beginning treatment, rather than leap into premature diagnoses or actions.

"The way scenarios are written, they may not find out [the plague diagnosis] for 12 hours," Mr. Finnegan says. During that time, by following normal procedures, hospitals will make errors that spread the disease, as the first wave of patients is sent through normal channels to such venues as the emergency room, and on to the laboratory for tests and X-rays -- exposing other patients and staff on their way.

Once the diagnosis is made, the real test begins. Says Mr. Finnegan: "Now, what do they do with the other patients who have been exposed?"

Saturation ensues swiftly, if past simulations are any guide -- and seeing how hospitals handle that saturation is one of the key ways that the drill will test and evaluate the public-health infrastructure. "A number of hospitals are going to be overloaded very quickly," Mr. Finnegan predicts, triggering hospital closure, ambulance diversions and patient transfers. The goal is to see how hospitals perform under maximum stress.

No special drugs or protective suits have been purchased for the Chicago drill. Hospitals will use protective clothing they have on hand. But the government will activate the National Strategic Stockpile, flying in a crate of supplies, "to see how long it takes to break it down and dispense it," says Mr. Finnegan.

TopOff2 is the only drill planned for 2003, Mr. Finnegan says, adding that "there's not enough Prozac" to sustain staff for more such games.

Actors will be identified by their Top Off T-shirts, and hospitals will post signs and make announcements to reassure real patients. Vows Mr. Finnegan: "Normal patient care is not going to be affected." In Seattle, students at an elementary school near the site where the mock bomb will explode have been briefed and shown the protective suits workers will use.

Drill organizers also say they won't be dropping their guard in terms of defending against real terrorist attacks during the drill. For security reasons, Chicago is only using actor-patients specifically recruited from certain high schools and senior centers, rather than using any volunteers or walk-ons from elsewhere. Officials won't disclose what other security measures they are taking.

The total budget for the TopOff2 exercise is \$16 million, coming from the Department of Homeland Security's Office of Domestic Preparedness, and the Department of State's coordinator for counterterrorism. Of that, \$5 million will be given directly to the states of Illinois and Washington.

Simply going through the drill will help health workers train for a real event. But Dr. Hamburg, a veteran of the Dark Winter smallpox drill and other simulations, warns against too slick or transparent a scenario.

"I've participated in some exercises that were too easy," she says, citing one scenario in which a terrorist unleashed infected plague rats in a football arena, a janitor found the box by half-time, and the tests were done by game's end. Too easy, says Dr. Hamburg.

"Probably in the real world there would have been no clue until people started to get sick," she says. "Such games give you a false sense of omnipotence."

Dr. Hagen of DuPage County says that despite such drills, it is hard to know what would happen in a real terrorist attack. "Will people storm the medical facilities?" he wonders. "Or will they stay quietly at home? No one really knows" ([UCLA, 2003](#)).

**Title:** Bioterror Drill Exposes Flaws In Response Plans

**Date:** December, 2003

**Source:** [Greeley](#)

**Abstract:** A federal study found that a bioterrorism drill conducted in May by the Department of Homeland Security revealed communications problems and confusion among emergency workers, the Associated Press reports.

The drill began in Seattle with the simulated detonation of a radioactive "dirty bomb" and ended in Chicago four days later with a raid on a fictional terrorist group responsible for the problems. Homeland Security officials released a 15-page summary of the drill's results, noting that crews in Seattle had difficulty determining where the radiological contamination had spread. This is important for evacuating and treating people in a real emergency.

The Chicago drill focused on the response to a deadly plague released in the city, but the exercise illustrated a serious shortage of medical supplies and hospital rooms. The report considered the drill a success as a learning experience for response agencies.

The report found that communications issues led to delays in deciding whether to raise an area's threat level, declare an emergency, or reopen public transportation systems. In the field, incident commanders made quick decisions, often assuming the affected area was larger than it actually was.

The exercise cost \$16 million and involved more than 8,500 people from 100 federal, state, and local agencies, the American Red Cross, and the Canadian government ([Greeley, 2003](#)).

**Title:** Hoffman Estates Seeks Volunteers For Bioterrorism Drill

**Date:** May 9, 2008

**Source:** [Chicago Tribune](#)

**Abstract:** Hoffman Estates officials are looking for 2,000 to 3,000 volunteers next week to participate in a public-health exercise in return for department store coupons and tickets to an indoor football game.

The volunteers are needed for a large-scale drill, planned for Tuesday at the Sears Centre arena, 5333 Prairie Stone Pkwy., to test how medicine would be distributed to victims of bioterrorism or an epidemic, said David Christensen, emergency management agency coordinator in Hoffman Estates ([Chicago Tribune, 2008](#)).

**Title:** Big [Bio-Terror] Public-Health Drill Has Small Turnout In Hoffman Estates

**Date:** May 14, 2008

**Source:** [Chicago Tribune](#)

**Abstract:** An elaborate public-health drill Tuesday that organizers had hoped would use thousands of volunteers to help test the Chicago area's response to a possible bioterrorism attack instead drew fewer than 350 people -- and one beleaguered Cook County Board president.

Todd Stroger, who has been criticized in recent months by some northwest suburban officials for pushing through a county sales-tax increase, made an appearance at the drill in the Sears Centre arena in Hoffman Estates, albeit 10 minutes after the training exercise ended.

"This visit was just really to be a part of the many things the county does," Stroger said.

The drill, coordinated by the county's Department of Public Health, was intended to test how quickly more than 300 emergency personnel from 25 communities in the north and northwest suburbs could distribute medicine in the event of a health threat.

For four hours, the arena was converted into a giant pharmacy and medical center, where volunteers learned to register patients, screen them for possible [side effects](#) from medication and distribute pills that would be needed to treat an epidemic or act of bioterrorism.

Organizers had hoped that 2,000 to 3,000 volunteers would participate in the drill.

Though the turnout was disappointing, Hoffman Estates officials said they were pleased to see Stroger paying a visit to the northwest suburbs.

The exercise, estimated to cost \$80,000, was mandated and funded by the U.S. Department of Homeland Security, which has called for health departments nationwide to coordinate drills since the terrorist attacks on Sept. 11, 2001.

Emergency personnel also staffed a practice command center in Barrington, where they simulated the phone calls and coordination that would have been needed to get medicine to 16 other sites in the north and northwest suburbs. The drill was the largest combined exercise the county's health department has ever orchestrated, said Kitty Loewy, a department spokeswoman ([Chicago Tribune, 2008](#)).

**Title:** Emergency Drills May Close Chicago-Area Roads

**Date:** June 9, 2010

**Source:** [Chicago Breaking News Center](#)

**Abstract:** A massive emergency response exercise is scheduled for the Chicago area beginning Sunday.

The practice events spread over five days will include a simulated commercial airplane crash, a simulated rail-car evacuation and a simulated terrorist attack.

Road closures and detours are possible in the Chicago area.

"It is a full-scale exercise, so residents can expect to see emergency responders looking and acting as if this was a real homeland security/domestic response mission," the Illinois Army and Air National Guard said in a press release.

The exercise will begin Sunday with a simulated jetliner crash in southwest suburban Oak Lawn, "with debris and mass casualties scattered throughout the area," said Maj. Gen. William Enyart of the Illinois National Guard.

Toyota Park in [Bridgeview](#) will be the staging area for the Guard starting Monday. Also, Chicago's Office of Emergency Management will practice setting up a remote command center at Soldier Field to handle a large-scale disaster.

On Tuesday, a simulated meth lab will be raided on Green and York Streets in Bensenville.

On Wednesday, Bensenville area also will be the site of numerous simulated terrorist attacks "including takedowns of suspected terrorists," simulated building collapses with trapped victims and mass decontamination and medical care by the National Guard.

At the same time, Rush University Medical Center in Chicago will receive "suspected biological agent patients to decontaminate and medically evaluate."

On Wednesday evening, the CTA will stage a rail-car evacuation SWAT incident at 15th and Clark streets. Chicago police K-9 units will detect "simulated explosives manufactured by a terrorist group on a CTA train." A simulated explosion will occur from 10 p.m. Wednesday to 4 a.m. Thursday. There will be road closings in the area.

On Thursday there will be another takedown situation in the Bensenville area and a simulated chemical explosion at the Nalco Co. plant at 6233 W. 66th St. in Chicago.

The Illinois National Guard says more than 50 local, state, federal and private agencies will participate in the drill to learn how to respond to disasters.

The five-day training exercise will run from Sunday through Thursday, June 17 ([Chicago Breaking News Center, 2010](#)).

**Title:** Massive Emergency Drills Planned In Chicago, Oak Lawn, Bridgeview, Elk Grove Village And Bensenville

**Date:** June 9, 2010

**Source:** [Fox News](#)

**Abstract:** Imagine a bomb blast, a plane crash, a hazardous materials spill and a CTA derailment, all in the same week. That's the set-up for a massive joint training exercise that's set to start Sunday. The drill is designed to stretch first responders to the breaking point. Dozens of local, state and federal agencies will respond, and seven hospitals will be ready for casualties. Anyone who sees the drill might think it's the real thing; Oak Lawn Police Lt. Arthur Clark says it will be very realistic.

"People who live in buildings across the street when they look out their window will see over 300 first responders and over 50 pieces of fire and emergency equipment," he said. "They're going to see people who will be simulated injured." And that's just for starters. At least seven different scenarios will play through Thursday in Oak Lawn, Bridgeview, Elk Grove Village, Bensenville and in Chicago. One event will be at Soldier Field, another will take place on a stretch of CTA track at 15th Street.

There are bound to be traffic tie-ups, and frightening scenes of survivors and victims. So if you see one, remember this story before you call 911. About 1500 people will be part of this. The folks putting this together say it's one of the biggest exercises ever coordinated in our area. Volunteers from Great



Lakes Naval base will play the injured. Mannequins will play the fatalities, and they're being dressed for the occasion by the Salvation Army stores ([Fox News, 2010](#)).

**Title:** Chicago Tests CBRN Response Teams

**Date:** June 15, 2010

**Source:** [Bio Prep Watch](#)

**Abstract:** Emergency response teams in Chicago are testing their skills this week to see how well they respond to different types of disasters, according to a myfoxchicago.com news report.

As part of the weeklong program, a mock terrorist attack will be held requiring emergency response teams to neutralize a terrorist during a chemical weapons release. Additionally, the emergency workers will have to attend to contaminated victims that must be rushed to nearby medical facilities.

The tests started on Sunday when firefighters responded to a mock plane crash. According to officials, fires were set and nearly 200 dummies and actors were scattered about as firefighters and rescue workers responded to the scene.

"It gives you a sense of realism. It gives you a sense of chaos the burning would give you," Illinois National Guardsman Captain Greg Hertz told MyFoxChicago.com. "So the smoke does come out and while we realize the fire on a plane would be much larger than that, it gives a sense of realism to the responders."

Hertz was among those who helped plan the series of training exercises.

Hertz also told myfoxchicago.com that on Thursday there will be a simulated explosion at the Nalco plant on Chicago's west side.

The drills, he said, are designed to test the ability of participating agencies.

"All responses are local and we understand that and the locals handle the responses in the way they deem necessary," Hertz said. "But what everybody needs is resources. And what becomes complicated in all this is how do I apportion resources to the appropriate venues" ([Bio Prep Watch, 2010](#)).

**Title:** North Chicago City Simulates Chemical Attack

**Date:** March 29, 2010

**Source:** [Bio Prep Watch](#)

**Abstract:** The Rapid Deployment Response Team of the Zion, Illinois Police Department was faced with a simulated chemical attack last Friday within the city's Central Middle School.

The drill, part of a yearly Illinois Terrorism Task Force mandated exercise, required local first responders and military companies to coordinate their response to the attack.

"In a crisis, military and city agencies form a cohesive emergency team that will protect the citizens of Zion," Police Chief Wayne Brooks told SuburbanChicagoNews.com

Injured students in the simulation – played by members of the Great Lakes Naval Corps School – wore makeup to simulated the effects of a chemical attack, including skin falling off and open sores oozing blood.

A chemical wash down to decontaminate the wounded was set up that included medical personnel in full chemical suits.

"From my perspective this is just first rate, phenomenal," Zion Mayor Lane Harrison told SuburbanChicagoNews.com. "I'm just really impressed to know we are officially prepared."

This is the second time such a training project has been held in North Chicago, with the previous event simulated at the college of Lake County.

Participants in the simulation included the 472nd Chemical Battalion, the 379th Chemical Company, a platoon from the 342nd Chemical Company's Biological Integrated Detection System and the 1171st Area Support Medical Company as well as camouflaged army reservists.

The responders utilized several \$1.5 million vehicles equipped to detect the air for toxins within a five-mile radius.

"We are set up to detect any biological attack," Capt. Peter Holloway said.

Exercises were held in seven locations around the city besides the school ([Bio Prep Watch](#)).

**Title:** Army Set For Large Disaster Response Exercise

**Date:** June 23, 2011

**Source:** [Bio Prep Watch](#)

**Abstract:** A large disaster response exercise planned by U.S. Army North will take place throughout southern Indiana and northern Kentucky between August 16 and August 28 to train federal military forces for CBRN incidents.

The Vibrant Response 12 and 12A planning conference in Camp Atterbury, Ind., on June 23 was the last chance for those planning the exercise to assemble. The event, which is the fourth field training event in the Vibrant Response series, will help federal forces train in their role in supporting civilian consequent managers in response to chemical, biological, radiological or nuclear incidents.

The 5,200 person Defense CBRN Response Force replaces the 4,500 person CBRN Consequence Management Response Force. It is designed to faster provide more life-saving capability to an incident.

"We have forged a strong training partnership with the Indiana National Guard and the people who run Camp Atterbury and Muscatatuck Urban Training Complex," Paul Condon, Army North's lead Vibrant Response exercise planner, said. "We've worked with them to add several new venues at both Camp Atterbury and Muscatatuck Urban Training Complex in order to accommodate the larger DCRF."

Organizations participating in the exercise include the Federal Emergency Management Agency, the Fort Knox Fire Department, the Army's 9th Area Medical Laboratory, National Guard elements from California, Indiana, Michigan, West Virginia, Minnesota and Illinois, and Verizon Wireless.

"Verizon will be using Vibrant Response to train their crews to repair equipment in a contaminated environment," Clark Wigley, the Army North joint exercise planner, said. "They also are providing some of their mock equipment for the military to transport."

The DCRF and the similar Command and Control CBRN Response Element A group were created as part of the Department of Defense's transformation of the nation's tiered CBRN response enterprise. The units will assume their mission Oct. 1 ([Bio Prep Watch, 2011](#)).

**Title:** Army Reserve Tests CBRN Preparedness

**Date:** June 24, 2011

**Source:** [Bio Prep Watch](#)

**Abstract:** Army Reserve units have joined forces with emergency responders in five states to participate in the chemical, biological, radiological and nuclear consequence drill known as Exercise Red Dragon 2011.

The exercise began in 2000 in an effort to develop, train and assess the capabilities of Army Reserve forces to be used in the Defense Support of Civilian Authorities. Over 2,000 participants were involved in the drill, which is directed by the Army Reserve Command.

"This year's exercise involves over 2,000 chemical, medical, logistics and signal Soldiers over several states," Col. Patricia Carlson, commander of the 415th Chemical Brigade, said. "Our support and our soldiers conducting this exercise come from throughout the United States."

Red Dragon 11 was conducted in Alabama, Illinois, Georgia, South Carolina and Wisconsin. The exercises prepared soldiers to assist local authorities with large scale disaster that they would not be able to handle on their own.

"The Red Dragon exercise is important because it will give the civilian sector an opportunity to work with Reserve units so we may be able to work together as one unit," Mary Casey-Lockyer, an emergency preparedness and response coordinator for Northwest Hospital in Arlington Heights, Ill., said.

Soldiers acted as casualties to aid the emergency responders with their preparedness training. Units of the Army Reserve train to maintain a high level of preparedness since they can be called at anytime to serve the nation in a civil or combat capacity.

"This exercise is important because it gives Army Reservist and civilian emergency responders an opportunity to unify and work together in the event of any type of catastrophe," Lt. Col. Timothy Dawson, the commander of the 472nd Chemical Battalion, said. "Preparedness is not just for us, it is for the communities as well" ([Bio Prep Watch, 2011](#)).

**Title:** Army Set For Large CBRN Disaster Response Exercise

**Date:** June 29, 2011

**Source:** [Bio Prep Watch](#)

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**Title:** Illinois County To Simulate Anthrax Attack

**Date:** March 13, 2012

**Source:** [Bio Prep Watch](#)

**Abstract:** Illinois first responders and hospitals in McLean County, along with officials with the Red Cross, Illinois State University and Illinois Wesleyan University, will run a tabletop exercise on Wednesday simulating an inhalation anthrax release.

Shay Simmons, the emergency preparedness coordinator for the McLean County Health Department, said that the tabletop exercise will prepare officials in the area for an emergency response for any pandemic. The department ran a simulated improvised explosive device explosion last year and the year before that it ran a simulated plane crash at Central Illinois Regional Airport, [WJBC](#) reports.

"Inhalation anthrax is not something we're going to see in McLean County very often, I don't think, but it's a similar scenario to what would happen if we had a really bad pandemic flu," Simmons said, according to [WJBC](#). "Think H1N1, but much worse."

The drill is meant to work out all the mistakes before a full-scale live drill in September.

"We are going to be looking for role players, we're going to try and push a couple hundred people through a simulated dispensing scenario," Simmons said, according to [WJBC](#). "We're not going to wait until September to practice this, that's why we're doing a tabletop exercise this week."

The exercise will occur at Illinois State University on Wednesday from 1 p.m. to 4 p.m. ([Bio Prep Watch, 2012](#)).

**Title:** Bio-Terror Attack Drills In St. Louis [Illinois]

**Date:** April 5, 2012

**Source:** [Fox 2 News](#)

**Abstract:** Would St. Louis be ready for a biological terrorist attack? The St. Louis County Health Department and 17 other departments from Missouri and Illinois are holding full-scale exercises on Thursday.

They are testing their response to a wide-spread bio-hazard. Specifically their ability to dispense medicine in the event of an anthrax exposure. The drill begins at 10am Thursday at Jefferson Barracks Park ([Fox 2 News, 2012](#)).

# Bio Terror Bible

## EXPOSING THE COMING BIO-TERROR PANDEMIC

**BIOTERRORBIBLE.COM:** When a major bio-terror attack and subsequent pandemic hit the United States of America, it will most likely be executed from behind the scenes by [Ezekiel Emanuel](#), soon to be known as the “Doctor of Death”. As it currently stands, the city of [Chicago appears to be bio-terror target #1](#) with Ezekiel's brother [Rahm Emanuel](#) in the power position of mayor. Both Emanuel brothers are dual U.S. and Israeli citizens whose father is a known Zionist terrorist who conducted attacks for the [terror state of Israel](#) who will likely provide the pathogens for the future bio-terror attack.

Israel is the only modern nation that has not signed the 1972 [Biological Weapons Convention](#) (refusal to engage in offensive biological warfare, stockpiling, and use of biological weapons). Israel is also the only modern nation that has signed but not ratified the 1993 [Chemical Weapons Convention](#) (refusal to produce, stockpile and use chemical weapons). Should a future biological terror attack hit America or any other nation, the state of Israel and its citizens will be prime suspects.

The following government and non-government agencies, institutions and organizations also appear to be intimately involved in some aspect of the upcoming bio-terror attack: [BARDA \(Biomedical Advanced Research and Development Authority\)](#), [CDC \(Center for Disease Control\)](#), [Center for Biosecurity of UPMC](#), [EIS \(Epidemic Intelligence Service\)](#), [INTERPOL \(International Criminal Police Organization\)](#), [NBACC \(National Biodefense Analysis and Countermeasures Center\)](#), [NIAID \(National Institute of Allergy & Infectious Diseases\)](#), [NIH \(National Institutes of Health\)](#), [OBFS \(Organization of Biological Field Stations\)](#), [USAMRICD \(U.S. Army Medical Research Institute of Chemical Defense\)](#), [USAMRIID \(U.S. Army Medical Research Institute of Infectious Diseases\)](#) and the [WHO \(World Health Organization\)](#).

### 1. BioterrorBible.com: Rahm Emanuel Wikipedia Entry:

**Title:** Rahm Emanuel  
**Date:** 2012  
**Source:** [Wikipedia](#)

**Abstract:** Rahm Israel Emanuel (born November 29, 1959) is an [American](#) politician and the 55th and current [Mayor of Chicago](#). He was formerly [White House Chief of Staff](#) to [President Barack Obama](#). He served as senior advisor to President [Bill Clinton](#) from 1993 to 1998 and as a [Democratic](#) member of the [United States House of Representatives](#), representing [Illinois's 5th congressional district](#), from 2003 until his resignation in 2009 to take his position in the [Obama Administration](#).

Emanuel was chair of the [Democratic Congressional Campaign Committee](#) during the [2006 mid-term elections](#) and remained a top strategist for House Democrats during the [2008 cycle](#). After Democrats regained control of the House in 2006, Emanuel was elected chairman of the [Democratic Caucus](#). This made him the fourth-ranking House Democrat, behind [Speaker Nancy Pelosi](#), [Majority Leader Steny Hoyer](#) and [Majority Whip Jim Clyburn](#).

Two days after Obama's election victory, Emanuel was announced as Obama's designee for White House Chief of Staff. He resigned from the House on January 2, 2009, and began his duties as Chief of Staff on January 20, 2009, the day of Obama's inauguration.

Emanuel resigned as Chief of Staff effective October 1, 2010, in order to pursue [a campaign to run for Mayor of Chicago](#) pending the announced retirement of six-term [incumbent Richard M. Daley](#). On January 27, 2011, the [Illinois Supreme Court](#) reversed a lower court's ruling that had cast doubt on Emanuel's candidacy; the court unanimously held that Emanuel did not abandon his [Chicago](#) residency by serving in the White House, thus affirming his eligibility to run for mayor. He won the Mayoral election on February 22, 2011, with 55% of the vote. President Obama appointed [William M. Daley](#), the brother of Emanuel's predecessor as mayor, as Chief of Staff to replace Emanuel.

### Early & Personal Life

Emanuel was born in [Chicago, Illinois](#), to [Jewish](#) parents. His father, Benjamin M. Emanuel, is a [Jerusalem-born pediatrician](#) who was once a member of the [Irgun](#), a Jewish paramilitary organization that operated in [Mandate Palestine](#). His mother, Marsha Smulevitz, is the daughter of a Chicago [union](#) organizer.<sup>[1]</sup> She worked in the civil rights movement and owned, briefly, a local [rock and roll](#) club. She is now a [psychiatric social worker](#). The two met in Chicago in the 1950s. Emanuel's older brother [Ezekiel Emanuel](#) is an [oncologist](#) and [bioethicist](#) at the [National Institutes of Health](#), and his younger brother [Ari Emanuel](#), a [Hollywood](#) talent agent. He has an adopted sister, Shoshanna, who is 14 years younger. Emanuel's grandfather was a Romanian Jew from [Moldova](#).

Emanuel's first name, Rahm (רם) means high or lofty in [Hebrew](#). The surname Emanuel (עמנואל), adopted by the family in honor of his father's brother Emanuel Auerbach, who was killed in the [1948 Arab–Israeli War](#) in Jerusalem, means God is with us. Sources disagree as to whether the family name was changed in 1933 or 1938.

When the family lived in Chicago, Emanuel attended the [Bernard Zell Anshe Emet Day School](#). After his family moved to [Wilmette](#), he attended public schools: Romona School, Locust Junior High School, and [New Trier West High School](#). He and his brothers attended summer camp in Israel, including just after the 1967 [Six-Day War](#).

While working at an [Arby's](#) restaurant in his high school years, Emanuel severely cut his right middle finger on a meat slicer. He sought medical attention after suffering a severe infection from swimming in Lake Michigan and as a result, had his finger partially [amputated](#).

Emanuel was encouraged by his mother to take [ballet](#) lessons as a boy and is a graduate of the Evanston School of Ballet as well as a student of The Joel Hall Dance Center, where his children also took dance lessons. He won a scholarship to the [Joffrey Ballet](#), but turned it down to attend [Sarah Lawrence College](#), a liberal arts school with a strong [dance](#) program.

He graduated from [Sarah Lawrence College](#) in 1981 with a [B.A.](#) in [Liberal Arts](#), and went on to receive an [M.A.](#) in [Speech](#) and [Communication](#) from [Northwestern University](#) in 1985. While an undergraduate, Emanuel was elected to the Sarah Lawrence Student Senate. He also joined the congressional campaign of David Robinson of Chicago.

During the 1991 Gulf War, Emanuel volunteered with the [Israel Defense Forces](#) as a civilian helping to maintain equipment.

Emanuel's wife, Amy Rule, [converted to Judaism](#) shortly before their wedding. They are members of the Chicago synagogue [Anshe Sholom B'nai Israel](#). They have a son and two daughters.

Emanuel is a close friend of fellow Chicagoan [David Axelrod](#), chief strategist for the 2008 [Barack Obama](#) presidential campaign. Axelrod signed the [ketuba](#), the Jewish marriage contract, at Emanuel's wedding.

Rabbi [Asher Lopatin](#) of [Anshe Sholom B'nai Israel](#) Congregation is quoted as saying Emanuel's family is "a very involved Jewish family", adding that "Amy was one of the teachers for a class for children during the High Holidays two years ago." Emanuel has said of his Judaism: "I am proud of my heritage and treasure the values it has taught me." Emanuel's family lives on the North Side of Chicago, in the [North Center](#) neighborhood.

Emanuel trains for and participates in [triathlons](#).



### Career as Political Staffer

Emanuel began his political career with the [public interest](#) and [consumer rights](#) organization Illinois Public Action. He went on to serve in a number of capacities in local and national politics, initially specializing in fundraising for Illinois campaigns and then nationally.

Emanuel worked for Democrat [Paul Simon](#)'s 1984 election to the [U.S. Senate](#), was the national campaign director for the [Democratic Congressional Campaign Committee](#) in 1988, and was senior advisor and chief fundraiser for [Richard M. Daley](#)'s victorious campaign for [Mayor of Chicago](#) in 1989.

At the start of then-[Arkansas](#) Governor Bill Clinton's presidential primary campaign, Emanuel was appointed to direct the campaign's finance committee. Emanuel insisted that Clinton schedule a lot of time for fundraising and greatly delay campaigning in [New Hampshire](#). Clinton agreed and embarked on an aggressive fundraising campaign across the nation. The fundraising paid off later, providing the campaign a vital buffer to keep buying television time as attacks on Clinton's character threatened to swamp the campaign during the [New Hampshire primary](#).

Clinton's primary rival, [Paul Tsongas](#) (the [New Hampshire Democratic primary](#) winner in 1992), later withdrew, citing a lack of campaign funds. Richard Mintz, a Washington public relations consultant who worked with Emanuel on the campaign, spoke about the soundness of the idea: "It was that [extra] million dollars that really allowed the campaign to withstand the storm we had to ride out in New Hampshire [over Clinton's relationship with [Gennifer Flowers](#) and the controversy over his [draft](#) status during the [Vietnam War](#)]." Emanuel's knowledge of the top donors in the country, and his rapport with "the heavily Jewish donor community" helped Clinton amass a then-unheard-of sum of \$72 million.

Following the campaign, Emanuel became a senior advisor to Clinton at the [White House](#) from 1993 to 1998. In the White House, Emanuel was initially Assistant to the President for Political Affairs and then Senior Advisor to the President for Policy and Strategy. He was a leading strategist in the unsuccessful White House efforts to institute [universal healthcare](#) and many other Clinton initiatives.

Emanuel is known for his "take-no-prisoners style" that has earned him the nickname "[Rahmbo](#)." Emanuel is said to have sent a dead fish in a box to a pollster who was late delivering polling results. On the night after the [1996 election](#), "Emanuel was so angry at the president's enemies that he stood up at a celebratory dinner with colleagues from the campaign, grabbed a steak knife and began rattling off a list of betrayers, shouting 'Dead! ... Dead! ... Dead!' and plunging the knife into the table after every name." Before [Tony Blair](#) gave a pro-Clinton speech during the impeachment crisis, Emanuel reportedly screamed to Blair's face "Don't fuck this up!" while Clinton was present; Blair and Clinton both burst into laughter. However, by 2007 friends of Emanuel were saying that he has "mellowed out". Stories of his personal style have entered the popular culture, inspiring articles and websites that chronicle these and other quotes and incidents. Though executive producer [Lawrence O'Donnell](#) has denied it, the character [Josh Lyman](#) in [The West Wing](#) is said to be based on Rahm Emanuel.

One of his proudest moments during the [Clinton administration](#) "was an event that touched his political sensibilities and his personal ties to [Israel](#): the 1993 Rose Garden signing ceremony after the [Oslo Accords](#) between Israel and the [Palestine Liberation Organization](#). Emanuel directed the details of the ceremony, down to the choreography of the famous handshake between [Israeli Prime Minister Yitzhak Rabin](#) and PLO leader [Yasser Arafat](#)."

### Career in Finance

After serving as an advisor to Bill Clinton, in 1998 Emanuel resigned from his position in the Clinton administration and joined the [investment banking](#) firm of [Wasserstein Perella](#), where he worked until 2002. Although he did not have an [MBA](#) degree or prior banking experience, he became a managing director at the firm's Chicago office in 1999 and, according to Congressional disclosures, made \$16.2 million in his two-and-a-half-years as a banker. At Wasserstein Perella, he worked on eight deals, including the acquisition by [Commonwealth Edison](#) of [Peco Energy](#) and the purchase by [GTCR Golder Rauner](#) of the SecurityLink home security unit from [SBC Communications](#).

Emanuel was named to the Board of Directors of the [Federal Home Loan Mortgage Corporation](#) (Freddie Mac) by President Clinton in 2000. His position earned him at least \$320,000, including later



stock sales. He was not assigned to any of the board's working committees, and the Board met no more than six times per year.

During Rahm's time on the board, Freddie Mac was plagued with scandals involving campaign contributions and accounting irregularities. The Obama Administration rejected a request under the [Freedom of Information Act](#) to review Freddie Mac board minutes and correspondence during Emanuel's time as a director.

The [Office of Federal Housing Enterprise Oversight](#) (OFHEO) later accused the board of having "failed in its duty to follow up on matters brought to its attention." Emanuel resigned from the board in 2001 when he ran for Congress.

### **Congressional Career**

After working in investment banking, in 2002 Emanuel pursued the U.S. House seat in the 5th District of Illinois previously held by [Rod Blagojevich](#), who chose not to run for re-election, but instead successfully ran for [Governor of Illinois](#). Rahm's strongest opponent of the seven other candidates in the 2002 Democratic primary was former Illinois State Representative [Nancy Kaszak](#), who had unsuccessfully opposed Blagojevich in the 1996 primary. The most controversial moment of the primary election came when [Edward Moskal](#), president of the [Polish American Congress](#), a [political action committee](#) endorsing Kaszak, called Emanuel a "millionaire [carpetbagger](#) who knows nothing" about "our heritage". Moskal also charged that Emanuel had [dual citizenship](#) with [Israel](#) and had served in the [Israeli Army](#). Emanuel did not serve in the Israeli army, but was a civilian volunteer assisting the [Israel Defense Forces](#) for a short time during the 1991 [Gulf War](#), repairing truck brakes in one of Israel's northern bases with [Sar-El](#). Emanuel brought together a coalition of Chicago clergy to denounce the incident. He recalled, "One of the proudest moments of my life was seeing people of my district from all backgrounds demonstrate our common values by coming together in response to this obvious attempt to divide them." Moskal's comments were denounced as [anti-Semitic](#) by Kaszak.

Emanuel won the primary and defeated [Republican](#) candidate Mark Augusti in the [general election](#).

Emanuel was elected after the October 2002 [joint Congressional resolution](#) authorizing the [Iraq War](#), and thus was not able to vote on it. However, in the lead up to the resolution, Emanuel spoke out strongly in support of the war, urging a United States' "muscular projection of force" in Iraq. Emanuel has been the focus of anti-war protests for his support of funding bills for the war in Iraq, and his support, during Democratic party primaries, of Democratic party candidates that are more hawkish. In his first term, Rahm Emanuel was a founding member and the Co-Chair of the Congressional [Serbian Caucus](#).

In January 2003, Emanuel was named to the [House Financial Services Committee](#), and sat on the subcommittee that oversaw Freddie Mac. A few months later, Freddie Mac Chief Executive Officer [Leland Brendsel](#) was forced out, and the committee and subcommittee commenced hearings lasting for more than a year. Emanuel skipped every hearing allegedly for reasons of avoiding any appearance of favoritism, impropriety, or conflict of interest.

### **Democratic Congressional Campaign Committee Chairman**

Emanuel assumed the position of [Democratic Congressional Campaign Committee](#) chairman (DCCC) after the death of the previous chair, [Bob Matsui](#). Emanuel led the Democratic Party's effort to capture the majority in the House of Representatives in the 2006 elections. The documentary [HouseQuake](#), featuring Emanuel, chronicles those elections. After Emanuel's election as chairman of the Democratic Caucus, [Chris Van Hollen](#) became committee chair for the 110th Congress.

While chairman of the DCCC, Emanuel was known to have had disagreements over Democratic election strategy with [Democratic National Committee](#) Chairman [Howard Dean](#). Dean favored a "[fifty-state strategy](#)", building support for the Democratic Party over the long term, while Emanuel believed a more tactical approach, focusing attention on key districts, was necessary to ensure victory.

Ultimately the Democratic Party enjoyed considerable success in the [2006 elections](#), gaining 30 seats in the House. Emanuel has received considerable praise for his stewardship of the DCCC during this election cycle, even from Illinois Republican Rep. [Ray LaHood](#) who said "He legitimately can be called the golden boy of the Democratic Party today. He recruited the right candidates, found the

money and funded them, and provided issues for them. Rahm did what no one else could do in seven cycles." However, he also faced some criticism for his failure to support some progressive candidates, as Howard Dean advocated.

### 2008 Election

Emanuel declared in April 2006 that he would support [Hillary Rodham Clinton](#) should she pursue the presidency in 2008. Emanuel remained close to Clinton since leaving the White House, talking strategy with her at least once a month as chairman of the DCCC. However, Emanuel's loyalties came into conflict when his home-state senator [Barack Obama](#) expressed interest in the race; asked in January 2007 about his stance on the Democratic presidential nomination, he said: "I'm hiding under the desk. I'm very far under the desk, and I'm bringing my paper and my phone." Emanuel remained neutral in the race until June 4, 2008, the day after the final primary contests, when he endorsed the eventual winner Obama.

Emanuel won re-election to the House, defeating Republican candidate Tom Hanson. [Open Secrets](#) reported that Emanuel "was the top House recipient in the 2008 election cycle of contributions from hedge funds, private equity firms and the larger securities/investment industry". Securities and investments business interests were the main sector contributing to Emanuel's campaigns in both 2006 and 2008.

### House Leadership

After his role in helping the Democrats win the 2006 elections, Emanuel was believed to be a leading candidate for the position of [Majority Whip](#). Nancy Pelosi, who became the next Speaker of the House, persuaded him not to challenge [Jim Clyburn](#), but instead to succeed Clyburn in the role of [Democratic Caucus Chairman](#). In return, Pelosi agreed to assign the caucus chair more responsibilities, including "aspects of strategy and messaging, incumbent retention, policy development and rapid-response communications." Caucus vice-chair [John Larson](#) remained in this role instead of running for the chairman position.

After [U.S. Vice President Dick Cheney](#) asserted that he did not fall within the bounds of orders set for the [executive branch](#), Emanuel called for cutting off the \$4.8 million the Executive Branch provides for the Vice President's office.

### Political Views

During his original 2002 campaign, Emanuel "indicated his support of [President Bush](#)'s position on [Iraq](#), but said he believed the president needed to better articulate his position to the American people". One of the major goals he spoke of during the race was "to help make [health care](#) affordable and available for all Americans".

In the 2006 congressional primaries, Emanuel, then head of the Democratic Congressional Campaign Committee, made national headlines for engineering a run by [Tammy Duckworth](#) — an Iraq war veteran with no political experience — against grassroots candidate Christine Cegelis in Illinois' 6th District. Expedited withdrawal from Iraq was a central point of Cegelis' campaign; Duckworth opposed a withdrawal timetable.

In his 2006 book, co-authored with Bruce Reed, *The Plan: Big Ideas for America*, Emanuel advocated a three-month compulsory universal service program for Americans between the ages of 18 and 25. An expanded version of this idea was later proposed by U.S. Presidential candidate Barack Obama (who was later to choose Emanuel as his White House Chief of Staff), during his 2008 campaign, in a [speech](#) on July 2, 2008, at the [University of Colorado](#), in which Obama proposed a "civilian national security force" (this term being used in the spoken version of his speech, not in the original written version), which included expanded voluntary national service programs in many areas, such as infrastructure rebuilding, service to the elderly, and environmental cleanup. For some of these services, tax credits and direct pay — primarily for college tuition — was proposed. Obama's original proposal was for participation by all ages, but with required participation by all middle-school and high-school students for 50 hours of community service a year. That proposed requirement was later modified to being "a goal". Obama's entire service program proposal quickly became controversial, largely for being mistaken as a call for a national paramilitary force, though the proposal's only reference to military service was volunteer participation in regular [U.S. Armed Forces](#), as one activity that would qualify for inclusion under the program's umbrella.

Emanuel is generally [liberal](#) on [social issues](#). He maintained a 100-percent [pro-choice](#) voting record, supports [gay rights](#) and [same sex marriage](#), and is a strong supporter of gun control, rated "F" by the NRA in December 2003. He has also strongly supported the banning of numerous rifles based upon "sporting" purposes criteria. He has aligned himself with the right wing of the Democratic Party, the [Democratic Leadership Council](#).

In June 2007, Emanuel condemned an outbreak of Palestinian violence in the Gaza Strip and criticized Arab countries for not applying the same kind of pressure on the Palestinians as they have on Israel. At a 2003 pro-Israel rally in Chicago, Emanuel told the marchers Israel was ready for peace but would not get there until Palestinians "turn away from the path of terror".

Emanuel has been called an ally of former Illinois Governor [Rod Blagojevich](#) and Chicago Mayor [Richard M. Daley](#); other sources dispute that he has been an ally of Blagojevich, for whom Emanuel served as a campaign adviser. He called Illinois state legislator [John C. D'Amico](#) in 2008 in support of Blagojevich's Illinois capital bill, but withdrew his encouragement when he discovered Daley opposed the bill. After Obama's election victory, Emanuel articulated his view on the role of government as a positive force to face difficult challenges and solve national problems, notably combating global warming through [green energy](#) policies and completely restructuring the healthcare system.

### **White House Chief of Staff**

**See also:** [Illinois's 5th congressional district special election, 2009](#)

On November 6, 2008, Emanuel accepted the Cabinet-level position of [White House Chief of Staff](#) for [Barack Obama](#). He resigned his congressional seat effective January 2, 2009. A special primary to fill his vacated congressional seat was held on March 3, 2009, and the special general election on April 7. Chicago newspapers reported that one candidate for that seat said at a forum that Emanuel had told him he may be interested in running for the seat again in the future.

Some Republican leaders criticized Emanuel's appointment because they believed it went against Obama's promises to make politics less divisive, given Emanuel's reputation as a partisan Democrat. Republican [Lindsey Graham](#) disagreed, saying: "This is a wise choice by President-elect Obama. He's tough but fair—honest, direct and candid."

Ira Forman, executive director of the [National Jewish Democratic Council](#), said that the choice indicates that Obama will not listen to the "wrong people" regarding the U.S.–Israel relationship. Some commentators opined that Emanuel would be good for the [Israeli–Palestinian peace process](#) because if Israeli leaders make excuses for not dismantling settlements, Emanuel will be tough and pressure the Israelis to comply. Some [Palestinians](#) expressed dismay at Obama's appointment of Emanuel. Emanuel said that Obama did not need his influence to "orientate his policy toward Israel".

In a 2010 article in [The New York Times](#), Emanuel was characterized as being "perhaps the most influential chief of staff of a generation".

At a closed-door meeting in the White House with liberal activists, he called them "fucking retarded" for planning to run TV ads attacking conservative Democrats who didn't support Obama's health-care overhaul. In February 2010, Emanuel apologized to organizations for the mentally handicapped for using the word "retarded." He expressed his regret to [Tim Shriver](#), the chief executive of the [Special Olympics](#) after the remark was reported in an article by [The Wall Street Journal](#) about growing liberal angst at the chief of staff. The apology came as former [Alaska governor](#) and conservative activist [Sarah Palin](#) called on President Obama to fire Emanuel via the former governor's Facebook page.

Emanuel also could make his team laugh. Chief technology officer [Aneesh Chopra](#) would come to staff meetings and give uniformly upbeat reports, administration aides said. Once Emanuel is said to have looked at him and said: "Whatever you're taking, I want some." Emanuel had a hand in war strategy, political maneuvering, communications and economic policy. Bob Woodward wrote in his book, *Obama's Wars* that Emanuel made a habit of calling up CIA Director [Leon Panetta](#) and asking about the lethal drone strikes aimed at Al Qaeda. "Who did we get today?" he would ask.

In 2010, Emanuel was reported to have conflicts with other senior members of the president's team and ideological clashes over policy. He was also the focal point of criticism from left-leaning Democrats for the administration's perceived move to the center. By September 2010, with the Democrats anticipating heavy losses in midterm elections, this was said to precipitate Emanuel's departure as Chief of Staff.

## **Mayor of Chicago**

### **2011 Chicago Mayoral Campaign**

See also: [Chicago mayoral election, 2011](#)

On September 30, 2010, it was announced that Emanuel would be leaving his post as White House Chief of Staff to run for Mayor of Chicago. He was replaced by [Pete Rouse](#) on October 2, 2010.

After being cleared as eligible to run for mayor by the Board of Elections and the Cook County Circuit Court (his eligibility was challenged on the basis of his lack of residency in Chicago for one year prior to the election), a divided Court of Appeals reversed holding on January 24, 2011, that residency for purposes of a candidate is different from residency for purposes of being a voter. Nevertheless, a further appeal to the [Illinois Supreme Court](#) resulted in a unanimous decision reversing the Court of Appeals and affirming Emanuel's eligibility to run for mayor. Emanuel was elected mayor on Tuesday, February 22, 2011. He is Chicago's first [Jewish](#) mayor.

Emanuel's electoral campaign was the inspiration for a Twitter account, [@MayorEmanuel](#), which was written by Chicago journalist Dan Sinker. The account received over 43000 followers, and was more popular than Emanuel's real Twitter account. Emanuel announced on February 28 that if the author would reveal himself, he would donate \$5000 to the charity of his choice. When Sinker revealed himself, Emanuel donated the money to Young Chicago Authors, a community organization which helps young people with writing and publishing skills.

### **Mayoralty**

Emanuel was sworn in as the [55th Mayor of Chicago](#) on May 16, 2011 at the [Pritzker Pavilion](#). At his inauguration were outgoing Mayor [Richard M. Daley](#), [Vice President Joe Biden](#), [Labor Secretary Hilda Solis](#), [Treasury Secretary Timothy Geithner](#), and [William M. Daley](#), who succeeded Emanuel as White House Chief of Staff and is the brother of the outgoing Mayor Richard Daley ([Wikipedia, 2012](#)).

## **2. BIOTERRORBIBLE.COM: Rahm Emanuel News:**

**Title:** Obama's First Appointment Is Son Of Zionist Terrorist

**Date:** November 6, 2008

**Source:** [Prison Planet](#)

**Abstract:** Rahm Emanuel's father was member of militant terror group that bombed hotels, massacred villagers – Obama pick is keen supporter of lobbying group aimed at creating militarized youth brigades

President elect Barack Obama's first appointment, Rahm Emanuel, who is set to become chief-of-staff, is the son of a member of the Zionist terrorist group Irgun, which was responsible for bombing hotels, marketplaces as well as the infamous Deir Yassin massacre, in which hundreds of Palestinian villagers were slaughtered.

Revelations about Obama's relationship with Bill Ayers, a Weather Underground domestic terrorist, which dogged him during the final weeks of the campaign trail, pale in significance to his selection of Emanuel, whose father, [Benjamin M. Emanuel](#), was an Irgun member.

Irgun has been labeled a terrorist organization by both [The New York Times](#) newspaper and by the [Anglo-American Committee of Enquiry](#).

Irgun was closely affiliated with the widely feared hardcore terrorist Stern Gang, an organization that carried out assassinations, train bombings and bombed police stations in an attempt to pave the way for unrestricted immigration of Jews into Palestine. Irgun operated in Palestine between 1931 and 1948.

Following the ideology of right-wing Revisionist Zionism, Irgun's doctrine was that, "Every Jew had the right to enter Palestine; only active retaliation would deter the Arabs and the British; only Jewish armed force would ensure the Jewish state".

This manifested itself by way of terror attacks such as the July 1946 bombing of the King David Hotel in Jerusalem, which killed 91 people. In 2006, Israelis including former Prime Minister Benjamin Netanyahu and former members of Irgun, attended a 60th anniversary celebration of the bombing organized by the Menachem Begin Centre.

Buses and marketplaces were also a target for Irgun, who were widely chastised for favoring attacks against civilian targets.

The widely condemned Deir Yassin massacre, which occurred in April 1948, involved Irgun working in consort with the Stern Gang and going house to house slaughtering Palestinian villagers. Eyewitness accounts of spies working for mainstream Jewish authorities, such as Meir Pa'il, reported Irgun members running around shooting civilians "full of lust for murder".

"I saw the horrors that the fighters had created. I saw bodies of women and children, who were murdered in their houses in cold blood by gunfire, with no signs of battle and not as the result of blowing up the houses," said eyewitness Eliahu Arbel.

"[One body was] a woman who must have been eight months pregnant," noted Jacques de Reynier, a French-Swiss Representative of the International Red Cross, "He hit in the stomach, with powder burns on her dress indicating she'd been shot point-blank."

The son of a man who helped carry out this slaughter has now been selected by Obama to be his chief-of-staff. Cries of "sins of the father" lose their gusto [when one considers the fact that](#), after the 1996 re-election of Bill Clinton, Rahm Emanuel "Was so angry at the president's enemies that he stood up at a celebratory dinner with colleagues from the campaign, grabbed a steak knife and began rattling off a list of betrayers, shouting 'Dead! ... Dead! ... Dead!' and plunging the knife into the table after every name." Sounds like a nice guy.

Rahm Emanuel is also an enthusiastic supporter of the [United States Public Service Academy Act](#), a lobbying group founded in 2006 in order to promote the foundation of an American public service academy modeled on the military academies – a youth corps whose students would be trained in "civilian internship in the armed forces".

This rings the alarm bells when we recall Obama's pledge to create a "civilian national security force" that is "just as powerful, just as strong, just as well-funded" as the U.S. military.

A creepy You Tube video of a brown-shirt style Obama youth brigade chanting and marching military style emerged last month, [raising fears](#) about where the messianic cult-like status of Obama's image could eventually lead ([Prison Planet, 2008](#)).

**Title:** Rahm Emanuel's Father: An Israeli Terrorist?

**Date:** November 8, 2008

**Source:** [Belfast Telegraph](#)

**Abstract:** The appointment of Rahm Emanuel triggered widespread interest in Israel, the native country of his former Jewish underground fighter father.

The older Emanuel, a paediatrician born in Jerusalem, was a member of Irgun, the hard-line militant group which fought for Jewish independence until 1948.

It was described as "terrorist" at the time by Britain. Mr Emanuel's appointment could reassure Israel that Mr Obama will continue America's close alliance.

The Ynet news service quoted Michael Kotzin, a leader of the Jewish Federation of Metropolitan Chicago, as saying Mr Emanuel is a frequent attendee at Israel-related events.

He co-sponsored a Bill defending Israel against a world court advisory opinion in 2004 criticising the route of the military's separation barrier for cutting deep into the West Bank, and co-sponsored another Bill congratulating Israelis and Palestinians who work together for peace.

He is credited with choreographing the famous handshake between Yasser Arafat and Yitzhak Rabin on the White House lawn in 1993 ([Belfast Telegraph, 2008](#))

**Title:** Wikipedia Deletes Benjamin Emanuel Entry

**Date:** November 13, 2008

**Source:** [Uruknet](#)

**Abstract:** Wikipedia has deleted Rahm Emanuel's father's page. Benjamin M. Emanuel's entry was recommended for deletion shortly after Obama named the younger Emanuel as his Chief of Staff, and it looks like it had already been deleted (or recommended for deletion) once before in January of 2007.

"Benjamin M. Emanuel" is no longer searchable in Wikipedia, but the former-page can be accessed through the original URL: [http://en.wikipedia.org/wiki/Benjamin\\_M.\\_Emanuel](http://en.wikipedia.org/wiki/Benjamin_M._Emanuel)

The old entry is no longer even in Google cache. The Progressive Mind was forward-thinking enough to save the original entry, including the original links. Here's what is used say:

<http://www.theprogressivemind.info/2008/11/benjamin-m-emanuel-wikipedia-free.html>

And here's a screenshot (from [Blog-Reporter](#)):



# Benjamin M. Emanuel

From Wikipedia, the free encyclopedia

Jump to: navigation, search

This article is being considered for deletion in accordance with Wikipedia's [deletion policy](#).

Please share your thoughts on the matter at [this article's entry](#) on the [Articles for deletion](#) page.

Feel free to edit the article, but the article **must not** be blanked, and this notice **must not** be removed, until the discussion is closed. For more information, particularly on merging or moving the article during the discussion, read the [guide to deletion](#).

*Steps to list an article for deletion:* 1. {{subst:pid}} 2. {{subst:pid|pg=Benjamin M. Emanuel|cat=|text=}} ~~~~ (categories) 3. {{subst:pid|pg=Benjamin M. Emanuel (2nd nomination)}} (add to top of list) 4. Please consider merging the author(s) by placing {{subst:adv|Benjamin M. Emanuel|Benjamin M. Emanuel (2nd nomination)}} ~~~~ on their talk page(s).

**Benjamin M. Emanuel** is a [Chicago](#) pediatrician and former member of the [Iraqi](#).<sup>[1][2]</sup> He is the father of U.S. Congressman and White House Chief of Staff-designate [Rahm Emanuel](#), [NIE](#) bioethicist [Ezekiel J. Emanuel](#), talent agent [Ari Emanuel](#), and adopted daughter Shoshana.<sup>[1]</sup> Born in [Jerusalem](#) in 1927,<sup>[1]</sup> he later emigrated to America in the 1950s<sup>[2]</sup> and married Martha Smolensky. They lived first in [Chicago](#) and later moved to [Winnetka](#).<sup>[1]</sup> Emanuel's family adopted their surname in 1933, after Benjamin's brother, Emanuel Auerbach, was killed in a skirmish with Arabs in Jerusalem.<sup>[1]</sup> According to Benjamin Emanuel, his son Rahm is the namesake of Rahanun, a [Lehi](#) combatant who was killed.<sup>[1]</sup>

## Quotes

[[edit](#)]

"Obviously he [[Rahm Emanuel](#)] will influence the president to be pro-Israel. Why wouldn't he be? What is he, an [Arab](#)? He's not going to clean the floors of the [White House](#)."<sup>[3][4][6]</sup>

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(Uruknet, 2008).

**Title:** Rahm Emanuel Apologizes For Father's Disparaging Remarks About Arabs

**Date:** November 14, 2008

**Source:** [Haaretz](#)

**Abstract:** U.S. President-elect Barack Obama's chief of staff Rahm Emanuel apologized to an Arab-American group on Thursday for comments disparaging Arabs made by his father.

The American-Arab Anti-Discrimination Committee sent a letter to Emanuel calling on him to distance himself from remarks made by the elder Emanuel in an interview with an Israeli newspaper following his son's appointment last week.

In the interview, Benjamin Emanuel was reported as saying: "Obviously, he will influence the president to be pro-Israel. Why wouldn't he? What is he, an Arab? He's not going to clean the floors of the White House."

While some political analysts have said Rahm Emanuel, a veteran Democratic congressman, should not be held responsible for the actions of his father, there was also a sense that an apology was unavoidable.

"Today, Rep. Emanuel called Mary Rose Oakar, president of the American-Arab Anti-Discrimination Committee, apologized on behalf of his family and offered to meet with representatives of the Arab-American community at an appropriate time in the future," a statement from his office said.

The committee, in a statement on its website, said Emanuel told Oakar it was unacceptable to make such remarks against any ethnic or religious group.

"From the fullness of my heart, I personally apologize on behalf of my family and me. These are not the values upon which I was raised or those of my family," the group quoted him as saying.

Oakar welcomed the apology, saying: "We cannot allow Arabs and Muslims to be portrayed in these unacceptable terms."



Some commentators in the Middle East have raised concern about the appointment of Emanuel, who has a pro-Israel record, suggesting he could use his position to influence Obama's policies in the region.

But political analysts and Emanuel himself this week dismissed such suggestions. The congressman said Obama did not need his influence to "orientate his policy toward Israel."

The chief of staff position serves as one of the closest advisers to the president and typically can decide who gains access to the president, while also developing administration policies ([Haaretz, 2008](#)).

**Title:** Rahm Emanuel Elected Mayor Of Chicago

**Date:** February 22, 2011

**Source:** [ABC News](#)

**Abstract:** Rahm Emanuel, the former White House chief of staff, has realized his lifelong ambition to become mayor of Chicago.

With 97 percent of the vote in the Chicago mayor's race counted this evening, Emanuel, 51, had 55 percent, winning the mayoral election outright and avoiding a runoff in April.

"Looking forward to working together as your next mayor," he tweeted tonight.

After a topsy-turvy campaign, in which his Chicago residence was repeatedly challenged, Emanuel easily outdistanced a crowded field.

His closest challenger, longtime city official Gery Chico, drew only 25 percent of the vote.

Former Sen. Carol Moseley Braun, the so-called "consensus" African-American candidate, polled a distant fourth with only about 8 percent.

In his victory address at Plumbers Hall, Emanuel thanked his supporters and spoke about his vision for the city.

"We have not won anything until a child can go to school and not think of their safety we have not won anything. Until a parent can think of their work, and not where they're going to find work, we have not won anything," Emanuel said. "The plural pronoun of 'we' is how we're going to meet the challenges. ... I do not want to see another child's name in memorial killed by violence."

President Obama, Emanuel's longtime friend and former employer, issued a statement congratulating him after all five other candidates in the race had conceded.

"I want to extend my congratulations to Rahm Emanuel on a well-deserved victory tonight," the president said. "As a Chicagoan and a friend, I couldn't be prouder. Rahm will be a terrific mayor for all the people of Chicago."

For more on the history of the job of mayor in Chicago, why so many politicians want it, and an [interview by George Stephanopoulos with current Mayor Richard Daley click here](#).

Turnout in Chicago was far lower than expected, according to city election officials, who said fewer than half of the city's registered voters showed up at the polls.

Emanuel takes office in May, succeeding Richard M. Daley who is retiring after 22 years in office -- serving longer than his famous father, Richard J. Daley, the last of America's big-city bosses.

Despite his big victory, Emanuel faces huge challenges including a crippling city budget deficit. The city faces a \$655 million budget gap in the current fiscal year and unfunded pension liabilities estimated at more than \$20 billion.

The results were not a surprise, as the most recent polls showed Emanuel far out in front, trailed by Chico.

Since Mayor Richard Daley announced he would not seek a record seventh term, Emanuel has led the pack in polling and fund-raising, amassing more than \$12 million in campaign contributions.

An attempt by Rev. Jesse Jackson and others to solidify African-American support behind Braun largely fizzled as the former senator's campaign [suffered numerous embarrassing gaffes](#).

Emanuel's most serious challenge had been expected to come from Chico, a former school board president and Daley chief of staff who had the support of Chicago's police and firefighters unions ([ABC News, 2011](#)).

# Bio Terror Bible

## EXPOSING THE COMING BIO-TERROR PANDEMIC

**BIOTERRORBIBLE.COM:** Based on recent news and events surrounding the NATO Summit in Chicago, Illinois, on May 20-21, 2012, it is possible that Chicago could be the staging ground of a massive bio-terror attack and/or an Obama assassination attempt. These attacks could occur simultaneously or one after the other and would definitely have Chicago Mayor Rahm Emanuel's signature all over it. There will likely be massive protests against the NATO summit in which a provocateur could attack Obama or attack the Occupy Wall St. crowd with a bio-terror device. Coincidentally, the script in the film entitled "The Death of a President" about a U.S. President getting assassinated in Chicago during major riots appears to be transpiring in reality.

**OBAMACSI.COM:** Filmed in 2006 but released in 2008, "[The Death of a President](#)" is an apparent script for the future assassination of Barack Obama. The assassination in the film takes place at 8:13pm on October 19 (date of the MLB World Series), in Chicago, Illinois, Obama's home town. The president depicted in the movie, George W. Bush, is shot twice at the Sheraton Hotel in downtown Chicago by an assassin with a sniper rifle. The top three suspects for the assassination are a full-time peace activist, a U.S. military veteran, and a Syrian man with alleged Al Qaeda ties. Although the Syrian man was charged, tried and convicted for the assassination, the true perpetrator of the crime was the U.S. military veteran's father, a Major in U.S. military and a Desert Storm veteran. If there was ever a blueprint for the assassination of Barack Obama, "The Death of a President" is definitely it.

**Title:** 2012 Chicago Summit

**Date:** April 16, 2012

**Source:** Wikipedia

**Abstract:** The 2012 Chicago summit is a meeting of the [heads of state](#) and [heads of government](#) of the [North Atlantic Treaty Organization](#), to be held in [Chicago, United States](#), on 20 and 21 May 2012. The event was originally scheduled to coincide with the [2012 G8 summit](#), but the G8 summit was later rescheduled to be held at Camp David. This is the first time ever that a NATO summit has been held in the United States outside of [Washington, DC](#).

### Agenda

The Chicago summit was originally planned as an "implementation summit" to follow up the [2010 summit in Lisbon](#). However, the group is now likely to discuss the impact of recent events, such as the [Arab Spring](#), [Libyan civil war](#), [global financial crisis](#), and transition for NATO forces in [Afghanistan](#).

NATO is planning to craft specific resolutions concerning [Middle East](#). Issues to address include the organization's continuing military support of active insurrections in the region, as well conflict with Iran. The group is going to make plans for defending certain areas, such as the [Strait of Hormuz](#).

The organization is also going to review its collective relationship to [Russia](#). Indeed, NATO has stated that Russia's attendance at the Chicago event will depend upon accession to a system of [European missile defense](#). Russia worries about its own nuclear deterrent in the region; the United States insists that a system is necessary to mitigate any threat from [Iran](#).

NATO will also discuss [missile defense](#) and [nuclear deterrence](#) more generally. The Lisbon summit ordered the creation of a "Deterrence and Defense Posture Review," (DDPR) a document expected to express and discuss conflicts some of the wide-ranging [conflicts on the topic within NATO](#). Reviewal of the DDPR will represent the first time since the end of the [Cold War](#) that NATO has explicitly conferred on the topic of nuclear deterrence. NATO members have a diversity of opinions on these topics, and Karl-Heinz Kamp, the Director of NATO Defense College's Research Division, cautions that few clear conclusions may be reached.

The Afghanistan issue in particular faces a public relations timeline due to a declaration by [Barack Obama](#) that NATO activities in Afghanistan would be concluded by 2014.

### **Protests**

Planners expect the NATO summit to draw protests from the [Occupy movement](#), as well as the [anti-globalization movement](#). Local fears about the impact of the protests have caused several local schools to reschedule their prom nights. Some schools are considering closing entirely.

### **Citizen Journalism**

A range of groups are expected to organize [citizen journalism](#) centers to provide independent media coverage of summit and the expected protests.

Alderman Rick Munoz has proposed legislation for the City Council that prohibits police from interfering with online media and cell phones during the event.

### **Policing**

The summit has been designated a [National Special Security Event](#) (NSSE) by the [Department of Homeland Security](#). Final authority over [law enforcement](#) thus belongs to the [Secret Service](#). The NSSE steering committee, which also includes representatives from the [Chicago Police Department](#) and has 24 subcommittees, began meeting in October 2011.

Local security forces are being trained by an Illinois company called Controlled F.O.R.C.E., which specializes in subduing crowds. Police are being trained in "Mechanical Advantage Control Holds," as well as the use of [tasers](#).

The city has signed a \$193,461 contract with [Super Seer Corp.](#) for the procurement of new face shields that fit over gas masks; the shields are intended to protect police officers from liquids. The Chicago Police Department will also prepare its mounted unit with riot gear: armor for horses along with "crowd control training."

### **New Regulation**

Chicago's mayor, [Rahm Emanuel](#), has proposed and passed new ordinances targeted at potential protestors. Contrary to Emanuel's initial statements, these ordinances will be permanent, remaining in effect after the summits are over.

### **The new measures include:**

1. Authorization for the Mayor to purchase and deploy surveillance cameras throughout the city, without any type of oversight.
2. Restrictions on public activity, including amplified sound and morning gatherings.
3. Restrictions on parades, including the requirement to purchase an insurance policy worth \$1 million and to register every sign or banner that will be held by more than one person.
4. The power to deputize many different types of law enforcement personnel other than the Chicago Police Department.

These new ordinances drew protests from the [ACLU](#), [Amnesty International](#), the [Occupy Movement](#) (particularly [Occupy Chicago](#)), and the [pro-life](#) movement. Some local business owners have complained about a lack of transparency in policing because those responsible for security are unwilling to release specific plans ([Wikipedia, 2012](#)).

**Title:** Protesters Urged To Occupy Chicago During G8 And Nato Summits

**Date:** January 26, 2012

**Source:** [Guardian](#)

**Abstract:** Adbusters, the group which helped spark the [Occupy movement](#), has put out a call for tens of thousands of protesters to occupy Chicago during the G8 and Nato summits in May.

Seeking out those it describes as "redeemers, rebels and radicals" all over the world, the Canadian activist group is calling on protesters to bring their tents and peaceful barricades to converge on the city and build a camp on public ground. By making the call international, [the group said it is hoping to pull off](#) the "biggest multinational occupation" ever.

It encourages peaceful civil disobedience and invokes the spirit of the "Chigago Seven", a group of high-profile civil rights leaders including Abbie Hoffman, who were charged with inciting riots in 1968, when the city was host to violent clashes between police and anti-Vietnam activists during the Democratic National Convention.

Protesters flocking on the city in May will face heightened security, when heads of state, Nato generals and other military leaders will be there. They will also face unique rules in the city against erecting tents, which forced Occupy Chicago to become unique in the Occupy movement for not ever setting up a permanent occupation.

Since a wave of evictions in cities and campuses across the US last November, the Occupy movement, which protested against income inequality and corporate greed, has become less visible, aside from a few rallies or demonstrations. But campaigners insist the movement continues to grow and will rise anew in the spring in time for the May offensive.

The month-long [protest](#) will focus on demands for "a Robin Hood Tax ... a ban on high frequency 'flash' trading ... a binding climate change accord ... a 'three strikes and you're out' law for corporate criminals ... an all-out initiative for a nuclear-free Middle East" and whatever it decides on general assemblies and global internet brainstorm, according to Adbusters.

Threatening civil disobedience, it added: "And this time around we're not going to put up with the kind of police repression that happened during the Democratic National Convention protests in Chicago, 1968 ... nor will we abide by any phony restrictions the city of Chicago may want to impose on our first amendment rights. We'll go there with our heads held high and assemble for a month-long people's summit ... we'll march and chant and sing and shout and exercise our right to tell our elected representatives what we want ... the constitution will be our guide."

A spokesman for Occupy Chicago welcomed the call, and said it would be publicising it as part of its #ChicagoSpring campaign, which would include protesting at Nato and G8.

Joshua Kaunert of Occupy Chicago said: "Occupy Chicago has a lot of work to do both prior to and after these summits: Mayor 1% has turned peaceful protest and passive resistance in Chicago into a criminal act, violating our First Amendment rights. We are still in the planning stages for all of our spring actions, but we welcome all who want to speak out against the famine and war forced on the world by the G8 and Nato to join us in the streets of Chicago."

Adbusters have said they hoped 50,000 people would converge on Chicago. However, none of the recent actions by Occupy have mustered the kind of numbers that it has managed in the past.

However, Sebastian, a spokesman for Occupy Wall Street – who was unwilling to give his surname – said the adbusters call was "inspiring" and could be the spark that lights up the movement in the Spring.

"The people base is probably growing faster than we had before, as we have spent a long time in network building and outreach work. A single march in Portland was 6,000 people and we had a union

march in New York of 30,000 people. The oppression of a movement makes it stronger. They are calling not just on Occupy, but on people internationally. The appeal is huge."

He said that Occupy was already planning actions in May, an important month in the civil rights calendar, such as a general strike on May 1, but the adbusters call to protest for the whole month was an "inspiration."

Sam Jewel of Occupy DC said: "Everyone I've spoken to from Occupy DC is pretty excited about it. It's going to be a pretty dramatic few weeks. It will be interesting to see that will happen and whether they will respect for dissent. The mayor of Chicago hasn't ever allowed tents at Occupy Chicago. There is the whole tradition of '68 with all the police brutality there. But we are in a different era of protests now.

"There is a global consensus that wealth is too accumulated by a small percentage, and that our country is not democratic any more" ([Guardian, 2012](#)).

**Title:** Security Fears? Chicago G8 Summit Canceled, Relocated To Camp David

**Date:** March 7, 2012

**Source:** [Russia Today](#)

**Abstract:** Amid concerns over thousands of protestors descending on Chicago, Illinois for the G-8 Summit this spring, the event has been moved to the presidential compound at Camp David, Maryland, around an hour outside of Washington.

Leaders from the United States, Russia, Canada, France, Germany, Italy, Japan, the UK and European Union were expected to arrive in Chicago this May for the annual meeting of the world's largest economies. Protesters also had plans for the Windy City, however, and demonstration groups including Occupy Wall Street offshoots had begun orchestrating events to coincide with the meeting. Now barely two months before the event is slated to occur, the G-8 Summit is being moved outside of Chicago to Camp David, a suburban city outside of the US capital that serves as a historic retreat locale for America's commander-in-chief.

*"In May, the United States looks forward to hosting the G-8 and NATO Summits. To facilitate a free-flowing discussion with our close G-8 partners, the president is inviting his fellow G-8 leaders to Camp David on May 18-19 for the G-8 Summit, which will address a broad range of economic, political and security issues,"* reads a statement released Monday by the White House.

After the G-8 Summit, the NATO meeting is expected to continue as planned in Chicago on May 20 through 21.

In the past, these high-profile meetings of the minds have attracted massive demonstrations, with the 2010 G-20 Summit in Toronto resulting in the largest mass arrest in the history of the entire country of Canada. In recent weeks, the Apartment Building Owners and Managers' Association of Chicago began a series of presentations in which it explained how building managers could effectively handle riots, protests, tear gas and bomb threats.

Camp David has served as a retreat for every president since Franklin Roosevelt went into office in the 1940s and has hosted foreign dignitaries such as Winston Churchill, Margaret Thatcher and Anwar al-Sadat. Come this spring, however, it will serve as a meeting place for more than just a few heads of state. Obama, Cameron, Merkel and Sarkozy are just a few of the names that are expected on this year's guest list — and don't expect there to be many more. Camp David is normally subjected to heightened security standards, and this spring's G8 Summit won't come as any exception. For protesters hoping to picket outside the grounds — a mass demonstration would be unlikely.

Coincidentally, a new bill drafted by Congress, [HR 347](#), will make it a federal offense to trespass on the grounds of any place granted Secret Service. If approved, the NATO Summit in Chicago will fall into this jurisdiction, as will the presidential retreat at Camp David. What does that mean for protesters?

Even if you're in the proximity of the premises, you could be considered a criminal for engaging in any activity that disrupts a governmental event ([Russia Today, 2012](#)).

**Title:** Secret Service Has Shopping List For Terror-Proofing NATO Summit

**Date:** April 16, 2012

**Source:** [Chicago Sun-Times](#)

**Abstract:** The Secret Service has an extensive shopping list to fortify the Chicago NATO summit, from barriers to withstand a vehicle going 50 mph to 8-foot-high fences that can't be climbed.

The specifics are contained in a bid request from the Secret Service, a document called "sensitive but unclassified." The proposals for equipment rental and project management are due April 24 for the May 20-21 summit.

Many world leaders are expected to arrive in Chicago on May 19 or a few days earlier — and so are protesters and an international press corps.

The Secret Service document sheds light on the massive security operation that is supporting the summit, which will draw up to 50 heads of state plus associated foreign and defense ministers, military attaches and other high-level personnel in national delegations.

The summit itself is at McCormick Place. Other events are taking place at Soldier Field, Navy Pier and the Field Museum. The official delegations will be staying mainly at downtown hotels. First lady Michelle Obama is taking spouses of world leaders to the Gary Comer Youth Center on the South Side.

The U.S. government — footing the security bill — is looking for a single vendor to deliver a variety of goods and services at a fixed price, starting on May 14, including:

- ◆ Portable high-security vehicle barriers to withstand the impact of a 15,000-pound vehicle hitting it at up to 50 mph. The barrier needs to be installed within one hour or less.

The Secret Service is looking for between 10,000 and 20,000 linear feet of standard road-side concrete barriers.

- ◆ Crowd control "barricade systems": 8-foot-high steel fences with 1/8-inch steel mesh "to mitigate/disperse thrown liquids." The barricade must be "environmentally sensitive" but strong enough to not be pulled or pushed down, "taken apart, set on fire and easily climbed on."

The "anti-scaling" fencing order is for between 20,000 and 25,000 linear feet.

The selected contractor can borrow up to 3,600 linear feet of anti-scale fencing from the government — but they have to pick it up and return it to a suburban Washington location.

- ◆ Between 10 and 20 portable light towers for Secret Service checkpoints.

- ◆ Sand bags, with no specific number.

- ◆ A variety of tents for various sites, porta-potties and mobile office trailers.

- ◆ Between five and 10 golf carts.

The Secret Service declined comment.

I understand that the equipment request is considered routine for an event of the magnitude of the NATO summit, with significant potential targets.



The Department of Homeland Security designated the NATO summit as a National Special Security Event; that puts the Secret Service in charge of the overall security plan.

The bid request was posted online April 10. The bid was first disclosed by Government Security News and Crain's Chicago Business.

The contractor needs experience in three other high-security events within the past 36 months. All employees must be U.S. citizens and anyone with warrants or felony arrests cannot be part of the work force. All workers will have to undergo a background check by the Secret Service — so the vendor must supply personnel who can “successfully pass the background investigation” ([Chicago Sun-Times, 2012](#)).

**Title:** Blackhawks Circle Low Through Chicago Skies As Secret Service Releases Security Details

**Date:** April 16, 2012

**Source:** [Fox Chicago](#)

**Abstract:** Chicago - Blackhawks and A/MH-6 Little Bird helicopters used by special forces circling low through downtown Chicago skies made for a scary scene along the Chicago River, as they rattled windows flying among the city's skyscrapers.

The training exercise comes as the city found out some of the details of what the Secret Service wants for security at next month's summit at McCormick Place.

**PHOTOS:** [Blackhawk Helicopters Circle Chicago](#)

FOX Chicago News has their terror prevention shopping list, [courtesy of the Chicago Sun-Times](#):

- Portable high security barriers
- Crowd control barriers
- 10-12 portable light towers
- Sandbags, port-a-potties
- Mobile offices
- 5-10 golf carts

[The Chicago Tribune reports](#) that the most traffic for NATO dignitaries will be between McCormick place and downtown hotels in the Loop, River North and the Gold Coast.

Fifty heads of state will attend, with delegates, and will be moving multiple times each day.

FOX Chicago News viewers called in, describing men with automatic weapons, hanging out of helicopters.

The city's Office of Emergency Management and Communications on Monday announced that Chicago is the site of a military training exercise this week involving personnel and at least three helicopters.

But the bland press release from City Hall did nothing to prepare folks for the jarring scene that unfolded Monday evening.

“It was frightening,” Jessica Hill said. “I was definitely alarmed.”

At least three Blackhawk helicopters flying at time in close order formation - at other times separating fairly widely - zoomed around office and residential towers for several hours.

“I was pretty amazed,” Felise Llano said, “because they were definitely military.”

Witnesses described three to four very heavily armed men in each chopper. Several said some of the men appeared to be tethered and were at times literally hanging out of the choppers, and looked ready to jump.

Calling it routine training, city officials said in a statement such exercises are conducted by military personnel in various cities around the country. They say the exercises are designed to improve the military's ability to operate in urban environments.

Emergency management officials said the training sites have been selected to minimize the impact on residents' daily routines.

The timing of the drills led some to wonder if they're in preparation for next month's NATO summit.

But officials said that the summit and the drills are unrelated ([Fox Chicago, 2012](#)).

**Title:** Residents Of State Street Condo Told To Leave Chicago During NATO Summit

**Date:** April 20, 2012

**Source:** [Fox Chicago](#)

**Abstract:** Chicago - Residents of a Chicago condo whose building will be in the eye of the NATO storm are being warned that they should move out for the weekend ... or risk being trapped inside by rioters.

FOX Chicago News was first to report Friday that the people living in the 17-floor Library Tower building at 520 South State Street were warned in a letter from condo management that "we are **STRONGLY** recommending that all residents find places to stay during the conference from May 18 through May 21."

[READ THE LETTER>>>](#)

NATO summits often attract crowds of thousands of protesters. Currently, a march is planned on Sunday, May 20, from the Petrillo Band Shell in Grant Park past Library Tower on State Street to McCormick Place.

The condo is hiring two off-duty police officers to provide security; those cops will be armed.

"In the event of a riot or the potential of one near the building, all access doors will be locked including the garage door," the letter continues. "For everyone's safety, we will be instructing anyone in the building to stay in his or her unit."

"I can't just leave my garage whenever I want. They'll be holding us hostage in here," said resident Sebrina Krieling.

The condo is in a busy area on State between Harrison and Congress, and residents are used to a lot.

"It's just pretty shocking to see and hear things are going to be scary in your own home," said resident Jeff Lunz. "I think they've got everyone's best interest in mind."

The letter also warns:

- "We are strongly recommending that you do not have any guests over during this time including dog walkers and cleaning companies."
- "There will be absolutely no deliveries or moves permitted between Friday, May 18 and Monday, May 21."
- "The revolving door will be locked on Friday morning."

"I'm inconvenienced by parades and a lot of other things. I can't get out on the day of the Thanksgiving Day parade. So that's just a part of city life," said Lunz ([Fox Chicago, 2012](#)).

# Bio Terror Bible

## EXPOSING THE COMING BIO-TERROR PANDEMIC

**BIOTERRORBIBLE.COM:** A [bio-terror grenade has been invented](#) and may be used in a future false-flag bio-terror attack in the city of Chicago during the May 20-21 NATO Summit. In the confusion of a riot or political demonstration by the Occupy Wall St. movement, a government terrorist could easily roll or throw a bio-terror grenade into an unsuspecting crowd and start a chain reaction of infection that could ultimately affect an entire nation or the world. Ultimately, the blame for the ensuing pandemic would be placed on the demonstration rather than the nation states capable of developing and using modern bio-terror weapons and techniques. Chicago is steeped in a history of protests, riots and high profile cases of attacks at mass gatherings. Based on the news being reported in respect to the NATO summit, the police and military are banking on major riots in which the Occupy Wall St. movement will likely be scapegoated.

### 1. BioterrorBible.com: History of Chicago Riots:

**Title:** Haymarket Affair

**Date:** 2012

**Source:** [Wikipedia](#)

**Abstract:** The Haymarket affair (also known as the Haymarket massacre or Haymarket riot) refers to the aftermath of a bombing that took place at a labor demonstration on Tuesday May 4, 1886, at Haymarket Square in [Chicago](#). It began as a peaceful rally in support of workers [striking](#) for an eight-hour day. An unknown person threw a dynamite bomb at [police](#) as they acted to disperse the public meeting. The bomb blast and ensuing [gunfire](#) resulted in the deaths of seven police officers and at least four civilians, and the wounding of scores of others.

In the internationally publicized legal proceedings that followed, eight [anarchists](#) were convicted of [conspiracy](#), although the prosecution conceded none of the defendants had thrown the bomb. Seven were sentenced to death and one to a term of 15 years in prison. The death sentences of two of the defendants were [commuted](#) by Illinois governor [Richard J. Oglesby](#) to terms of life in prison, and another committed suicide in jail rather than face the gallows. The other four were hanged on November 11, 1887. In 1893, Illinois' new governor [John Peter Altgeld](#) pardoned the remaining defendants and criticized the trial.

The Haymarket affair is generally considered significant as the origin of international [May Day](#) observances for workers. The site of the incident was designated a [Chicago Landmark](#) on March 25, 1992, and a public sculpture was dedicated at the site in 2004. The Haymarket Martyrs' Monument in nearby Forest Park was listed on the [National Register of Historic Places](#) and designated a [National Historic Landmark](#) on February 18, 1997.

#### The Bombing and Gunfire

At about 10:30 pm, just as Fielden was finishing his speech, police arrived en masse, marching in formation towards the speakers' wagon, and ordered the rally to disperse. Their commander, Police Inspector Bonfield, proclaimed:

I command you [addressing the speaker] in the name of the law to desist and you [addressing the crowd] to disperse.

A home-made bomb with a [brittle metal casing](#)<sup>[30]</sup> filled with [dynamite](#) and ignited by a fuse, was thrown into the path of the advancing police. Its fuse briefly sputtered, then the bomb exploded, killing policeman Mathias J. Degan with flying metal [fragments](#) and mortally wounding six other officers.

Witnesses maintain that immediately after the bomb blast there was an exchange of gunshots between police and demonstrators. According to the May 4th [New York Times](#) (which was manifestly hostile to the strikers) demonstrators began firing at the police, who then returned fire. Others, notably historian Paul Avrich, point out that accounts vary widely as to how many returned fire at the police. He maintains that the police fired on the fleeing demonstrators, reloaded and then fired again, killing four and wounding as many as 70 people. What is not disputed is that in less than five minutes the square was empty except for the casualties. Policemen then carried their wounded comrades and some wounded demonstrators into the adjacent police station. Other wounded demonstrators found aid where they could. The exact number of dead and wounded among the demonstrators is unknown.

In his report on the incident, Inspector Bonfield wrote that he "gave the order to cease firing, fearing that some of our men, in the darkness might fire into each other". An anonymous police official told the [Chicago Tribune](#), "A very large number of the police were wounded by each other's revolvers. ... It was every man for himself, and while some got two or three squares away, the rest emptied their revolvers, mainly into each other."

About 60 officers were wounded in the incident, along with an unknown number of civilians. In all, seven policemen and at least four workers were killed, with one other policeman dying two years after the incident from complications related to injuries received on that day. It is unclear how many civilians were wounded since many were afraid to seek medical attention, fearing arrest. Police captain Michael Schaack wrote the number of wounded workers was "largely in excess of that on the side of the police". The Chicago Herald described a scene of "wild carnage" and estimated at least fifty dead or wounded civilians lay in the streets ([Wikipedia, 2012](#)).

**Title:** Chicago Seven

**Date:** 2012

**Source:** [Wikipedia](#)

**Abstract:** The Chicago Seven (originally Chicago Eight, also Conspiracy Eight/Conspiracy Seven) were seven defendants—[Abbie Hoffman](#), [Jerry Rubin](#), [David Dellinger](#), [Tom Hayden](#), [Rennie Davis](#), [John Froines](#), and [Lee Weiner](#)—charged with conspiracy, inciting to riot, and other charges related to protests that took place in [Chicago, Illinois](#) on the occasion of the [1968 Democratic National Convention](#). [Bobby Seale](#), the eighth man charged, had his trial severed during the proceedings, lowering the number from eight to seven.

### Grand Jury and Indictment

Following the convention on September 9, 1968 a Federal [grand jury](#) was empaneled to consider criminal charges. The grand jury focused on the possible grounds for charges in four areas:

1. A conspiracy by protesters to cross state lines to incite a riot
2. Violations by police of the civil rights of demonstrators by use of excessive force
3. TV network violations of the Federal Communications Act
4. TV network violations of federal wiretap laws.

Over the course of more than six months the grand jury met 30 times and heard some 200 witnesses. However, President Lyndon Johnson's [Attorney General](#), [Ramsey Clark](#), discouraged an indictment,

believing that the violence during the convention was primarily caused by actions of the Chicago police. The grand jury returned indictments only after President [Richard Nixon](#) took office and [John Mitchell](#) assumed the office of Attorney General. On March 20, 1969, eight protesters were charged with various crimes and eight police officers were charged with civil rights violations.

### Charges

The eight defendants were charged under the anti-riot provisions of the [Civil Rights Act of 1968](#)<sup>[5]</sup> which made it a federal crime to cross state lines with the intent to incite a riot. The Chicago 8 indictment alleged crimes of three kinds:

1. That all eight defendants conspired (together with another sixteen unindicted co-conspirators) to cross state lines to incite a riot, to teach the making of an incendiary device, and to commit acts to impede law enforcement officers in their lawful duties.
2. That David Dellinger, Rennie Davis, Tom Hayden, Abbie Hoffman, Jerry Rubin, and Bobby Seale individually crossed state lines to incite a riot.
3. That John Froines and Lee Weiner instructed other persons in the construction and use of an incendiary device.

The sixteen unindicted co-conspirators were: [Wolfe B. Lowenthal](#), [Stewart E. Albert](#), [Sidney M. Peck](#), [Kathy Boudin](#), [Corina F. Fales](#), Benjamin Radford, [Thomas W. Neumann](#), [Craig Shimabukuro](#), Bo Taylor, [David A. Baker](#), [Richard Bosciano](#), Terry Gross, [Donna Gripe](#), [Benjamin Ortiz](#), [Joseph Toornabene](#), and Richard Palmer. Additionally, Rick Pecora was implicated for inciting incidents but never charged.

### Verdict

On February 18, 1970, all seven defendants were found not guilty of conspiracy. Two (Froines and Weiner) were acquitted completely, while the remaining five were convicted of crossing state lines with the intent to incite a riot, a crime instituted by the anti-riot provisions of the [Civil Rights Act of 1968](#). On February 20, they were each fined \$5,000 and sentenced to five years in prison. At sentencing, [Abbie Hoffman](#) recommended that the judge try [LSD](#), offering to set him up with a dealer he knew in Florida ([Wikipedia, 2012](#)).

## 2. BIOTERRORBIBLE.COM: 2012 NATO Summit Riots (May 20-21, 2012):

**Title:** Magazine Calls Occupiers To Come To Chicago In 'Tradition of' 1968 Rioters

**Date:** January 27, 2012

**Source:** [CNS News](#)

**Abstract:** [Adbusters](#), the radical, Vancouver-based anti-consumerist magazine, [credited](#) by many media outlets for launching the Occupy Wall Street protests, [has put out](#) an ad calling for 50,000 protestors to "Occupy" the G8 summit in May.

The [Adbusters ad](#) shows a picture of policemen beating up a defenseless protestor, and comes with the caption: "In the Tradition of the Chicago 8." The Chicago 8 were radicals who incited riots in Chicago during the 1968 Democratic convention. The 1968 convention unrest became so legendary that the band Crosby, Stills, Nash (and Young) wrote a [song](#) about it called "Chicago." The "tradition" of the Chicago 8 included calling for displays of [public fornication](#) and attacking police.

According to the [official statement](#) of Adbusters (titled Tactical Briefing #25), "On May 1, 50,000 people from all over the world will flock to Chicago, set up tents, kitchens, peaceful barricades and #OCCUPYCHICAGO for a month. With a bit of luck, we'll pull off the biggest multinational occupation of a summit meeting the world has ever seen."

The ad threatens to shut down the economy if their demands are not met: "And if they don't listen ... if they ignore us and put our demands on the back burner like they've done so many times before ... then, with Gandhian ferocity, we'll flashmob the streets, shut down stock exchanges, campuses, corporate headquarters and cities across the globe ... we'll make the price of doing business as usual too much to bear."

So the same group that [called for the Occupy Wall Street protests in the first place](#) is now calling for protestors to shut down the entire economic system of a city if their demands are not met, in the tradition of people who brought us the 1968 Democratic convention riots ([CNS News, 2012](#)).

**Title:** Protesters Urged To Occupy Chicago During G8 And Nato Summits

**Date:** January 26, 2012

**Source:** [Guardian](#)

**Abstract:** Adbusters, the group which helped spark the [Occupy movement](#), has put out a call for tens of thousands of protestors to occupy Chicago during the G8 and Nato summits in May.

Seeking out those it describes as "redeemers, rebels and radicals" all over the world, the Canadian activist group is calling on protestors to bring their tents and peaceful barricades to converge on the city and build a camp on public ground. By making the call international, [the group said it is hoping to pull off](#) the "biggest multinational occupation" ever.

It encourages peaceful civil disobedience and invokes the spirit of the "Chigago Seven", a group of high-profile civil rights leaders including Abbie Hoffman, who were charged with inciting riots in 1968, when the city was host to violent clashes between police and anti-Vietnam activists during the Democratic National Convention.

Protesters flocking on the city in May will face heightened security, when heads of state, Nato generals and other military leaders will be there. They will also face unique rules in the city against erecting tents, which forced Occupy Chicago to become unique in the Occupy movement for not ever setting up a permanent occupation.

Since a wave of evictions in cities and campuses across the US last November, the Occupy movement, which protested against income inequality and corporate greed, has become less visible, aside from a few rallies or demonstrations. But campaigners insist the movement continues to grow and will rise anew in the spring in time for the May offensive.

The month-long [protest](#) will focus on demands for "a Robin Hood Tax ... a ban on high frequency 'flash' trading ... a binding climate change accord ... a 'three strikes and you're out' law for corporate criminals ... an all-out initiative for a nuclear-free Middle East" and whatever it decides on general assemblies and global internet brainstorming, according to Adbusters.

Threatening civil disobedience, it added: "And this time around we're not going to put up with the kind of police repression that happened during the Democratic National Convention protests in Chicago, 1968 ... nor will we abide by any phony restrictions the city of Chicago may want to impose on our first amendment rights. We'll go there with our heads held high and assemble for a month-long people's summit ... we'll march and chant and sing and shout and exercise our right to tell our elected representatives what we want ... the constitution will be our guide."

A spokesman for Occupy Chicago welcomed the call, and said it would be publicising it as part of its #ChicagoSpring campaign, which would include protesting at Nato and G8.

Joshua Kaunert of Occupy Chicago said: "Occupy Chicago has a lot of work to do both prior to and after these summits: Mayor 1% has turned peaceful protest and passive resistance in Chicago into a criminal act, violating our First Amendment rights. We are still in the planning stages for all of our spring actions, but we welcome all who want to speak out against the famine and war forced on the world by the G8 and Nato to join us in the streets of Chicago."

Adbusters have said they hoped 50,000 people would converge on Chicago. However, none of the recent actions by Occupy have mustered the kind of numbers that it has managed in the past.

However, Sebastian, a spokesman for Occupy Wall Street – who was unwilling to give his surname – said the adbusters call was "inspiring" and could be the spark that lights up the movement in the Spring.



"The people base is probably growing faster than we had before, as we have spent a long time in network building and outreach work. A single march in Portland was 6,000 people and we had a union march in New York of 30,000 people. The oppression of a movement makes it stronger. They are calling not just on Occupy, but on people internationally. The appeal is huge."

He said that Occupy was already planning actions in May, an important month in the civil rights calendar, such as a general strike on May 1, but the adbusters call to protest for the whole month was an "inspiration."

Sam Jewel of Occupy DC said: "Everyone I've spoken to from Occupy DC is pretty excited about it. It's going to be a pretty dramatic few weeks. It will be interesting to see that will happen and whether they will respect for dissent. The mayor of Chicago hasn't ever allowed tents at Occupy Chicago. There is the whole tradition of '68 with all the police brutality there. But we are in a different era of protests now."

"There is a global consensus that wealth is too accumulated by a small percentage, and that our country is not democratic any more" ([Guardian, 2012](#)).

**Title:** Secret Service Has Shopping List For Terror-Proofing NATO Summit

**Date:** April 16, 2012

**Source:** [Chicago Sun-Times](#)

**Abstract:** The Secret Service has an extensive shopping list to fortify the Chicago NATO summit, from barriers to withstand a vehicle going 50 mph to 8-foot-high fences that can't be climbed.

The specifics are contained in a bid request from the Secret Service, a document called "sensitive but unclassified." The proposals for equipment rental and project management are due April 24 for the May 20-21 summit.

Many world leaders are expected to arrive in Chicago on May 19 or a few days earlier — and so are protesters and an international press corps.

The Secret Service document sheds light on the massive security operation that is supporting the summit, which will draw up to 50 heads of state plus associated foreign and defense ministers, military attaches and other high-level personnel in national delegations.

The summit itself is at McCormick Place. Other events are taking place at Soldier Field, Navy Pier and the Field Museum. The official delegations will be staying mainly at downtown hotels. First lady Michelle Obama is taking spouses of world leaders to the Gary Comer Youth Center on the South Side.

The U.S. government — footing the security bill — is looking for a single vendor to deliver a variety of goods and services at a fixed price, starting on May 14, including:

- ♦ Portable high-security vehicle barriers to withstand the impact of a 15,000-pound vehicle hitting it at up to 50 mph. The barrier needs to be installed within one hour or less.

The Secret Service is looking for between 10,000 and 20,000 linear feet of standard road-side concrete barriers.

- ♦ Crowd control "barricade systems": 8-foot-high steel fences with 1/8-inch steel mesh "to mitigate/disperse thrown liquids." The barricade must be "environmentally sensitive" but strong enough to not be pulled or pushed down, "taken apart, set on fire and easily climbed on."

The "anti-scaling" fencing order is for between 20,000 and 25,000 linear feet.

The selected contractor can borrow up to 3,600 linear feet of anti-scale fencing from the government — but they have to pick it up and return it to a suburban Washington location.

- ◆ Between 10 and 20 portable light towers for Secret Service checkpoints.
- ◆ Sand bags, with no specific number.
- ◆ A variety of tents for various sites, porta-potties and mobile office trailers.
- ◆ Between five and 10 golf carts.

The Secret Service declined comment.

I understand that the equipment request is considered routine for an event of the magnitude of the NATO summit, with significant potential targets.

The Department of Homeland Security designated the NATO summit as a National Special Security Event; that puts the Secret Service in charge of the overall security plan.

The bid request was posted online April 10. The bid was first disclosed by Government Security News and Crain's Chicago Business.

The contractor needs experience in three other high-security events within the past 36 months. All employees must be U.S. citizens and anyone with warrants or felony arrests cannot be part of the work force. All workers will have to undergo a background check by the Secret Service — so the vendor must supply personnel who can “successfully pass the background investigation” ([Chicago Sun-Times, 2012](#)).

**Title:** Blackhawks Circle Low Through Chicago Skies As Secret Service Releases Security Details

**Date:** April 16, 2012

**Source:** [Fox Chicago](#)

**Abstract:** Chicago - Blackhawks and A/MH-6 Little Bird helicopters used by special forces circling low through downtown Chicago skies made for a scary scene along the Chicago River, as they rattled windows flying among the city's skyscrapers.

The training exercise comes as the city found out some of the details of what the Secret Service wants for security at next month's summit at McCormick Place.

**PHOTOS:** [Blackhawk Helicopters Circle Chicago](#)

FOX Chicago News has their terror prevention shopping list, [courtesy of the Chicago Sun-Times](#):

- Portable high security barriers
- Crowd control barriers
- 10-12 portable light towers
- Sandbags, port-a-potties
- Mobile offices
- 5-10 golf carts

[The Chicago Tribune reports](#) that the most traffic for NATO dignitaries will be between McCormick place and downtown hotels in the Loop, River North and the Gold Coast.

Fifty heads of state will attend, with delegates, and will be moving multiple times each day.

FOX Chicago News viewers called in, describing men with automatic weapons, hanging out of helicopters.

The city's Office of Emergency Management and Communications on Monday announced that Chicago is the site of a military training exercise this week involving personnel and at least three helicopters.

But the bland press release from City Hall did nothing to prepare folks for the jarring scene that unfolded Monday evening.

"It was frightening," Jessica Hill said. "I was definitely alarmed."

At least three Blackhawk helicopters flying at time in close order formation - at other times separating fairly widely - zoomed around office and residential towers for several hours.

"I was pretty amazed," Felise Llano said, "because they were definitely military."

Witnesses described three to four very heavily armed men in each chopper. Several said some of the men appeared to be tethered and were at times literally hanging out of the choppers, and looked ready to jump.

Calling it routine training, city officials said in a statement such exercises are conducted by military personnel in various cities around the country. They say the exercises are designed to improve the military's ability to operate in urban environments.

Emergency management officials said the training sites have been selected to minimize the impact on residents' daily routines.

The timing of the drills led some to wonder if they're in preparation for next month's NATO summit.

But officials said that the summit and the drills are unrelated ([Fox Chicago, 2012](#)).

**Title:** Residents Of State Street Condo Told To Leave Chicago During NATO Summit

**Date:** April 20, 2012

**Source:** [Fox Chicago](#)

**Abstract:** Chicago - Residents of a Chicago condo whose building will be in the eye of the NATO storm are being warned that they should move out for the weekend ... or risk being trapped inside by rioters.

FOX Chicago News was first to report Friday that the people living in the 17-floor Library Tower building at 520 South State Street were warned in a letter from condo management that "we are **STRONGLY** recommending that all residents find places to stay during the conference from May 18 through May 21."

[READ THE LETTER>>>](#)

NATO summits often attract crowds of thousands of protesters. Currently, a march is planned on Sunday, May 20, from the Petrillo Band Shell in Grant Park past Library Tower on State Street to McCormick Place.

The condo is hiring two off-duty police officers to provide security; those cops will be armed.

"In the event of a riot or the potential of one near the building, all access doors will be locked including the garage door," the letter continues. "For everyone's safety, we will be instructing anyone in the building to stay in his or her unit."

"I can't just leave my garage whenever I want. They'll be holding us hostage in here," said resident Sebrina Krielinger.

The condo is in a busy area on State between Harrison and Congress, and residents are used to a lot.

"It's just pretty shocking to see and hear things are going to be scary in your own home," said resident Jeff Lunz. "I think they've got everyone's best interest in mind."

The letter also warns:

- "We are strongly recommending that you do not have any guests over during this time including dog walkers and cleaning companies."
- "There will be absolutely no deliveries or moves permitted between Friday, May 18 and Monday, May 21."
- "The revolving door will be locked on Friday morning."

"I'm inconvenienced by parades and a lot of other things. I can't get out on the day of the Thanksgiving Day parade. So that's just a part of city life," said Lunz ([Fox Chicago, 2012](#)).

### 3. BIOTERRORBIBLE.COM: Occupy Wall St. Terror:

**Title:** City Claims Occupy Wall Street Protesters Were Stockpiling Weapons, Fights Court Order To Reopen Park

**Date:** November 15, 2011

**Source:** [Gothamist](#)

**Abstract:** Deputy Mayor Cas Holloway filed a motion on behalf of the city today opposing a court order requiring the NYPD to allow [Occupy Wall Street](#) demonstrators [back into Zuccotti Park](#). In [filing the motion](#), Holloway asserted that "people who have a known history of violent interaction with the police" have been gathering in the park, and "makeshift items" that he said could be used as weapons, "such as cardboard tubes with metal pipes inside, had been observed among the occupiers' possessions." He also noted that after the October 1st Brooklyn Bridge march, "knives, mace and hypodermic needles were observed discarded on the roadway."

"It was our understanding that the protesters may have had a significant number of items that could potentially be used as weapons," Holloway [writes in the motion](#), adding that there had been little to no crime in Zuccotti Park before the occupation began, but since there had been "73 misdemeanor and felony complaints" and about 50 arrests. Although the initial order to vacate (see below) promised demonstrators they would be allowed in—though without tents and sleeping bags—Bloomberg is now refusing to comply with the court order, and the park remains closed. A growing throng of demonstrators [have gathered around it](#).

Justice Michael Stallman is expected to issue his decision around 3 p.m. In the meantime, here is Brookfield's letter to Bloomberg, which was sent to the Mayor yesterday. The letter urges the city to intervene in the interest of "public safety" and cites media reports of "violence, outbursts of bigotry, and escalating sanitary conditions."

#### [Brookfield Letter to the Mayor Re Zuccotti Park](#)

Numerous politicians have issued statements on the matter. Manhattan Borough President (and [presumptive mayoral candidate](#)) Scott Stringer writes:

I am greatly troubled by reports of unnecessary force against protestors and members of the media, including the use of "chokeholds" and pepper spray. I am also troubled by reports of media being forcibly kept away at a distance from these events. American foreign correspondents routinely put themselves in harm's way to do their jobs, in some of the most brutal dictatorships in the world. And

their NYC colleagues deserve the freedom to make the same choice. Zuccotti Park is not Tiananmen Square. I call for a full explanation of police behavior in this evacuation.

Congressman Jerrold Nadler and State Senator Daniel Squadron, who represent Lower Manhattan, also issued a joint statement:

We have also been urging the City to have a zero tolerance policy on noise and sanitation violations, and to make the results of its enforcement public. But we must balance the core First Amendment rights of protesters and the other legitimate issues that have been raised.

The City's actions to shut down OWS last night raise a number of serious civil liberties questions that must be answered. Moving forward, how will the City respect the protesters' rights to speech and assembly? Why was press access limited, and why were some reporters' credentials confiscated? How will reported incidents of excessive force used by the police be addressed?

"On the issue of Brookfield's rules, we are very concerned that they were promulgated after the protesters arrived; the specific legal questions on this topic are being addressed where it is appropriate - in the courts. Whatever the courts rule, the City's actions here must not be a backdoor means of ending the free exercise of protesters' rights.

And Council Member Jumaane D. Williams and the Black, Latino and Asian Caucus [are holding a press conference](#) in Foley Square now. In addition to condemning last night's raid, Williams will call attention to the arrest of Council Member Ydanis Rodriguez (D-Manhattan), "who is still in custody due to overaggressive policing tactics which also led to the banning of the press from the park and the improper seizure of personal property, amongst other violations" ([Gothamist, 2011](#)).

**Title:** British Police Label Occupy London Terrorists

**Date:** December 5, 2011

**Source:** [Business Insider](#)

**Abstract:** Occupy LXE is [somewhat upset](#) with the news that the City of London police consider them a "terrorism/extremism" group.

The document below ([via Twitter user HeardinLondon](#)) was apparently past out to local businesses in the last week, and appears to lump the Occupy London protests in with groups such as Al Qaeda, FARC, and the IRA.

A source at the City of London [police told the Guardian](#) that the "title of the document was not helpful" ([Business Insider, 2011](#)).

**Title:** 'Occupy' Protesters Suspected Of Throwing Smoke Bomb Over White House Fence

**Date:** January 18, 2012

**Source:** [Fox News](#)

**Abstract:** An apparent smoke bomb was thrown over the fence of the White House as hundreds of Occupy protesters massed outside the gates.

The crowds were dispersed Tuesday night and the White House was all clear. U.S. Secret Service spokesman George Ogilvie says there were no arrests in the incident.

The Obamas were at dinner celebrating Michelle Obama's birthday, but they have since returned to the White House without difficulty.

The tense scene outside the White House follows an earlier protest on the West Lawn of the Capitol, in which several hundred protesters affiliated with the Occupy Wall Street movement decried the influence of corporate money in politics and voice myriad other grievances.

Organizers had touted the rally, known as Occupy Congress, as the largest national gathering of Occupy protesters to date and secured a permit that would have allowed up to 10,000 people to participate. By mid-afternoon, the protest appeared to have fallen far short of those goals.

Still, participants said they were optimistic about the strength of the Occupy movement, which began in September when protesters pitched tents in a lower Manhattan park. The movement has since spread to dozens of cities, including Washington. While many cities have moved to evict the protesters, the [National Park Service](#) has allowed encampments to remain in two public squares near the White House.

"I'm encouraged," said Jon Wynn, 63, of North Carolina, who traveled to Washington to attend the protest and visit friends. "There's energy here, even if there's not a whole lot of people."

While the rally was mostly peaceful, there were some scuffles between police and protesters along walkways leading to the Capitol. By mid-afternoon Tuesday, four people had been arrested -- U.S. Capitol Police said -- one for allegedly assaulting a police officer and three accused of crossing a police line ([Fox News, 2012](#)).

**Title:** Occupier Slams Cop In The Face With A Brick

**Date:** February 6, 2012

**Source:** [Town Hall](#)

**Abstract:** Nancy Pelosi and Debbie Wasserman Schultz have refused to condemn the Occupy Wall Street movement and even at times have embraced it. Over the weekend, the Occupy D.C. camp was finally cleared out, but the anarchists protestors didn't leave without slamming a brick in the face of a police officer while [assaulting others](#).

Authorities say 11 people have been arrested in Washington's McPherson Square since Park Police began clearing away tents from one of the nation's last remaining Occupy sites.

David Schlosser, who is a spokesman for the U.S. Park Police, said Sunday that one of those arrested was charged with felony assault on a police officer and assault with a deadly weapon. That person is accused of hitting an officer in the face with a brick Saturday evening. The officer was treated at a hospital.

Three others were charged with assault on a police officer ([Town Hall, 2012](#)).

**Title:** Occupier Arrested For Bringing Gun To NYC Court

**Date:** February 23, 2012

**Source:** [The Blaze](#)

**Abstract:** We just brought you the news of an Occupy supporter who said it might be time for Occupiers to [bring their guns to Wall St.](#), and now the question is: Did one of them get the memo?

The New York Daily News [reports](#) "John Scott DeKuyper arrived for a Wednesday court hearing at the wrong building while carrying a Colt .45 pistol in his leather backpack, police and court officials said."

DeKuyper apparently told police at the courthouse it was an accident and was "the stupidest thing he'd ever done."

He was appearing in court for a charge stemming from an Oct. 15 scuffle with police during an Occupy protest. At the time, he tried to rip the badge off of NYPD Chief of Department Joseph Esposito. He had spend time at Zucotti Park last fall.

The Daily News says DeKuyper, from Delaware, reportedly said he's licensed to carry the gun in another state. However, [DNA Info quotes](#) Assistant District Attorney Ryan Hayward as saying the gun was purchased legally, but that he did not have a permit to carry it.

"He indicated the gun was purchased legally in the state of Delaware but he does not have a carry permit and he packed the gun last night to bring to New York but forgot to take it out of his bag before coming to the courthouse," Hayward said.

"I'm gonna turn it in! I'm gonna turn it in!" Dekuyper apparently yelled, according to a witness who talked to DNA Info ([The Blaze, 2012](#)).

**Title:** Occupy Supporter Threatens To 'Storm' Wall St. And Capitals With Guns In USA Today...Is This Him?

**Date:** February 23, 2012

**Source:** [The Blaze](#)

**Abstract:** A letter to the editor of USA Today is drawing considerable attention after it calls on protesters to consider using their "Second Amendment-sanctioned guns" to "storm Wall Street and our nation's capitals."

The author, Rich Latta from Austin, TX, is upset over a USA Today editorial that characterizes the Occupy movement as "fading into a whimper."

"But with the recent clearing of encampments in Washington, D.C.— one of the last cities in which they still existed — a movement that came in with a bang appears to be going out with a whimper," [that original editorial reads](#). "Future political operatives might view it as a case study in how *not* to organize a lasting movement."

It continues: "They did nothing day after day, week after week, under the mistaken belief that camping in public plazas would prompt some kind of action from others. ... The Occupiers lacked identifiable leaders and clear goals. And they presented bewildering messages to the public, epitomized in the irony of people sitting idle to protest those who had made fortunes."

For Latta, though, that just wouldn't do.

"Anyone who claims the 'Occupy' movement has no clear message is either trying to discredit it or simply isn't paying attention," [he writes in his response](#), the passion nearly visible in his keystrokes. "This protest always has been about economic injustice and the fact that a small handful of people have corrupted our system in their favor" ([The Blaze, 2012](#)).

**Title:** Protestors Throw Urine Bombs At Denver Police

**Date:** February 26, 2012

**Source:** [Fox 31 Denver](#)

**Abstract:** Several protesters were arrested Saturday evening during a disruptive anti-police protest in downtown Denver.

According to Lt. Matt Murray of the Denver Police Department, at 7:30 p.m. close to 60-70 anarchist protesters started marching on the 16<sup>th</sup> Street Mall.

The Mall Ride was forced to shut down as protesters allegedly threw urine-filled balloons, set off fireworks and spray painted several vehicles including an RTD bus.

Murray said a police car and several other vehicles were also tagged.

Five protesters were arrested and face charges including criminal mischief.

The group was allegedly protesting police brutality and not directly associated with the Occupy Denver movement ([Fox 31 Denver, 2012](#)).



**Title:** New York Police Probe 'Kill A Cop' Tweet Linked To 'Occupy Wall Street' Protests

**Date:** March 19, 2012

**Source:** [Fox News](#)

**Abstract:** New York City police were investigating Sunday an "Occupy Wall Street" protester who made threats on [Twitter](#) about killing police as hundreds clashed the previous day with cops at Zuccotti Park.

"We won't make a difference if we don't kill a cop or 2," Twitter user "Smackema1" posted about 11:40 p.m. with a link to Ustream, which was showing footage of the protests at the Lower Manhattan park where "Occupy Wall Street" began last September, the New York Post reported.

The author also posted several other comments Saturday about the protests, the New York Daily News reported, and police are now seeking a subpoena to help them discover who was behind the tweet, NYPD spokesman Paul Browne said.

An anonymous man claiming to be behind the tweets later defended them to the Daily News, saying, "It's not like I meant anything of it. Who takes anything like that seriously? I'm in Florida, what am I going to do?"

He said he had never attended an "Occupy Wall Street" protest, but had followed them online.

Police also said Sunday they were separately investigating threats made to two cops and their families.

There were 73 people arrested Saturday when protesters returned to Zuccotti Park to mark six months since the "Occupy Wall Street" movement's inception.

Fourteen of the arrests were made before officers raided the gathering, police sources told FOX News Channel.

The protesters erected a tent in Zuccotti Park -- reminiscent of the around-the-clock encampment that began at the site on Sept. 17, 2011 and remained for nearly three months, inspiring similar efforts across the US and around the world. Others held pop-up tents over their heads, according to the Post.

The large-scale clashes began when law enforcement presence increased dramatically after 11:00pm local time.

"There was a change in mood," 32-year-old student Shane Patrick told The Wall Street Journal. "They made an announcement that we had to get out. Once they pushed people out, they immediately started snaking the barricades and locking the park down."

Some protesters said police used physical force to drive demonstrators from the park.

"They were beating us and hitting us," 38-year-old Felix Rivera-Pitre said. "They came at us with batons and started pushing everyone out of the park."

One person threw a glass Snapple bottle towards officers, according to the Post.

Several protesters said a young woman had a seizure as she was being escorted to a van by police. An ambulance arrived at the scene about 20 minutes later, one protester said ([Fox News, 2012](#)).

# Bio Terror Bible

## EXPOSING THE COMING BIO-TERROR PANDEMIC

**BIOTERRORBIBLE.COM:** Bio-terror and pandemic related conferences have occurred on a regular basis since 9/11, but have recently started occurring on a monthly basis since March of 2011.

**Title:** Bioterrorism: Homeland Defense: The Next Steps

**Date:** February, 2000

**Source:** [Rand Corporation](#) (PDF)

**Abstract:** For many years, the United States has been concerned about domestic acts of terrorism using conventional weapons and explosives. More recently, these concerns have grown to include other weapons of mass destruction (WMD), particularly use by terrorists of chemical and biological weapons. Recent independent assessments have concluded that as a nation we are ill-prepared to deal with such events. This Symposium, focused on the Los Angeles area, was held to help remedy that situation by seeking to identify the elements of an integrated homeland defense against Bioterrorism, identifying critical gaps in current federal, state, and local government policies, programs, and capabilities, and offering suggestions on how a relatively cost-effective homeland defense program might be achieved.

This Symposium was organized and hosted by RAND with assistance from the staff of the many sponsoring organizations, and particularly by the Los Angeles County Terrorism Early Warning Group (TEWG).

Speakers included experts from all levels of government and the private sector. Nobel Laureate Dr. Joshua Lederberg of Rockefeller University, and Mr. Brian Jenkins, noted RAND expert on terrorism, gave invited luncheon talks. Mr. Jenkins also gave a wrap up talk at the Symposium's end. Ms. Cindy Conlon of RAND and ASIS (American Society for Industrial Security) was the Symposium Moderator. Opening remarks for this Symposium were given by Dr. Jeffrey Isaacson, Vice President, RAND, Mr. Dallas Jones, Director of California State Emergency Services, and Dr. James Wilburn, Dean, School of Public Policy, Pepperdine University.

This document is comprised of highly condensed summaries of each of the talks presented at the Symposium held on February 8, 9, and 10, 2000 at the Four Points Hotel in Santa Monica, California. The entire Proceedings of the Symposium, as well as the names and associations of participants, can be found on the RAND National Security Web Site ([RAND Corporation, 2000](#)).

# Bio Terror Bible

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**Title:** Last Chance For Biological Arms Control?: Peace Activists Urge North-South Cooperation On Verification Protocol

**Date:** July 19, 2001

**Source:** [Sunshine Project](#)

**Abstract:** What may be the final round of negotiations on a protocol to strengthen the Bioweapons Convention will start in Geneva on Monday, July 23rd. With a hard-fought compromise text on the table, all eyes are now on the US, which has repeatedly said it may back out. Without a show of strength from the rest of the world, the US may do for the Bioweapons Convention what it has already done for the ABM Treaty – pull the plug on international arms control efforts.

Global protections against biological weapons and six years of diplomatic work are at stake. Signed in 1972, the BTWC bans biological weapons; but contains no means to verify that governments are in compliance. In 1995 governments began to create a Verification Protocol to make the BTWC enforceable for the first time ever. This important process was scheduled to be complete this year. Failure would signal that major powers are no longer in agreement against biological weapons, lowering the political penalty for engaging in offensive biological weapons research and possibly signaling the beginning of the end of the global ban.

### Non-Profit Peace Groups Appalled

"The Americans regularly deplore the danger of biological weapons and are pouring hundreds of millions into biodefense research," says the Sunshine Project's Edward Hammond, "If the US does another Kyoto and abandons these negotiations, it could be very destabilizing." The rest of the world will be forced to conclude that the US will go it alone on verifying compliance with the Bioweapons Convention. Sunshine Project attorney Susana Pimiento, who will attend the negotiations, says "Espionage and intelligence won't solve the biological weapons problem. That is a dangerous paradigm that could provoke belligerence and international crises. Cooperation on a strong UN verification regime can do far more than cruise missiles ever will. Political will to conclude the Verification Protocol is sorely needed."

Recently, an alliance of more than 100 international organizations including Friends of the Earth, Greenpeace, Third World Network and many others, called "on all governments to undertake every effort to reach consensus on a strong Protocol", a view that was also shared by the European Parliament in a resolution it passed. But with attention focused on Star Wars and the climate negotiations in Bonn, US backsliding on bioweapons control has escaped intense public scrutiny.

### Europe's Special Role

Jan van Aken, a Sunshine Project biologist based in Hamburg, says that Europe has a critical role: "It is now time for Europe to make it unmistakably clear to the Bush Administration that they will not tolerate a third treaty to be trashed by short-sighted American policy." The US argues that the Protocol is too weak and would not catch violators of the Bioweapons Convention. But the US obstructed the negotiations during the past six years and played a major role creating the watered-down compromises it now says are weakness. "Rather than pandering to the US," says van Aken, "Europe must reassume the banner of its earlier positions on key issues, work with the rest of the world to reconcile differences and make the text stronger, bringing a verification system with global

support to the critical November-December Review Conference where the Protocol's future will be decided."

### **More Details**

For a detailed but concise discussion of outstanding issues in the Protocol text, please consult the briefing paper [The Biological Weapons Convention and the Negotiations for a Verification Protocol](#) available on our website ([Sunshine Project, 2001](#)).

**Title:** Bioweapons Negotiations Focus On Forum, Not Substance

**Date:** December 6, 2001

**Source:** [Sunshine Project](#)

### **Abstract: Latin America Shines. Europe is Uninspired. A Quarrelsome U.S. Blocks Progress.**

With talks scheduled to conclude tomorrow, December 7th, the outcome of the Fifth Review Conference of the Biological and Toxin Weapons Convention (BTWC) remains in doubt. Presently the Review Conference appears unlikely to move ahead on substantive issues because countries are instead focusing on if and when to continue negotiations. Missing opportunities for more meaningful progress, the BTWC 5th Review Conference's "major decision" could be little more than an agreement to continue to talk. Key unresolved issues on substance include an unqualified reassertion of the BTWC's prohibition on all forms of biological warfare, the development of biological weapons for the Drug War ("Agent Green"), and the relationship between the BTWC and the Cartagena Biosafety Protocol.

Hopes for substantive progress were reduced early by a destructive US opening salvo on November 19th. A US Under Secretary of State sent from Washington unilaterally declared the Verification Protocol "dead, dead, dead" and announced US opposition to new multilateral efforts to stop development of biological weapons. On the other hand, China and several members of the Non-Aligned Movement (NAM) are advocating for the Verification Protocol and insist that the mandate of the Ad Hoc Group that negotiated the Protocol over the past six years is still alive. This conflict overshadows other discussions and could even prevent consensus on a Final Declaration, causing a complete failure of the Review Conference.

In a move to overcome the deadlock, the European Union (EU) tabled a compromise that would allow for ongoing negotiations while burying the Ad Hoc Group. This proposal includes annual Conferences of the Parties as well as the establishment of expert groups. While some NAM countries have expressed interest in this proposal, the US still has not openly announced its position.

While the EU sought to be a peacemaker in the harsh conflicts between the NAM and the United States, it was in a defensive posture from the outset, hesitant and intimidated by US belligerence. Outshining other regions on proposals to address substance, the new ideas are coming from Latin America, whose diplomats are trying to advance important proposals under difficult circumstances.

### **Scope**

Perhaps the most vexing issues confronting the Review Conference are the problems posed by so-called "non-lethal" biological weapons. These include new biochemical crowd control agents and genetically engineered anti-material microbes that degrade and destroy supplies and infrastructure, such as fuel, asphalt, plastics, and food stocks. These types of weapons are being researched by the US, at the Pentagon's Joint Non-Lethal Weapons Program and the US Naval Research Laboratory, and possibly by other countries.

While such weapons clearly fall within the BTWC's Article I prohibition on all biological weapons, formulating language to address this new technology in the Conference's Final Decision is proving difficult. Taking the lead are Brazil, Chile, Peru, and Mexico, who are encouraging the strongest possible decision with respect to the Convention's scope and have argued for inclusive and unambiguous language for the Final Declaration. Mexico, in particular, is working actively to ensure that the Conference asserts that biological warfare prohibitions apply everywhere in countries' territories, including all areas or under their jurisdiction or control.

### **Agent Green**

A number of countries have expressed concern about the development of biological weapons (called "Agent Green") to forcibly eradicate narcotics-producing crops such as coca, poppy, and cannabis. In an embarrassing gaffe, US Ambassador Don Mahley told diplomats that the US opposes Latin America's proposals on scope and needs items like Agent Green "to fight the Medellín Cartel". The Ambassador was confused because the Medellín Cartel, a drug smuggling group prominent in the 1980s, was dismantled by law enforcement a decade ago and its leader, Pablo Escobar, was killed in a 1993 shootout with Colombian police. Delegates privately pointed out the US double standard: While the US would surely condemn Iraq if it used biological weapons in its internal conflict with Kurds, it refuses to accept proposals that would restrain US promotion of biological or chemical weapons in the Drug War or "internal" conflicts.

The Review Conference may have missed the opportunity for action on Agent Green. Proposals by Mexico to explicitly link development of Agent Green with BTWC concerns are being fought by the US and are unlikely to succeed. A proposal by South Africa to require transparency and declaration of activities at facilities capable of producing arms such as Agent Green may be put off for consideration at a future meeting.

### **Biosafety Protocol**

After a US proposal for countries to adopt national biosafety laws, but not under any binding international framework, a number of countries proposed Final Declaration text to build linkages between the BTWC and the Cartagena Biosafety Protocol, a new legally-binding biosafety agreement opened for signature last year. Mexico and Peru encouraged States to use ideas from the Cartagena agreement to prevent acquisition and transfer of biological weapons, and for countries to study ways that the BTWC and Biosafety Protocol can be implemented together. These proposals also ran afoul of a nay-saying US delegation, which objects to multilateral efforts in general, and the Biosafety Protocol in particular because it incorporates the Precautionary Principle, a concept used in international law and policy to encourage countries to exercise caution (to protect the environment and human health) when adopting new technologies, particularly in the life sciences. But given the degree of influence that US biotechnology industry exercises over its government's policy, the US opposition isn't surprising.

More disturbing is the European Union's failure to rally behind the Latin American proposals and defend the Precautionary Principle, which is said to be a cornerstone of EU biosafety policy. If Europe fails to correct its course in the final phase of Review Conference negotiations, it will be the second time in a month that the EU has buckled under US pressure to abandon the Precautionary Principle, raising questions about the EU's true commitment to supporting international efforts to scrutinize biotechnology risks. In November, US delegates returned from the Doha, Qatar meeting of the World Trade Organization (WTO) gleeful that they had convinced the EU not to include the Precautionary Principle in new agriculture negotiations ([Sunshine Project, 2001](#)).

# Bio Terror Bible

## EXPOSING THE COMING BIO-TERROR PANDEMIC

**BIOTERRORBIBLE.COM:** Bio-terror and pandemic related conferences have occurred on a regular basis since 9/11, but have recently started occurring on a monthly basis since March of 2011.

**Title:** Bioethics And Bioterrorism

**Date:** February 28, 2002

**Source:** [The Journal of Philosophy, Science & Law](#)

**Abstract:** A day-long conference was convened to discuss bioethical concerns arising in the wake of September 11th and the subsequent anthrax mailing incidents. As Jonathan Moreno, Director of the Center for Biomedical Ethics at the University of Virginia, observed in his opening remarks, while substantial funds have been earmarked for combating bioterrorism, none of those funds have been set aside for studying the ethical, social and legal implications of the research and practices to be developed. It was, Moreno remarked, the stated purpose of the conference to “begin the public dialogue.”

The opening remarks of Arthur Caplan, Director for the Center for Bioethics at the University of Pennsylvania, echoed Moreno’s concern that this developing area of bioethics not be overlooked. Caplan identified a number of what he described as “systematic and thematic issues” posed by the recent acts of bioterrorism and by U.S. efforts to combat bioterrorist threats. It was around these themes that the five panels of the conference were organized: “Biological Weapons: Threat and Response”; “Vaccination Policy and Prevention”; “Patents, Profits and Public Health”; “The Duty to Face Danger”; and “Science in the Interest of National Security.”

Among the panels, some further themes emerged: a blurred line between treatment and research in emergency response care; the need for diverse public involvement in ethics dialogue; and the risk that ethics will be compromised in times of war. The following report covers the conference speakers in order of presentation.

### Biological Weapons: Threat & Response

#### The New Jersey Anthrax Crisis

The first speaker, Dr. Eddy Bresnitz, is a State Epidemiologist for the state of New Jersey, and was integrally involved with the state’s response to the anthrax contamination incidents. Bresnitz made the point that New Jersey, as well as the nation as a whole, had been preparing for bioterrorism, albeit with minimal resources. The thinking on bioterrorism, he said, was shaped by the preparations for a pandemic influenza outbreak, which some thought would be more likely to occur than a bioterrorism incident. Further, it shares some of the same public health concerns as bioterrorism responses. Among the common issues, Bresnitz named allocation of treatment, supplies and vaccines; coordination of response; and surveillance of outbreaks.

While prior thought had been given to public health and medical responses, Bresnitz believed that decision-makers primarily acted without any deliberate ethical analyses to guide them. The ethos, Bresnitz suggested, was one of “do the right thing.” The difficulty, he contended, was that the “right thing” changes based on the information available at the time, resulting in a “moving target.”

Bresnitz then explored anecdotally the substantial ethical questions that arose in New Jersey regarding post-exposure prophylaxis policy. Bresnitz attempted, in his anecdotal overview, to give the participants a “taste of what happened in New Jersey.” The three main issues Bresnitz discussed were: treatment allocation; acting in the face of medical uncertainty; and coercion in treatment.



In terms of treatment allocation, a question arose relating to who should receive prophylactic medication. The guiding ethos, according to Bresnitz, became one of risk analysis—those at the most risk should receive the medication. A fairly straightforward approach, as long as resources aren't scarce.

Additionally, questions need to be answered concerning appropriate and effective treatment. As there were no developed civilian treatment protocols, there was uncertainty about appropriate prophylaxis, duration of medication, and best first-line medication in the event of exposure. A related issue was that the vaccine, which had previously only been available to the military, had yet to be approved by the FDA for general use. Ultimately, acting on preliminary data, New Jersey extended the period of prophylactic antibiotics to 100 days. The vaccine and antibiotic combination treatment was brought in and administered by the CDC, which gave rise to Bresnitz's third concern: coercion.

According to Bresnitz, the CDC provided the drug as part of an "investigational new drug trial," requiring all participants to sign informed consent releases. Bresnitz suggested that the forms sought to limit the government's liability, and had a statement to the effect of 'refusing the treatment may result in [the patient's] death'. The situation is inherently coercive, and therefore ethically problematic in Bresnitz's view.

In closing, Bresnitz observed that these issues were a fertile area for policy and ethics debate, and that while he had posed many questions, he offered few answers. In many ways, however, Bresnitz's speech was a microcosm of the core issue that would be discussed throughout the day: bioterrorism presents problems for which we don't yet have systems of response.

For example, Bresnitz pondered at one point, what if the disease had not been anthrax, but highly contagious smallpox? Would we be obligated to treat those exposed, potentially against their will, as a matter of public health? Would we forcibly quarantine, through use of police powers, those refusing medicines? We do have public health systems for dealing with communicable disease, but rarely do we press citizens to use experimental medications, even for the common good.

A number of audience members pointed out that there were analogous systems which addressed some of the issues presented. One example cited was emergency medicine where a treatment protocol may be used which has not been proven when the emergent condition fails to respond, or has no known treatment. Emergent conditions can also be inherently coercive, as the patient's life is often at risk. The point several audience members made, and which was echoed by speakers throughout the day, is that while we may be facing new problems, medicine, public health, and bioethics have an existing platform of relevant work on which to build.

### **"Psychological Responses to Bioterrorism: It's About Time"**

The second speaker, Dr. Greg Saathoff, serves as the Executive Director of the Critical Incident Analysis Group at the University of Virginia. Saathoff sought to distinguish the critical difference between bioterrorism and other forms of terrorist attacks using more conventional "NICE weapons" (Nuclear, Incendiary, Chemical, and Explosive). Unlike NICE weapons, which are self-limiting in impact by the nature of the weapons materials themselves, bioterrorism weapons can be deployed without victims knowing they are under attack. Further, some of these weapons have the capacity to reproduce. Bioterror weapons, therefore, are not limited (or fixed) in time. Bioterror carries on, and can advance substantially before we are even aware of a problem.

Saathoff echoed the concerns of Bresnitz, stating that we do not yet have an establishment for dealing with bioterroristic infectious disease. Not only do we lack models and studies, but we already know we have "limited surge capabilities," generally defined as the ability to provide emergency care for situations resulting in mass injuries or mass casualties. Further, vaccine availability and response protocols may be insufficient.

The psychological response to such insidious attacks, and to the fear created by them, depends on a number of factors articulated by Saathoff: leadership response; medical resources; media; law enforcement; communications; individual responses; community responses; and governmental emergency responses.



Saathoff indicated that there are seven elements to the leader's response that would help determine the psychological response of the public. First, the leader must have clear and effective communication skills. Second, the existing level of trust in the leader at the time of the response is vitally important. (Similarly, Saathoff stated that the leader's charisma was critical, which he defined as the leader's ability to be trusted and be followed.) Third, the leader's relationship with, and understanding of, the media is important. The leader must understand that the media's critical role is not adversarial, but one which more rapidly fosters solutions. The fourth element is the leader's previous training and experience dealing with bioterrorism. Fifth, the leader must have a thorough understanding of the interaction and availability of local, state and federal response systems. Sixth, the leader must be able to transcend partisanship and lead the entire group or entire society. And finally, the leader must be able to express what Saathoff calls "vigilant hope," an ability to deal with the uncertainty presented by the situation and move forward.

Some of the other factors Saathoff mentioned rather briefly. The "medical resources" factor, he said, will turn on the following: experience of clinicians, especially in managing disasters and working with incomplete information; relationship of medical institutions with the government, the media and public alliances; having and using a communication network to disseminate information about the bioterrorism event; and adequate mental health resources, not just for victims, but also care providers. For the "media" factor, the critical elements are: their own leadership; the level to which the community trusts them; their bioterrorism knowledge and training; their prior experience with disasters; their relationship with medical service providers; their local and national perspective, and ability to see the relationship between the two arenas; and their ability to recognize their role as one which fills an important information void for the public. For "law enforcement", the key elements are: prior experience with disasters; bioterrorism training; relationship with the media; and sensitivity to their own medical and other needs. For "communications," Saathoff identified the critical elements as: the level of overlap or redundancies; prior disaster experience; and surge capability.

In closing, Saathoff remarked that although predicting the psychological response of the public to bioterrorism attacks should be sought after, the ability to do so will depend largely on the aforementioned factors.

### **A Brief Response**

Colonel Dr. Art Anderson, Chief of Clinical Pathology at the U.S. Army Medical Research Institute of Infectious Diseases, addressed some of issues raised by Bresnitz and Saathoff. Col. Anderson suggested that his comments represented his own views, and not those of the Department of Defense or USAMRIID.

Anderson pointed out that the military makes top-down, scenario-driven response plans, so that when catastrophic events occur, be they bioterrorism or battle, there is an institutional protocol in place to handle the response. He added that a mechanism is needed for promoting and disseminating the military response protocols for bioterrorism incidents for the benefit of the public, something which was not done well with the anthrax exposures. One problem, Anderson noted, was that there is a stigma attached to military research because its dissemination and discussion among scientists and physicians might be restricted.

### **Conference Discussion & Questions**

Following the presenters' speeches, much of the discussion focused on how consent forms could be developed for an investigational trial performed in response to a terrorist incident. The general consensus among audience members and speakers was that state and local communities must be involved in all levels of planning the network of response, including such items as consent forms. Several audience members, as well as Col. Anderson, urged an open, inclusive process similar to the one currently used by local Institutional Research Boards, a process which Anderson said needed to avoid becoming "politicized."

Additionally, many were concerned by the nature of the CDC prophylaxis response to the anthrax incidents by making medication and vaccination available as an "investigational new drug trial." As Bresnitz observed, many individuals in New Jersey felt they were being experimented upon, rather than prophylactically treated. Bresnitz asserted that it might be problematic ethically, because you are acting with intent to benefit, but portraying the treatment as research, because the treatment is not yet

proven or licensed. Anderson suggested that perhaps a contingency licensing scheme be developed for use in the event of emergencies.

## **Vaccination Policy & Prevention**

### **“Approaching Vaccines for Agents of Bioterrorism”**

The second panel started with the comments of Dr. David Weiner, a molecular immunologist and professor in the Department of Pathology at the University of Pennsylvania, who touched briefly on the types of bioterrorist threats we might face in the future and how we might develop appropriate vaccines to reduce our risk.

Weiner noted that there were numerous agents which could be used in a bioterrorism attack, but that recent attention had been focused on “chimeric viruses” as a possible new threat. A chimeric virus is typically created out of two or more separate viruses, for example, a combination of smallpox and the Ebola/Marburg virus. The terrorist goal could be to create a virus which would spread rapidly and that would be highly lethal.

Weiner expressed the opinion that the threat posed by chimeric viruses might not be as grave as many seemed to think. First, he pointed out that, paradoxically, chimeras may be less lethal than their counterparts are separately (or perhaps only as lethal). What makes smallpox so lethal, for example, is its lengthy incubation period (leaving hosts infectious, but not yet symptomatic), which is eliminated by a cross with fast-acting Ebola. Thus, if hosts die quickly, then the chimeric disease may not spread as well as the original smallpox. In addition, Weiner said that it was not clear that there would be a need for new vaccines, as the current multi-strain vaccines may be more effective than many assumed initially.

What is clearly needed is a vaccine strategy for containment, Weiner claims. He added that prophylaxis is typically given to confirmed cases, caregivers, hospital staff, mortuary staff, and others who have had contact with infected persons. Those at risk from vaccination itself include persons with suppressed immune systems (organ transplant recipients, cancer patients, etc.), people with autoimmune disorders, the elderly, and infants. Weiner pointed out that many of these risk groups were larger than when we last battled smallpox in the 1960's, so that the exact impact of a current vaccination campaign is harder to predict.

Weiner concluded by setting out some possible future directions. First, he mentioned the possibility of future gene-based vaccines as possibly both safer than current live vaccines, and with a stronger response than current non-live vaccines. In addition, gene-based vaccines could be very complex, so it would be difficult for bioterrorists to “engineer around” the vaccine.

### **Bioterrorism & Public Health**

Dr. Phillip Nieberg, Associate Director for Public Health in the Global AIDS Program at the Centers for Disease Control, followed Dr. Weiner with a macro-scale perspective of issues that might arise in respond to a bioterrorist attack. It was noted that Dr. Nieberg's remarks are his own views, and do not reflect the opinions of his employer.

Nieberg framed the issues presented by bioterrorism as public health issues, and applied a different set of ethical standards than many bioethicists, who have tended to treat bioterrorism as more of a medical issue. The ethics of public health and the ethics of biomedicine can vary, with biomedicine typically acting to protect the interests of the individual and public health acting on behalf of the state to protect the health and well-being of citizens generally. The “public” in “public health,” Nieberg asserted, refers to the public decision-making process, not the intended target of the policies.

As an illustrative example, Nieberg pointed to the public health laws that mandate vaccinations for school children. From a public health view, the citizens are somewhat inconvenienced, but the health of the community is improved—even for those students who are exempted for religious reasons. It is, he said, a classic case of the tension between a public interest and an individual one.

Nieberg gave three examples where public health concerns would likely arise, and where public health ethics might be most appropriate: rationing of medical resources; mobility restrictions; and dealing with human remains. With rationing of resources like vaccines, there are many possible

metrics that could be used, he said. Some common ones are “first come, first served,” “ability to pay,” or a lottery. When you take into account public health concerns, other metrics may come into play, based on societal or role values: “first responders,” “medical care providers,” “those at highest risk,” or exposed familial caregivers. A situation may arise where the government may have to take “control of health care supplies” to ensure a uniform society-wide policy, Nieberg proposed. The implied question, it seems, is when should we, as a society, have a discussion about that possibility.

The next example was that of the state using its police powers to restrict mobility to prevent or reduce exposure. The modern analogues for bioterror attack response may well be the systems for infectious disease control already in place, or those used in the not-too-distant past: isolation/quarantine; voluntary curfew; prohibition of mass gatherings; and compulsory treatment or vaccines. Again, a sharp example of balancing individual freedom with community protection—a classic public health concern.

The final example, which Nieberg briefly touched on, was that of safe disposal of human remains. Previous epidemics lead to requirements for rapid burial or embalming, even though often risk was actually fairly low. Public health here seeks to balance religious, cultural and personal beliefs with protection of the larger community.

In conclusion, Nieberg stated that all the concerns he raised require public discussion, with a transparent process for decision making and policy setting. Good communication with the public, as well as refined risk assessments when information is unavailable, will facilitate the process.

#### **“Of Utmost National Urgency: Lynchburg Colony Hepatitis Study, 1942”**

Dr. Paul Lombardo, director of the Law and Medicine Program at the Center for Biomedical Ethics at the University of Virginia, asked the question “do ethical touchstones change (or go out the window) during war?” An attorney and historian, Lombardo used the 1942 Lynchburg Colony Hepatitis Study as an example and cautionary note in exploring his question.

Lombardo presented the following case: in the early 1940’s, the Yellow Fever Vaccine had been given to US soldiers, which resulted in an outbreak of jaundice, with one death for every 461 cases. In 1942, a study began at the Lynchburg Training School and Hospital in Lynchburg, Virginia to examine the link between the vaccine and jaundice. Researchers at the Training School injected approximately 190 children with a host of potential pathogens, including the vaccine and infected blood from jaundice patients. The research was conducted upon the institutionalized children without informed consent, and the goal was to observe the children to see if they became ill. While some of the children had permanent liver damage, none died. Ultimately, the researchers concluded, correctly, that the serum being used to produce the vaccine was contaminated with hepatitis and causing jaundice. The serum was modified, the study was published, and there was no public outcry over the treatment of these children as unwilling experimental subjects.

As Lombardo pointed out, such work was considered ethical at the time, some even invoking language to describe the children as “draftees in the war against disease.” Certainly, Lombardo said, there are uncomfortable parallels to the Nazi practices roundly and rightly condemned by the world, but the Lynchburg experiment was not as malignant in its intent and purpose as the acts of the Nazis. It does, however, help to illustrate the question Lombardo asked the audience to consider: do ethical rules change to accommodate the exigencies of war?

It seems, Lombardo concluded, that we always answer the question in retrospect, rather than by proactive discussion. Public health and war are a volatile mix, he said, adding that “combining official secrecy and the fear of disease can yield ethically problematic situations.”

### **Patents, Profits & Public Health**

#### **Lessons from the Cipro Case**

Arti Rai, a professor of law at the University of Pennsylvania Law School, sought to raise some “provocative points” about the potential effects of “breaking” pharmaceutical patents under the “Takings Clause” of the U.S. Constitution.<sup>[4]</sup> Under certain circumstances, the Takings Clause allows the federal government to take the property of persons (including corporations, who are an “artificial person” in the eyes of the law) by utilizing their power of eminent domain. The government is required

to pay some amount of “just compensation,” an amount often determined by litigation.

During the initial anthrax incidents, the Department of Health and Human Services suggested that the government might use eminent domain and the Takings Clause to “break” the patent on Cipro, a broad-spectrum antibiotic produced by the Bayer pharmaceutical company. Breaking the patent, according to Rai, would allow the government to arrange to have the drug manufactured without compensating Bayer beyond the amount determined as “just compensation.” With this threat in the background, the government then negotiated a lower-than-market price for the purpose of creating a Cipro stockpile.

While the recent WTO Agreement on Trade Related Aspects of Intellectual Property (TRIPS) may preclude such takings, the federal government can and has taken patents previously, said Rai. Typically, she added, the “just compensation” was about ten percent of the monopoly sales price.

Rai is concerned that the threat of breaking a patent with the Takings Clause may have a chilling effect on pharmaceutical research and development. One alternative that has been proposed is the “voluntary buy-out,” whereby the government buys the right to manufacture the drug from the patent holder. The obvious concern is that there will be extortive pricing in the case of an emergency or disaster situation, like a bioterrorist attack.

Rai proposed a model where public funds are used for research and development, much like the government currently does with National Defense. This model seems to make particular sense in light of bioterrorism concerns, as bioterrorism touches on issues of defense and public health, Rai added.

This model, Rai suggests, would stimulate research on vaccines and antibiotics, which are not often big moneymakers for pharmaceutical companies. It would be important, she added, to evaluate closely which cases would get public funding, so as not to waste research funds.

### **Scarce Resources, Triage and Bioterrorism**

Dr. James Childress, Professor of Religious Studies and Faculty Member of the Center for Biomedical Ethics at the University of Virginia, raised the question of what to do in situations of scarce medical resources, and proposed that we consider a triage model in advance. Childress referred directly to an article by Pesik, et al. as a starting point for considering a triage model, though he made some general comments as well.

Generally, Childress said, triage models are expressly utilitarian, and thus come under attack by biomedical ethicists that tend to support more individualistic and egalitarian viewpoints. Yet, Childress argued, we do have a prima facie duty to maximize good within the constraints of our ethical principles. He would put forth, then, a triage model for doing so.

Childress pointed out that a frequent metric for determining who receives treatment first is those who can satisfy medical utility concerns. Obviously excluded, he continued, are constructs and categories such as ethnicity, age, gender, disabilities, antisocial behaviors, and socioeconomic status. Coupled with these distinctions are factors such as the likelihood of responding to treatment, especially to minimal treatment, if medical resources are limited.

Such a model can be constructed, Childress argues, in an ethical framework, but it must be acceptable and justifiable to the public. We must have a collective consensus, he argued, on how to treat and how to react to bioterrorism.

Childress argued that the dialogue on triage response systems must begin, and it must consider the following issues in addition to those mentioned above: justice; public cooperation, even in face of increasing illness; possibility of a weighted lottery favoring those with essential medical and social functions; and what we do when infected victims become transmission vectors, or unwitting “secondary agents of terror.”

### **Pharmaceutical Companies & Pricing**

Dr. Patricia Danzon, an economist and professor at the Wharton School of Business, made some brief comments on issues regarding pharmaceutical companies, drug pricing, and patents.

Economists, she said, use the criterion of “economic efficiency” to evaluate policy. Economists will

favor the policy that delivers the greatest value from limited resources from the perspective of both current and future users.

Danzon argued that the pharmaceutical industry is unique, as pharmaceutical companies must spend a substantially higher amount of earnings on research and development than any other industry. In addition, the pharmaceutical companies have a high cost to market, many research failures, a lengthy approval process for products, and like other companies, responsibilities to shareholders for return on investment. Patents, she argued, protect the pharmaceutical companies' investments, and should only be broken in rare circumstances.

One such circumstance, Danzon suggested, would be where there is a production restraint preventing access to a medication, rather than a price restraint. Her particular concern for a chilling effect is in the development end. Who, she asked, would risk money developing a vaccine, if the patent might get broken? Who should take the risk? While Danzon had no suggested model, she clearly felt that patent breaking was too heavy-handed a tactic, and that other solutions should be considered.

### **Research & Health System Efforts**

Dr. William Haseltine, CEO of Human Genome Sciences, was brief but posed several questions to consider. First, he observed that the US is attempting to deal with bioterrorism threats by increasing funding to the National Institutes of Health (NIH). This, he said, means that we have turned the health system to war efforts. We should ask, Haseltine asserted, "Is this good for us?" This is a dialogue we need to have, even if we have it post facto, Haseltine argued.

He encouraged people to think through the issues involved, and not to act without careful consideration. As examples of the kinds of issues to consider, Haseltine posed the following questions:

1. Should we use this effort to reinvigorate our research programs in defense?
2. Should we use this effort to reinvigorate our research programs in public health?
3. Should there be vaccine research for anti-biowarfare?
4. What will be the reactions of universities? How will their policies affect this research?
5. Should graduate students be working on biowarfare issues?

Although Haseltine did not offer solutions to these questions, he suggested that the governmental responses to these issues were overly complex and viewed governmental complexity as a barrier to solutions.

### **The Duty to Face Danger**

An introduction given by Dr. Ann Hamric, professor of Nursing and Faculty Member of the Center for Biomedical Ethics at the University of Virginia, preceded the full presentations by the panel members. Hamric noted that the panel chose to focus on the duties of doctors and nurses, rather than all possible responders, and to conceive of the "duty to face danger" as a continuum construct.

### **HIV as a Model for Epidemic Coping**

Dr. Leslie Blackhall, Director of Research at the Center for Biomedical Ethics at the University of Virginia, argued that the medical community's response to HIV disease might offer a good model for coping with epidemic illnesses, such as those which might result from a bioterrorism incident. Early reaction from medical personnel, Blackhall said, was typically overreaction: fear of contagion, reluctance to provide care, extreme precautions to avoid contact, and other unnecessary behaviors. Blackhall argued that the risk of contagion and the reasonable desire to avoid contagion are not uncommon aspects of the medical profession. There were predictions that the medical system would never be able to respond to HIV-positive patients, she said. Yet, the medical system held and began to treat HIV patients appropriately.

What led to the medical system's success in responding, Blackhall argued, was not volunteerism by physicians and medical professionals who felt it was their duty to provide care. The actions of selfless

volunteers were only a part of the solution, she claimed. Blackhall identified four factors integral to the medical system finally responding in an appropriate fashion. These factors are: 1) the illness was seen as a crisis by affected communities, who organized and mobilized resources to cope, including demanding care; 2) involved institutions, including medical schools and professional organizations, created disincentives for those who refused to provide treatment; 3) incentives became available for those who did provide treatment, including funding for research and palliative treatment; and finally, 4) early predictions about high levels of contagion were groundless.

From the HIV experience, Blackhall concluded that in order to provide adequate care, there must be: volunteer care providers, responding to a call to duty; disincentive and incentive systems, with the support of the medical establishment; an effort to reasonably protect health care providers; and a perception of opportunity for those who provide care, be it prestige, wealth, or some other reward.

### **Reconsidering the Common Law Rule of “No Duty”**

Dr. Eric Feldman, professor of law at University of Pennsylvania School of Law, argued that bioterrorism concerns might lead us to reconsider the Common Law rule regarding the duty to help. According to Common Law, there is no duty to render aid or assistance to a person in need, even if one could do so with no risk to oneself.

Feldman argued that there are a number of mechanisms that could be used to encourage health care providers to face danger by reframing the duty to care, both legally and ethically. For example, Feldman pointed out that health providers could be required to provide care in the event of an emergency through licensure requirements. In addition, while individual doctors don't have a duty to provide care, hospitals and other institutions sometimes do, particularly for emergent situations. Feldman says the current legal regime, including the requirements of the Americans with Disabilities Act, seek to protect doctors, while still encouraging them to act. The system provides “weak incentives to be a hero,” he says.

So far, only the Model State Emergency Health Powers Act (MSEHPA) had systematically addressed the duty to care issues. While the MSEHPA is not law, it does serve to offer guidance to state legislators, and may influence the types of laws and schemes enacted. MSEHPA would allow states to require health care providers to provide care in the event of emergencies, Feldman noted. The duty does vary by risk, he continued, since no one would want a scheme which would overburden health care providers.

In closing, Feldman offered five reasons why the current situation offers an opportunity to reconsider the Common Law rule. First, it is the right political climate, in light of the development of the Model Act, as well as the recent bioterrorist concerns. Second, if provision of care is only linked to bioterrorism incidents, you could end up with people who put themselves in the zone of risk to get access to other needed care. Third, reliance on the ethos of “volunteerism” will be insufficient to provide adequate care. Fourth, the hierarchy of medicine means that doctors can refuse to treat, but medical aides and nursing staff cannot, without the risk of being fired. This hierarchy results in the least empowered providers being required to face dangers that others do not have to face. And finally, the duty should be imposed to reflect the societal status and professionalism of health care providers. Feldman added that even though we would require the duty, health care providers should be given credit for acting well in the face of danger.

### **The Ethical Duty to Face Danger**

Dr. Hamric presented the view that facing danger was ethically obligatory for the health care professional. This obligation, she argued, is rooted in the professional roles of physicians and nurses and in the prominent status accorded these professions. In addition, this obligation stems from the responsibility of having increased skills and knowledge to help others, which intertwines with the duty

of beneficence.

In nursing, Hamric noted, there is a strong presumption of a duty to treat, and of an altruistic duty to provide care. This presumption (really, a set of presumptions) is part of the culture of nursing, and those who refuse are informally sanctioned within the community of nurses.

Additionally, Hamric said, the presumption is reflected in both the 2001 American Nursing Association Code of Ethics and in the 1994 American Nursing Association Risk versus Responsibility Statement. Both documents encourage nurses to provide care in the face of danger, though they recognize that nurses also must be concerned with their own safety, Hamric noted. One of the difficulties nurses will face in evaluating appropriate levels of risk to self, Hamric concluded, is that bioterrorism may present situations where the risk is not known.

### **Medicine & Limits**

Dr. Walt Davis, the Director of Education for the Center for Biomedical Ethics at the University of Virginia, examined the “duty to face danger” as it applies to doctors. He noted that the earliest American Medical Association (AMA) codes of ethics referred to a doctor’s “responsibility to provide treatment”, but that this language was dropped from the code in the 1950s.

Following the events of September 11th, the AMA’s Council on Ethical and Judicial Affairs issued a “Declaration of Responsibility” addressing the responsibility of doctors to respond to bioterrorism.[\[10\]](#) The Declaration uses an aspirational, not mandatory, form of a voluntary pledge. The Declaration used language which implies a strong duty, such as “bound,” “fulfilled this obligation,” and to “(a) pply our knowledge and skills when needed, though doing so may put us at risk.”

“Risk,” Davis noted, is undefined. It seems clear, he added, that the “duty to face danger” is context dependent, and balances the risk of harm to the provider and the potential benefits to the patient. To adequately render service and “face danger”, there is an expectation on the part of health care providers that they will have adequate information, a coherent plan, protective mechanisms in place, and that the obligations of others (such as government agencies and officials) will be met, Davis said. Davis concluded by echoing the remarks of Dr. Hamric, saying that the difficulty we currently face is that we are in a time of unprecedented uncertainty regarding possible threats and harms.

### **Conference Discussion and Questions**

In discussion with conference participants, there were two primary issues of concern. A number of participants were concerned about laws or regulations “forcing” health care providers to provide care. Most participants framed the issue as one of “who wants to be treated by someone who doesn’t want to treat them, and what kind of care can you expect?”

The other main issue related to which health care providers can refuse to provide care and which cannot, and what the ethical implications of that difference might be for providers, a point raised by Dr. Feldman in his talk. For example, where a doctor might be free to refuse care, a physician’s aide or orderly might not, particularly where instructed to provide said care by a doctor or nurse. The doctor might refuse without the risk of losing her job, but the situation may differ for an orderly. In addition, Dr. Hamric made the point that the doctor usually is in a position to dictate the conditions under which the care will be provided, whereas the nurse or orderly is not typically in that position. Many participants asserted that this differential authority in decision-making must be addressed for a fair and ethical response system to be developed.

### **Science in the Interest of National Security**

#### **“Ethics of Enrolling Vulnerable Subjects into Research”**



Dr. Jason Karlawish put forth what many might cast as a contrarian viewpoint regarding research with vulnerable subjects. Karlawish, a Professor of Medicine in the Division of Geriatrics at the University of Pennsylvania, made a case for including physically frail and cognitively impaired subjects in research designed to protect us (and them) from bioterrorist incidents.

Karlawish argued that it is time for researchers to recognize that while some people are more vulnerable than others, scientists can do a vulnerable population a grave disservice by developing medicines and treatment protocols whose efficacy in treating vulnerable patients is not known. By utilizing only the healthiest subjects, no information is gathered regarding the efficacy of the experimental protocol on less healthy people.

Using a hypothetical example of a frail, cognitively impaired 75 year old woman, Karlawish asked, "Will the fruits of bioterror research be available to her?" Karlawish argued that researchers typically put the vulnerable last in line for experimental trials, but that they should be moved more towards the front.

In identifying some barriers to vulnerable people's opportunity to participate in research, Karlawish pointed out the following: the institutions which care for vulnerable persons are usually have a preponderance of low-paid staff, and are frequently understaffed besides; health issues in the frail, elderly, and other wise vulnerable person introduces experimental confounds and increases the risk to the subject; and issues of cognitive impairment obviously complicate the issue of consent (or proxy consent for which there is little to no guidance). In addition, Karlawish said, we must be able to ensure access to the "fruits of research" and find a way to monitor the trial efficacy and safety for the vulnerable population.

### **Government Reorganizes to Respond**

Gary Ellis is the Executive Secretary of the National Science and Technology Council, a Cabinet-level group by which the President coordinates the diverse parts of the Federal research and development enterprise as regards science and technology. It is, Ellis said, a "virtual agency" comprised of the President, Vice President, Cabinet members, and Agency heads. Since September 11th, the NSTC has been focusing on the vulnerabilities "laid bare" by the terrorist attacks.

Ellis said that Dr. John Marburger III from the Office of Science and Technology Policy had taken the lead in creating an interagency taskforce designed to address concerns about terrorism. The working groups were created focusing on chemical and biological weapon detection and response, radiological weapon detection and response, protection of vulnerable systems, and social, educational, and behavioral sciences. In addition, there is a rapid response group for emergencies.

The NTSC, Ellis said, has been planning for a systemic approach, and has received a tremendous amount of advice regarding terrorism, especially from citizens not working directly for the government. The Department of Defense, Ellis noted, has formalized the process for garnering advice, and has received over 1200 responses to a Broad Agency Announcement soliciting ideas.

The NTSC's office role is to form partnership, and is currently focusing on short-term issues, he said. The fight against terrorism "needs new tools," and the NSTC is trying to coordinate that effort, according to Ellis.

### **Ethics of Research in Classified Contexts**

Dr. Jonathan Moreno examined the issue of how to ethically conduct human subjects research in classified contexts for the military. He briefly reviewed some of the previous classified research where soldiers and citizens were used in experiments, sometimes with the knowledge and consent of those affected, and sometimes without valid consent.

One of the problems, Moreno asserted, is that the Food and Drug Administration is not set up to handle approving drugs for biowarfare defense. Some options have been explored, including an informed waiver process, an expedited process for “countering bioterrorism initiatives,” and a supplementary approval process based on historical experience, clinical experience, and other available information. No clear system has yet been established, according to Moreno.

The return in the U.S. to what Moreno characterized as a “Cold War stance” raises concern that an increase in classified research is likely to occur. Two items which Moreno pointed out as particularly important in this context were: 1) the granting of authority to the Department of Health and Human Services to classify information as “secret”; and 2) the government’s failure to put into place human subject research guidelines for classified research. Moreno pointed out that the federal Advisory Committee on Human Radiation Experiments, of which he was a member, had suggested some guidelines for classified research, but none had yet been adopted. Moreno expressed concern that failure to develop an ethical framework for bioterror and bioweapon research would contribute to a “legacy of mistrust” which already overshadows much of the federal government’s medical experimentation history.

### **Preparation for Bioexposure Research**

For the final presentation, Dr. Caplan sought to comment and build on much of what other speakers had said before him at the conference. Caplan, who drew on his experiences with the federal Advisory Committee on Gulf War Veteran’s Illnesses, stated that the current system is not set up to undertake bioexposure research and that the system, as it is now, will not adequately protect subjects.

In the Gulf War, Caplan noted, studying the soldiers who became ill was difficult as there was no baseline health data, no rigorous assessment those soldiers who mustered out, poor or nonexistent records detailing who was exposed to which agent and in what area of the battlefield, and no sampling or analysis of the environment in which the soldiers were fighting. These hurdles to good epidemiological analyses and response planning are substantial. Data must be gathered to answer these types of questions if we are to be able to respond to bioexposure attacks, or even to environments made toxic by conventional attacks, such as the ones on the World Trade Center.

Caplan argued that we must change the way we view warfare, and we must look at the battlefield from an epidemiological view. We must be prepared to learn from disaster, he said, and have a system in place to consider the effects for five, ten, or twenty years down the road. Caplan concluded that we cannot design an experiment that will teach us how to respond to bioterrorism, but we can prepare to learn as much from natural and man-made disasters as possible, and to use that experience to prepare for the future.

### **Commentary**

In this author’s opinion, what was particularly informative about this conference is how well it drove home the point that we are just at the beginning of a dialogue regarding the appropriate societal and medical response to bioterrorism, and the scope of the discussion to be had. This conference, and hopefully this report on it, makes clear the current need to continue the necessary dialogue in earnest. If this dialogue had been scheduled earlier, the bioethics field might have been in a better position to advise on secure research methods, attack response protocols, and other important issues. It is, of course, easier to look back and criticize in hindsight ([The Journal of Philosophy, Science & Law, 2002](#))

# Bio Terror Bible

## EXPOSING THE COMING BIO-TERROR PANDEMIC

**BIOTERRORBIBLE.COM:** Bio-terror and pandemic related conferences have occurred on a regular basis since 9/11, but have recently started occurring on a monthly basis since March of 2011.

**Title:** No World Health Assembly Approval For Expanding Smallpox Virus Research

**Date:** May 25, 2005

**Source:** [Sunshine Project](#)

**Abstract:** At the 58th World Health Assembly (WHA), which ended today, the leadership of the World Health Organization (WHO) was requested by member states to reconsider proposals to expand risky smallpox research and to reassess the process by which such research recommendations are produced.

WHA discussed, but did not approve, experiments to genetically engineer smallpox and other proposals that would dramatically expand risky experiments with live smallpox virus. Rather, it “noted” a report containing the proposals, after the WHO Secretariat “especially welcomed” and took “special note” of the serious cautions and criticisms made by member governments. WHO must now move to resolve the issues that governments have raised and which it has committed to address.

Most of the countries speaking about smallpox research expressed serious concerns. These included calls for ongoing research to be terminated, for greater transparency, for a new destruction date for remaining virus stocks, and for strengthened WHO oversight mechanisms that are more independent and scientifically and regionally balanced.

According to the Sunshine Project and Third World Network, WHO's leadership has been given a mandate to radically restructure its oversight of smallpox in the interim before destruction of the remaining stocks. This includes the terms of reference, membership, and procedures of its Advisory Committee on Variola Virus Research (or "VAC", for Variola Advisory Committee). Once restructured, the VAC then needs to reconsider past recommendations and seek approval from the WHA before any research that goes beyond the existing limits (established in 1994) is allowed.

Governments requested that WHO smallpox oversight be transformed into a stronger and more independent process that separates research proponents from those who perform reviews, that is regionally-balanced, and which incorporates heretofore neglected perspectives of public health, biosafety, and preparedness for deliberate outbreaks of disease. NGOs say that major world regions are underrepresented or entirely unrepresented on WHO's current committee. WHO should heed the calls from governments and NGOs for this problem to be addressed.

Third World Network and the Sunshine Project are requesting that WHO take the following steps in response to the concerns and objections raised about smallpox virus research at the WHA:

**1.** Launch a transparent and balanced process to overhaul the VAC, including its terms of reference, membership, and procedures, aimed to:

- a.** Prevent research proponents from reviewing their own proposals,
- b.** Incorporate neglected areas of expertise, such as public health and biosafety,
- c.** Achieve regional balance among members and advisors,
- d.** Institute a separate, and transparent, laboratory safety review procedure
- e.** Reform committee modalities to create greater transparency, including that of subcommittees, and to create more frequent, high quality reporting to WHA.

**2.** Once the VAC has been so restructured, it should reassess its prior recommendations, forwarding revised ones to the WHA for its consideration and (dis)approval.

**3.** In keeping with prior WHA resolutions and as requested by member states, WHO should prepare a resolution to fix a new destruction date for all remaining stocks of smallpox virus.

**4.** Prepare a WHO Secretariat study for the next WHA on options for how possession of live smallpox virus may be deemed a crime against humanity following destruction of remaining stocks ([Sunshine Project, 2005](#)).

# Bio Terror Bible

## EXPOSING THE COMING BIO-TERROR PANDEMIC

**BIOTERRORBIBLE.COM:** Bio-terror and pandemic related conferences have occurred on a regular basis since 9/11, but have recently started occurring on a monthly basis since March of 2011.

**Title:** The Threat Of Bioterrorism: Private Sector Coordination With Governments

**Date:** October 16, 2007

**Source:** [EWI](#) (East West Institute)

**Abstract:** Public-private cooperation in combating the proliferation of weapons of mass destruction (WMD) and the threat of bioterrorism will be addressed by a panel of experts convened by the EastWest Institute (EWI) and Columbia University on Thursday, October 18, 2007, from 4 pm to 6 pm at the Columbia University School of International and Public Affairs, Room 1512, 420 West 118th Street, New York City.

There are deep flaws in the structure of global regimes designed to control access to WMD technology and sharp disagreement among major powers over the use of sanctions and military force to address potential threats. Often overlooked is the role of the private sector in issues surrounding WMD proliferation and responding to the threat of bioterrorism.

Distinguished leaders from business and the United States government will join Columbia and EWI experts to explore how the private sector can collaborate with governments to devise an effective response to these threats.

### The presenters are:

Dr. Mark Chandler  
Chairman and CEO, Biophysical Corporation  
Member of the Board of Directors, the EastWest Institute

Brandon D. Declet  
Counsel to the US House of Representatives, Committee on Homeland Security

Stuart Gottlieb  
Lecturer in the Discipline of International and Public Affairs, Columbia University

Dr. Greg Austin  
Vice President at the EastWest Institute and Director of EWI's Global Security Program and Policy Innovation ([EWI, 2007](#)).

# Bio Terror Bible

## EXPOSING THE COMING BIO-TERROR PANDEMIC

**BIOTERRORBIBLE.COM:** Bio-terror and pandemic related conferences have occurred on a regular basis since 9/11, but have recently started occurring on a monthly basis since March of 2011.

**Title:** Two-Day Training Session Simulates Pneumonic Plague Attack

**Date:** September 14, 2009

**Source:** [Bio Prep Watch](#)

**Abstract:** Members of U.S. humanitarian aid groups learned how to deter biological terrorist attacks during a recent two-day training session in Montreux, Switzerland.

The Red Cross and other groups, including the UN's World Food Program and the World Health Organization, participated in the International Bioterrorism Response Coordination Exercise (Black ICE II).

The training, featuring an attack scenario involving pneumonic plague, was designed to facilitate the international cooperation of health, security, transportation and law enforcement sectors.

Pneumonic plague is almost invariably fatal, unless the infection is treated quickly.

Representatives of the North Atlantic Treaty Organization, the Counter-Terrorism Committee of the Organization of the American States, and the Organization for Security and Co-operation in Europe also participated in the training session ([Bio Prep Watch, 2009](#)).

**Title:** Prevention Of Biothreats: A Look Ahead

**Date:** October 6, 2009

**Source:** [UPMC](#)

### Introduction

On October 6, 2009, the Center for Biosecurity of UPMC organized a one-day conference, *Prevention of Biothreats: A Look Ahead*, in Washington, DC. The conference was hosted in collaboration with the Commission on the Prevention of Weapons of Mass Destruction Proliferation and Terrorism, and it was funded by the Alfred P. Sloan Foundation.

This meeting convened nearly 200 administration officials, policy analysts, scientists, health leaders, congressional staff members, and members of the media to discuss strategies for countering biological weapons threats.

During the conference, participants discussed a wide range of U.S. government programs, international approaches, and non-governmental efforts aimed at preventing the development and use of biological weapons, including: arms control and multilateral agreements; efforts to prevent the unlawful acquisition of materials, equipment, and information; deterrence, intelligence, and surveillance; and improving resiliency to biological attacks as a means of dissuasion and prevention.

Given the wide range of activities and professional groups engaged in biothreat prevention efforts, it is rare for the entire community to convene as a single group. This meeting accomplished that—the first

step toward generating promising new ideas and directions for biothreat prevention and promoting greater coherence in the biopreparation community.

This summary report has been prepared by the staff of the Center for Biosecurity of UPMC to provide a brief synopsis of each day's panel discussions and individual presentations.

We invite you to explore this conference website, where you will find videos of the day's discussions as well as the conference agenda, speaker bios, attendee list, and background readings.

### **Welcome and Introductory Remarks: Thomas V. Inglesby, Deputy Director, Center for Biosecurity of UPMC**

In his opening remarks, Dr. Inglesby said that the purpose of the conference was to “have a serious discussion about biothreat prevention issues across a community of people who work on distinct elements of biological threat prevention and response.” He then asked the audience to consider 4 propositions to help guide the day's discussion.

1. Biological threats are an increasingly serious and complex threat to national security. The most recent National Intelligence Estimate identified the threat of bioterrorism as the intelligence community's most significant WMD-related concern. This is because the knowledge, equipment, and pathogens required to construct a biological weapon (BW) are now globally dispersed, and there is no single technological methodology chokepoint or process that can be regulated to prevent the development of BW.

Historical evidence confirms the effectiveness of BW, on both a small scale such as the 2001 anthrax attacks, and on a large scale, such as the trials and demonstrations undertaken during the development of offensive BW programs in the U.S., UK, and former Soviet Union. Multiple assessments and reports from the U.S. government, World Health Organization, and others have concluded that, absent a rapid and robust response, a BW attack could result in thousands of casualties or many more.

Equally concerning is the extant intention to utilize BW against the U.S. and other countries, as recently voiced by Al Qaeda (corroborated by discovery of evidence of BW development following the U.S. invasion of Afghanistan in 2001) and radical environmentalist organizations. Barriers to the development have fallen quickly as necessary technologies advance and grow more accessible. It is now plausible for a terrorist organization, a small group, or even an individual to develop BW.

2. The nuclear nonproliferation and prevention model does not apply to BW; BW requires its own framework. As a point of reference, Dr. Inglesby briefly outlined the primary goals of nuclear non-proliferation and prevention efforts:

1. Secure fissile material around the world.
2. Secure highly technical information about nuclear weapons development.
3. Prevent the emergence of new nuclear states and nuclear testing by utilizing inspections, aerial reconnaissance, and sophisticated seismic, hydroacoustic, radionuclide, and other forms of monitoring.
4. Prevent the divergence of nuclear fuel into the weapons cycle.
5. Maintain current and seek new treaty arrangements (NPT, Fissile Material Cut-off Treaty, CTBT) in pursuit of these policy goals.
6. Maintain deterrence through nuclear forensics, attribution, and the promise of retribution.

BW prevention requires a different model because biological material (pathogens) cannot be accounted for or regulated in the same way as fissile material. Unlike the relatively scarce supply of weapons grade uranium and plutonium in the world, biological materials are widely available in labs and in nature. It will be increasingly possible to synthesize organisms *de novo*. Additionally, nuclear weapons and technologies are almost universally controlled by countries, whereas biotechnologies and materials are widely dispersed and are not generally controlled by governments.



Detection and identification of BW development is considerably more difficult than detection of nuclear weapons. Nuclear facilities have specific infrastructure requirements and signatures, and they are discoverable through a variety of techniques. In contrast, biological science facilities are small, heterogeneous, widely dispersed, and almost all are dedicated to benevolent science aimed at improving health and economic well being. It will, therefore, remain exceptionally difficult to detect a BW development facility.

Nuclear forensics is a well established field, and the U.S. government is confident in its ability to attribute a nuclear attack to a foreign power. However, as evidenced by the tremendous effort required to attribute the Amerithrax attack, BW forensics is far more complicated and challenging.

Because there are significant differences the nuclear weapons threat and the BW, BW requires a unique approach to prevention that takes into account the unique nature of the threat.

3. The goals of the bio-prevention framework should be feasible. Dr. Inglesby observed that the day's discussion would be most valuable if it focused on *feasible goals* of bioprevention first, followed by evaluation of the merit of those goals, i.e., will a particular policy or program bring us closer to achieving these goals. He offered the following questions for consideration:

1. Can we control biological materials or information in ways that slow BW development or use?
2. Can we improve transparency among countries on BW issues?
3. Can we strengthen moral and behavioral norms against BW?
4. Can we improve intelligence and interdiction?
5. Can we improve surveillance and international collaboration on infectious disease monitoring and response?
6. Can we improve forensics, attribution, or deterrence?
7. Can we strengthen biodefense as a means of dissuasion?

For each, Dr. Inglesby stressed the need to evaluate the feasibility, potential benefits, and potential adverse consequences.

4. Success is not guaranteed. Dr. Inglesby noted finally that, regardless of the prevention strategy pursued by the U.S., effectiveness cannot be assumed. Therefore, it is fundamentally important to national security that the U.S. bolster its capacity to respond rapidly and effectively to a BW attack.

### **Panel 1: Approaches to Controlling Materials and Information**

***What role does strict control play in lowering the risk that biological weapons will be developed and used?***

Moderator: [Gigi Kwik Gronvall](#), Senior Associate, Center for Biosecurity of UPMC

1. [Carol Linden](#), Principal Deputy Director, Biomedical Advanced Research and Development Authority (BARDA), Office of the Assistant Secretary for Preparedness and Response, Department of Health and Human Services
2. [Gerald Epstein](#), Director, Center for Science, Technology, and Security Policy, American Association for the Advancement of Science (AAAS)
3. [Michael Gelles](#), Senior Manager, Deloitte Consulting LLP
4. [David Franz](#), Former Commander, USAMRIID, Member, National Science Advisory Board for Biosecurity
5. [Carrie Wolinetz](#), Director of Scientific Affairs and Public Relations, Federation of American Scientists for Experimental Biology (FASEB)

### **Overview & Background**

This panel examined whether attempts to control biological materials and information play a role in reducing the risk that biological weapons will be developed and used. Such efforts are based on the

premise that, without access to pathogens, relevant information, and/or laboratory equipment, potential U.S. adversaries will be unable to make biological weapons.

Current efforts to control materials and information include U.S. export controls and the U.S. Select Agent Program, as well as personnel reliability programs, enhanced physical lab security, and guidelines on the communication and development of dual use information. The U.S. Select Agent Program registers and monitors laboratories and personnel that research and transport 82 human, animal, and plant pathogens. It is administered by the U.S. Centers for Disease Control and Prevention (CDC), the U.S. Department of Agriculture (USDA), and USDA's Animal and Plant Health Inspection Service (APHIS).

Personnel reliability programs are based on the model of the nuclear weapons complex and seek to ensure that those who work with biological agents of concern are trustworthy. Such programs may entail rigorous background checks and psychological tests prior to granting an individual clearance to work in a laboratory that handles select agents. There are no national standards for personnel reliability at this time, but some have called for this. Panelists discussed the efficacy of such controls and offered suggestions for improvement.

### **Greater Control of Science Is Not the Answer**

Dr. Epstein emphasized the idea that, in contrast to nuclear technologies, it is no longer possible to limit the proliferation of expertise in the biological sciences or the materials, facilities, and infrastructure to support research, development, and invention in the field. The practice of life sciences is now ubiquitous in the world. Dr. Epstein asserted that this is, fundamentally, a positive progression in science, and that further development of the biological sciences should be promoted for its potential to improve the quality of life around the world. Because of that potential, Dr. Epstein observed, restricting the use of biology is not only impossible, but is also immoral. Rather than control, Dr. Epstein promoted the idea of monitoring and transparency, suggesting that security should be the product of international engagement, collaboration, and enhanced epidemiological capabilities. Dr. Linden concurred, noting that, since the insider threat cannot be reduced to zero, efforts to enhance security should focus on creating an open and transparent global bioscience community.

### **Dangers of Over Regulation of Science**

Dr. Linden provided an overview and history of the personnel reliability and lab security efforts in the U.S. Select Agent Program. She explained that, substantial strengthening of lab security has been made since the anthrax attacks of 2001. However, some of the regulations enacted to date have produced unanticipated and unfortunate consequences. Dr. Linden said that, without justification, the addition of more restrictions and security measures may be overzealous.

Dr. Franz noted that the U.S. should continue to lead in the field and to lead the way in achieving security without hindering scientific research. To that end, he encouraged the avoidance of approaches that constitute "fighting the last war" and that will lead to over-regulation of science; he advocated for creation of international partnerships in life sciences and health as being ultimately better for U.S. security, as it will lead to greater transparency among nations and development of better, shared biodefenses.

### **Positive Workplace Culture: More Effective than Personnel Reliability Programs**

Dr. Gelles described the challenges of combating the insider threat, focusing specifically on the problems that attend (often misguided) efforts to screen for reliability using psychological testing. He explained that because people and their circumstances are dynamic, and screening methods are static, screening is not the most effective approach. The more likely scenario is one in which a personal crisis leads a previously "secure" or reliable employee to engage in a potentially dangerous behavior that screening will not catch. The approach advocated by Dr. Gelles is one of astute and attentive management and collegial work relationships that support recognition of important changes in colleagues. A secure laboratory workforce is one in which crises that may lead to potentially dangerous changes in personnel are noticed and addressed. Dr. Franz also emphasized that a positive work culture in the life sciences will provide more security than additional regulations.

## **Sensible Approaches to Regulation of Life Sciences**

Dr. Wolinetz said that the scientific community is already committed to the nation's security, is already subject to significant regulation and oversight, and is not, on principle, opposed to regulation. She urged, however, that regulations should directly support the goal of security. Dr. Wolinetz called for a review of current systems, with an eye toward identifying areas in need of improvement, and she discouraged a reactive approach that leads to implementation of hastily construed new regulations in response to crises.

## **Panel Conclusions**

The panel concluded that nuclear laboratory security programs simply do not apply to the biological sciences and that biodefense requires its own approach, emphasizing the need for expanded international partnerships and enhanced capabilities in surveillance, diagnostics, and the life sciences around the world. While the insider threat cannot be eliminated, the U.S. government should be wary of creating unnecessary regulations and overly aggressive personnel reliability programs. Instead, the focus should be on making adjustments to the current system and building a culture in the life sciences that supports community-wide commitment to security.

## **Panel 2: International Treaties and Agreements**

***What role do they play in increasing transparency and setting moral and behavioral norms among nations?***

**Moderator:** [Gigi Kwik Gronvall](#), Senior Associate, Center for Biosecurity of UPMC

1. [Jonathan B. Tucker](#), Senior Fellow, James Martin Center for Nonproliferation Studies, Monterey Institute of International Studies
2. [Julie E. Fischer](#), Senior Associate, Global Health Security Program, Henry L. Stimson Center
3. [Terence Taylor](#), Vice President for Global Health and Security, Nuclear Threat Initiative, President of the International Council for Life Sciences
4. [Kenneth Luongo](#), President, Partnership for Global Security

## **Overview & Background**

Panelists examined the role that international treaties and agreements may have in increasing transparency between nations and in setting moral and behavioral norms. The international treaties and agreements that address biological threats include the [Biological Weapons and Toxins Convention](#) (BWC), the [International Health Regulations](#) (IHR), and [United Nations Security Council Resolution \(UNSCR\) 1540](#).

**For background, Dr. Gronvall outlined a brief history and the purpose of these agreements:**

1. The BWC is the first treaty to ban an entire class of weapons. While it upholds a strong moral norm, some nations have flagrantly disregarded it. This led to an attempt to create a verification regime, which failed in 2001. Many experts believe that, unlike nuclear weapons, verification for biological weapons (BW) is not possible. Currently, states parties hold a series of annual expert reviews focusing on BWC implementation.
2. The IHR were originally intended to minimize disruption of trade in times of disease emergencies. In 2005, the World Health Organization (WHO) revised the IHR, transforming the agreement to serve as a means of enhancing transparency about disease outbreaks among nations. Under the IHR, nations are required to report an event constituting as a "public health emergency of international concern" to the WHO.
3. UNSCR 1540 aims to ensure that no state or non-state actor is a source or beneficiary of weapons of mass destruction (WMD) proliferation. Under full implementation, the actions of each state are intended to strengthen international standards relating to the export of sensitive materials and to ensure that non-state actors do not gain access to nuclear, biological, or chemical weapons, their means or delivery, or related materials.

### **Strengthening the BWC**

Dr. Tucker emphasized that the BWC embodies a norm against the hostile use of disease. While necessary, this norm is not sufficient to promote adherence to the treaty. The BWC lacks a Secretariat and robust institutional mechanisms for support, limiting the ability of some countries to actively participate in the BWC process. Dr. Tucker encouraged policymakers to focus on practical ways of building capacity to address the full spectrum of disease threats within the BWC expert group meetings. He explained the need to expand the current process of data exchanges with decision-making capabilities so states can reach agreements on the understandings and interpretations of the treaty, respond to changes in technology, and establish a set of best practices for biosecurity rules and regulations.

### **Universality and the BWC**

Dr. Tucker addressed the issue of universality, explaining that there are currently only 163 states that are parties to the BWC, whereas the Chemical Weapons Convention (CWC) has 188 states parties and has been in force for only 12 years. He also explained that the 3-person Implementation Support Unit in Geneva is supposed to promote universality of the BWC but lacks the resources to do so effectively. Dr. Tucker also emphasized that once the majority of countries have signed and ratified the BWC, it may become part of customary international law, meaning it will bind all states whether or not they are actually member parties. It is difficult to assess which member states are actually in compliance with the BWC due to the lack of verification measures.

### **Challenges In Implementing the IHR**

Dr. Fischer highlighted how awareness of failed reporting of disease during the SARS outbreak catalyzed the adoption of IHR 2005. She explained how the revised IHR requires its 194 member states to develop the capacity to detect, report, and respond effectively to a public health crisis in near real-time (24-48 hours), and how the WHO now collects information from non-governmental organizations (NGOs).

The current H1N1 outbreak illustrates ways in which the IHR has been successful, as nations did indeed report cases as they occurred and the WHO responded accordingly. While the outbreak revealed the new emerging norm to share information, many countries took “non-evidence based actions,” such as restricting trade and travel without scientific bases. This highlighted a challenge in the implementation of the IHR—namely the economic ramifications for countries that do report cases.

The main challenge in implementing the IHR is a state’s ability to develop the capacity to detect, report, and respond to public health crises; otherwise the system is only as good as its weakest link.

### **BW Non-Proliferation Is Not Nuclear Non-Proliferation**

Mr. Luongo addressed transnational challenges and the differences inherent in nuclear and biological weapons non-proliferation. While many nuclear non-proliferation efforts have been successful, prevention of biological warfare must be approached independently of the nuclear agenda. He stated that an arms control model would not work in biological nonproliferation, mainly because of the variety of stakeholders and the constant change in technology. Mr. Luongo identified a need to create partnerships within the private sector, and particularly within the biotechnology industry. He also noted that a more appropriate goal for the BWC may be to develop more confidence building measures, as opposed to seeking verification.

Mr. Luongo further suggested that, just as the United Nations Security Council has put forth resolution 1887 to focus on nuclear non-proliferation, a similar treaty should be developed to address the proliferation of biological weapons. He focused on the need to develop a framework for identifying existing biological threats, but not mandating implementation of a treaty. Treaties should allow for flexible implementation among countries, leaving detailed implementation up to individual governments.

### **Networks Enhance Prevention**

Mr. Taylor discussed examples of effective networking and explained how their success is attributable to stakeholders’ ability to control and set priorities. To ensure their effectiveness, prevention strategies must be complemented by direct actions in the private sector and among non-state actors. Networks

involving a variety of stakeholders, in addition to governments, can increase information sharing. He ultimately advocated for government support of such networks. Mr. Taylor offered examples of disease surveillance networks now operating that cross national lines, such as those in the Mekong Delta and the Middle East.

### **Panel Conclusions**

The panelists concluded that the United States government can act in a variety of ways to strengthen the BWC and clarify reasons for state membership. The international community should also explore how to provide more incentives to countries to report emergencies without opening themselves up to economic damage. While governments must be engaged in dialogues, there is a role for non-state actors and the private sector in setting moral and behavioral norms among nations. All agreed that non-proliferation of BW requires a specifically tailored approach, rather than one based on nuclear non-proliferation efforts.

### **Luncheon Conversation: Intelligence Community Efforts at Detecting or Interrupting Biological Weapons Development or Use**

1. [Lawrence Kerr](#), Senior Advisor for Biological Sciences, National Counterproliferation Center, Officer of the Director of National Intelligence
2. [Col. Randall Larsen](#), USAF (Ret), Executive Director, the Commission on the Prevention of Weapons of Mass Destruction Proliferation and Terrorism
3. [Linda Millis](#), Director, Private Sector Partnerships, Office of the Director of National Intelligence

### **Overview and Background**

This panel provided an overview of the progress and challenges faced by the intelligence community in preventing the development and/or use of biological weapons (BW). Historically, the U.S. has both overestimated and underestimated other nations' BW because of the difficulty in discerning the intent and motivation behind the purchase of dual use equipment for a laboratory. Col. Larsen illustrated the nature of this uncertainty by providing a recent example: On October 6, South Korea reported that North Korea has the ability to produce BW using 13 different agents, including smallpox. While gathering intelligence on nation-states is not easy, gathering intelligence on activities of non-state actors in time to prevent or respond to an attack is even more difficult.

### **Current Efforts**

The panelists first provided an overview of the different types of intelligence, and described how various disciplines are applied to the task of collecting information. They distinguished among several types of intelligence:

1. HUMINT (Human Intelligence) information gathered by interpersonal contact
2. SIGINT (Signals Intelligence) information acquired through radar, telemetry, and interception and analysis of communications, such as emails, phone calls, and text messages among and between person of interest
3. MASINT (Signals and Measurement) qualitative and quantitative analysis of specimens, such as DNA, metallurgy, and electromagnetic radiation
4. GEOINT (Geo Spatial) information gathered by use of imagery to confirm consistency between images and other intelligence information.
5. OSINT (Open Source) the majority of useful intelligent information actually exists in open source materials. This is particularly true for life sciences.

### **Intelligence Workforce**

The panelists stressed that, to further enhance bio-intelligence capabilities, more life scientists are needed in the intelligence workforce--they pointed out that the approximately 150 members of the conference audience outnumbered those currently working on BW intelligence. Dr. Kerr also noted that, although many young scientists enter the intelligence arena, once they do so, they find it difficult to maintain their laboratory skills and expertise, and many are drawn to more profitable private sector positions. One current retention effort is a sabbatical program that allows scientists to return to academia to refresh their skills and conduct laboratory research. Dr. Kerr also described a proposal to create a program similar to the military's ROTC; the proposal calls for creation of a reserve corps of

life scientists who could maintain their security clearances and be called to work during a national crisis.

### **Private Sector Partnerships**

The panelists acknowledged that it would be impossible to develop internal expertise in the life sciences equal to that available externally, and emphasized that the intelligence community must focus on outreach to private sector partners that can enhance biological intelligence capabilities. Such a program currently exists, but it is limited to private sector experts with security clearances; Ms. Millis suggested that this type of outreach should be expanded and not necessarily limited by security clearance. The panel noted private sector willingness to partner with the federal government in national security initiatives.

### **Panel Conclusions**

The discussion of this panel focused sharply on the need to build and maintain a life sciences workforce within the intelligence community and to leverage the vast expertise of the private sector to bolster biological intelligence capabilities. However, while preventing development and use of BW is a high priority for the intelligence community, personnel and funding are not adequate to the task. In closing, the panelists observed that U.S. scientists should be aware that they may be targets of foreign intelligence efforts, and called for an emphasis on maintaining a culture of safety and security within the scientific community.

## **Presentation 2: Kenneth A. Myers III, Director, Defense Threat Reduction Agency**

### **Overview**

The Defense Threat Reduction Agency (DTRA) is a Department of Defense (DoD) agency charged with safeguarding the United States and its allies from the threat posed by weapons of mass destruction (WMD), including biological weapons (BW). For the past 15 years, DTRA's Cooperative Threat Reduction (CTR) program has worked to identify and secure WMDs or their components in countries around the world, focusing primarily on nuclear weapons in the former Soviet Union.

Mr. Meyers described his firsthand knowledge of the BW threat, which is based on his experience at the Hart Senate Office Building, where he was a congressional staff member during the anthrax attack of October 2001. Mr. Myers said that DTRA's biological threat reduction strategy is largely predicated on overlaying the successful Nunn Luger CTR model onto the BW threat. DTRA has constructed reference laboratories in partner nations such as Armenia, Azerbaijan, and Georgia in order to secure "dangerous pathogens." Mr. Myer's said that such aid should be expanded to failing states in order to deny America's adversaries' access to the materials necessary to construct a biological weapon.

### **Future Directions**

A recent National Academy of Sciences report entitled [Global Security Engagement: a New Model for Cooperative Threat Reduction](#) recommended expanding CTR programs to include additional geographic locations and threats. Although the original CTR model was effective in Russia, Mr. Myers asserted that future programs must be sensitive to cultural differences as well as the practical needs of a partner nation in order to be effective. Next generation CTR programs will likely include an increased emphasis on global health security, with particular emphasis on assisting with the promotion and development of infectious disease surveillance systems. Mr. Myers noted that existing CTR programs do have a history of engaging with the Russian bioscience community, and plans to maintain and expand those relationships. Finally, future DTRA initiatives will utilize a flexible framework of bilateral and multilateral partnerships in order to maximize America's investment.

## **Panel 3: Surveillance, Attribution, and Deterrence**

***What roles do early outbreak warning systems, forensics, and deterrence play in lowering the risks of biological weapons development and use?***

**Moderator:** [Jennifer Nuzzo](#), Center for Biosecurity of UPMC

1. [Anne Harrington](#), Executive Director, U.S. National Academies of Sciences' Committee on International Security and Arms Control
2. [Louise Gresham](#), Executive Director, Health Security and Epidemiology, NTI Global Health and Security Initiative
3. [Jenifer Smith](#), Former Section Chief, Federal Bureau of Investigation (FBI) WMD Directorate
4. [John Vitko](#), Former Director of Biological and Chemical Countermeasures for the Science and Technology Directorate of the U.S. Department of Homeland Security

### **Overview**

This panel considered whether and how disease surveillance, microbial forensics, and methods of deterrence are useful to lower the risks of a biological attack. Ms. Harrington and Dr. Gresham highlighted successes and challenges in building disease surveillance systems, while Dr. Smith discussed the emerging field of microbial forensics and its promises and limitations in attribution of biological weapons (BW) to specific adversaries. Finally, Dr. Vitko discussed ways in which the U.S. might deter attacks with biological weapons.

### **Disease Surveillance Systems: Potentially Useful if Well Designed**

Ms. Harrington and Dr. Gresham argued that disease surveillance systems, which are designed to detect and monitor naturally occurring outbreaks, could also help countries to prevent BW development. They also observed that surveillance systems must be a collaborative effort among nations. Dr. Gresham commented that it is particularly important that the country providing disease outbreak information benefits from the surveillance system because some countries fear that the information they collect will not benefit them directly.

It was noted that the influenza tracking system is currently the best available in disease surveillance—it is a global system and is used annually. Ms. Harrington suggested that the broader bio-surveillance community build on the success of influenza surveillance, and design a robust system capable of tracking many diseases.

### **Microbial Forensics: Necessary, but not Sufficient for Attribution**

Dr. Smith addressed the use of microbial forensics for attribution, which entails tracking microbes based on their genetic and other scientifically distinguishable characteristics. Because microbial forensics does not lead directly to the source of an intentional biological agent release, attribution is the joint responsibility of science, law enforcement, and intelligence communities working together. Dr. Smith emphasized that the field of microbial forensics is still in its early years, and it requires continued development, research, and oversight. Currently, the White House Office of Science and Technology Policy (OSTP) is developing a strategy for research and development of microbial forensics.

### **Deterrence: Possible, but Challenging**

While Dr. Vitko believes it may be possible to deter the use of biological weapons, it is critical to understand the inherent challenges. The first challenge is the difficulty and impracticality (indeed, impossibility) of limiting the illicit transfer of materials, technologies, and knowledge, given that the proliferation of dual use biotechnologies is accelerating at a pace comparable to that of information technologies. While global advances in biotechnology promise myriad positive health and economic benefits, the task of trying to control these new technologies out of concern for their potential danger is daunting at best. Dr. Vitko further suggested that it may be immoral to prevent dispersion of beneficial technologies, and he emphasized the need to strike a constant balance between advancing new technologies to derive great benefit vs. attempting to limit or control them out of concern for safety and security.

Dr. Vitko identified attribution as the second challenge to deterrence and dissuasion as the third. The third major challenge in deterrence, though perhaps the most easily overcome, is convincing potential adversaries that they have more to lose than gain in attacking with biological weapons. Addressing this challenge requires making the necessary case to Congress and the American people that the



biological threat requires investment in preparedness and response systems. When investments are made in these areas, it lets an adversary know that the success of an attack will be uncertain. To widen this uncertainty, we need to put policies in place that hold nation states responsible for harboring groups or individuals that commit bioterrorist attacks. Finally, we need to strengthen the social and cultural norms against bioterrorism.

### **Panel Conclusions**

National response efforts to outbreaks depend on an accurate understanding of a disease and how it is spreading. Therefore, shared and transparent disease reporting systems are necessary for effective response to outbreaks. The U.S. government should build upon current disease surveillance efforts, such as the Cooperative Threat Reduction (CTR) program, but new approaches are needed as well. Microbial forensics can play an important role in identifying and attributing the source of a biological attack, but there are limits to the capabilities of forensic efforts. Attribution of a biological weapons attack requires inputs from several sources in addition to forensics, among them, intelligence and law enforcement. Consequently, efforts to strengthen capabilities beyond forensics are important. There are a number of steps the U.S. can take to improve deterrence policies.

### **Presentation 3: Richard Danzig, Chairman of the Board, Center for New American Security**

Dr. Danzig framed his talk by asking the audience to consider what the president or a policymaker would want to know immediately following an attack with a bioweapon—what type of system would give us more information about the attacker, how the attack was carried out, and how the next attack could be stopped? Dr. Danzig asserted that we have fundamental deficiencies in our detection systems that require dramatic changes and improvement. He outlined the deficiencies of the BioWatch program and recommended investing in several specific enhances to spark evolution of detection systems.

**What's Wrong With Biowatch?**1. BioWatch does not support interdiction: Dr. Danzig explained that because BioWatch does not provide data in real time, and because the system relies on too few sensors, spread too far apart, it cannot reliably detect an attack with a biological weapon. Consequently, BioWatch does not support interdiction, which is crucial. He emphasized that any multibillion dollar system that has been years in development but does not allow the U.S. to know who attacked, when, and with what, and then to stop the next attack, is simply not justifiable. An effective tool for informing decision-making, must provide real-time information about the nature, location, and perpetrator of an attack; without this capacity, Dr. Danzig emphasized, BioWatch is inadequate.

2. BioWatch cannot provide situational awareness: Situational awareness, which depends on real-time data, is imperative for informed and rapid decision-making. Dr. Danzig highlighted that BioWatch acts only as an alarm because it can provide an alert about the occurrence of an event, but will not provide the types of information necessary to create situational awareness for decision-makers. As a result, decision-makers will not have the data they need to execute an effective response or to engage in effective consequence management.

BioWatch will not detect new and engineered pathogens: Dr. Danzig emphasized that the current system is vulnerable and will be increasingly inadequate to the task of detecting bioattacks in the coming decade and beyond. Rapid advancements in the biological sciences will lead to engineered pathogens that are currently not, and likely never will be, on standard threat lists. He urged the development of future systems able to detect spectrums of pathogens.

3. Interdiction, situational awareness, and the ability to address the full spectrum of threats are fundamental to effective biodetection systems. While no system can be assured in its successes, efforts to improve systems are necessary to maximize the development of efficient and robust consequence management programs. Dr. Danzig explained that the most powerful form of deterrence is the ability to catch a perpetrator and prevent future attacks. A system that robustly addresses this concern warrants investment. Furthermore, Dr. Danzig outlined his recommendations for future investment to improve the BioWatch program.

### **What Technological Advancements Warrant Future Investment?**

1. Greater specificity in smaller, less expensive technology: Dr. Danzig emphasized the need for building greater specificity into BioWatch to enhance pathogen detection and to enable location of an attack. He also called for smaller and automated sensors that can be produced at significantly lower cost. This would allow for deployment to a much greater number of sites in much greater concentration, which will significantly enhance real-time surveillance, detection, and location capabilities. Additionally, he suggested that smaller, less expensive BioWatch sensors could be imbedded within existing systems and that new sensing technologies possibly could be incorporated into HVAC systems in buildings in a more widely distributed way.

2. Lidar technology to improve detection: Dr. Danzig suggested that the BioWatch system integrate the use of lidar (short-range lasers that examine clouds as they form). This would provide the ability to see aerosol clouds as they rise in the atmosphere, which would provide more real-time data. However, this type of technology can generate too many false-positives, because of other factors that create clouds, and it can only detect aerosol attacks, limiting its potential utility to outdoor attacks.

3. Tracking exposure in human hosts: Finally, Dr. Danzig recommended evaluating human hosts to determine exposure to a pathogen. He suggested that perhaps baseline measures of populations, - such as volunteers from the emergency management community, followed by regular testing of the same persons, would allow for detection of exposure in those specific populations, and results could be extrapolated to the larger population in a given area.

Dr. Danzig concluded his remarks by saying that biological threats will persist far beyond any of the specific groups currently posing a threat to national security. Biological threats will persist because of the growth and power of biotechnology and the life sciences.

#### **Panel 4: Biodefense & Resilience**

##### ***What role does resilience play in dissuading and deterring biological attacks?***

**Moderator:** [Thomas Inglesby](#), Deputy Director, Center for Biosecurity of UPMC

1. [Col. Randall J. Larsen](#), USAF (Ret.), Executive Director of the Commission on the Prevention of Weapons of Mass Destruction Proliferation and Terrorism

2. [Robert Kadlec](#), Former Director for Biodefense, Homeland Security Council

3. [Daniel Hamilton](#), Director of the Center for Transatlantic Relations at the Paul H. Nitze School of Advanced International Studies (SAIS), Johns Hopkins University

##### **Overview**

This discussion focused on the role that resilience might play in deterring a bioterror attack. For the purposes of this discussion refers to the ability to rapidly recover from and diminish the consequences of an otherwise catastrophic event. In the context of BW, it is worth considering both deterrence by dissuasion—convincing adversaries that they should not pursue BW—as well as deterrence by denial—convincing adversaries that they are likely to fail at their objectives with BW. Dr. Inglesby noted that, throughout history, potential attackers have been deterred by denial, either through the introduction of a new technology that denied them a previously available means of attack, or through development of a much stronger defense that convinced an adversary that an attack would fail (e.g., strengthened embassy protections). In this context, therefore, the ability to deter by dissuasion or denial suggests the importance of building a strong and resilient biodefense that will convince adversaries that they will not succeed in their objectives by using BW.

##### **Preparedness as a Deterrent**

Col. Larsen noted that if a nation, organization or individual mounted a successful BW attack, it would inspire others to attempt to achieve the same effect, thus increasing the odds of more BW attacks. Conversely, an adversary observing little or no effect might be more likely to change tactics, reducing the odds of a BW attack. Col. Larsen then asserted that the U.S. should focus its efforts on improving response capability, especially the ability to rapidly produce and administer a range of medical countermeasures (drugs, vaccines) to the population. If the U.S. were to become truly resilient to BW, then these weapons could effectively be removed from the broader category of weapons of mass

destruction (WMDs). Limiting the consequences of a BW attack by preventing the potential for a “bio-Katrina” is a primary focus of the [Commission on the Prevention of Weapons of Mass Destruction Proliferation and Terrorism](#).

### **Goals of Deterrence**

Dr. Kadlec views deterrence as a “mind game” with two goals: 1) Make would-be bioterrorists believe that the effects of a BW attack will be far less severe than intended because the U.S. is able to mount a coordinated, robust response; and 2) Make it well-understood that use of WMD, including BW, will unquestionably result in harsh consequences for those deemed responsible. In the previous panel, Dr. Smith noted that, though our ability to attribute a BW attack is limited, great progress has been made since the Amerithrax investigation. As attribution capability is developed, it will increase America’s resilience and enhance deterrence. Dr. Kadlec closed by noting that we need to “maximize our collective security” by increasing the resilience of our allies, as our security depends upon their resilience.

### **Resilience Requires International Collaboration**

Dr. Hamilton echoed Dr. Kadlec’s last point by saying that it would be insufficient to focus U.S. efforts on building resilience solely in the American homeland because “our resilience will rely on that of others.” In addition to protecting human health, a goal of ongoing U.S. biodefense efforts should be to defend and strengthen the networks that uphold free societies and prevent major social disruption. Toward that end, Dr. Hamilton proposed that a collaborative, multi-sectoral approach that engages the international community would be of great benefit. Finally, Dr. Hamilton closed by advocating for the support of moral and behavioral norms against the use of biological weapons as a means to “dishonor the act.”

### **Conclusion**

The panelists concluded that a resilient nation may indeed act as a deterrent to would-be bioterrorists, and that the U.S. government should continue to implement measures that improve the nation’s ability to substantially diminish the consequences of a BW attack. The role of deterrence in the context of BW is still evolving. Building resilience through partnerships with other countries (e.g., international partnerships to create medicines and vaccines or to conduct disease surveillance) requires increased effort and attention.

### **Closing Remarks: Tom Inglesby, Deputy Director, Center for Biosecurity of UPMC**

Dr. Inglesby closed the conference by summarizing the main points he would take away from the day’s discussion:

1. International norms must be robust. Moral and behavioral norms against development and use of biological weapons are essential, and the international community must strive to deepen and preserve norms such as those embodied in the Biological and Toxins Weapons Convention (BWC).
2. Changes to the U.S. lab security regime must be evaluated carefully. Serious unintended consequences could result from efforts to control pathogens, materials, and information, beyond those controls already in place. Dr. Inglesby encouraged policymakers to assess carefully the current approach to U.S. lab security and the potential consequences of any planned changes to the U.S. lab security regime before introducing any new regulations.
3. Transparency is essential to national biodefense. Efforts should continue to make U.S. national biodefense programs as fully transparent as possible. Dr. Inglesby noted that the U.S. program seems at least as transparent as other national biodefense programs in the world, and other countries should be encouraged to pursue transparency along with the U.S. Because physical inspection and verification of all bioscience laboratories in the world is impossible, calls for such measures are distractions from improving transparency.
4. Intelligence plays a strategic role, but it is not likely to provide the tactical warning necessary for prevention. Intelligence will continue to be a key component of prevention, but intelligence in this arena is particularly challenging, and there is no guarantee of its reliability in preventing development or use of BW or in providing tactical warning of an imminent attack.

5. International engagement has a role in prevention. Cooperative Threat Reduction (CTR) programs and other surveillance efforts are key to international engagement and to improving international public health, and they warrant continued support. It is important to examine how such programs can contribute most effectively toward the goals of preventing biothreats.

6. Microbial forensics is a critical aspect of prevention. Microbial forensics is a young but advancing field that can be an important element of attribution. Policy makers should support the advancement of this field.

7. Biodefense and resilience are key for prevention. Prevention efforts are a critical component of building dissuasion and deterrence to development and use of BW. They have the additional benefit of building our capacity to respond to diseases outbreaks domestically and internationally. Because we cannot guarantee the success of the nation's collective prevention efforts, the U.S. must build both its resilience and a strong biodefense in order to diminish the consequences of potential biological threats ([UPMC, 2009](#)).

# Bio Terror Bible

## EXPOSING THE COMING BIO-TERROR PANDEMIC

**BIOTERRORBIBLE.COM:** Bio-terror and pandemic related conferences have occurred on a regular basis since 9/11, but have recently started occurring on a monthly basis since March of 2011.

**Title:** Conferences Will Review U.S.'s Ability To Reduce Biothreat

**Date:** February 10, 2010

**Source:** [Bio Prep Watch](#)

**Abstract:** A pair of conferences over the next few weeks will enact a comprehensive review of the United States' ability to reduce the impact of a biological weapons attack.

The review of the HHS' recently announced Public Health Emergency Medical Countermeasures Enterprise comes on the heels of numerous vaccine delivery delays during last fall's H1N1 pandemic.

A two-day workshop on improving medical countermeasure development to respond to health emergencies, originally scheduled for this week in Washington DC, has been postponed to Feb. 22 through the 24 as a result of snowstorms, Gretchen Michael, spokeswoman in the Office of the Assistant Secretary for Preparedness and Response at the Department of Health and Human Services, said.

The meeting will discuss methods of removing obstacles to developing drugs, vaccines and diagnostics meant to counter threats including anthrax attacks.

The other workshop, organized by the National Biodefense Science Board, will review the management and structure of the countermeasures development program.

The workshop's agenda notes that the problem with countermeasures development is that there is little commercial market for most medical countermeasures, which means that the government must provide incentives for private companies to develop them.

"However, certain structural, strategic, and technical elements of the enterprise continue to impede research, development, and production of medical countermeasures," the agenda states according to CIDRAP News ([Bio Prep Watch, 2010](#)).

**Title:** U.N. Secretary-General Opens Chemical Weapons Convention

**Date:** December 1, 2010

**Source:** [Bio Prep Watch](#)

**Abstract:** The United Nations Secretary-General Ban Ki-moon opened the 15th Session of the Conference of the States Parties to the Chemical Weapons Convention on November 29 by lauding the convention's more significant contributions to world safety.

"I welcome the significant progress that has been made, including the destruction of more than 60 percent of the world's declared stockpiles of chemical weapons under strict verification," the Secretary-General said, according to the meeting's official transcripts.

Ban also said that he believes that the convention remains an effective, non-discriminatory and comprehensive legal instrument that has the ability to verify the existence and destruction of chemical weapons stockpiles, as well as prevent their proliferation.

He further lauded the progress of three possessor states that recently completed their destruction programs and commended the actions of the remaining possessor signatories. The challenge, according to Ban, will be for them to fulfill all of their obligations by the April 2012 deadline.

The secretary-general paid particular attention to the global nature of the convention.

"With 188 states parties encompassing 98 percent of the global population, the convention is approaching universal membership, thereby moving ever closer to eliminating the possibility that chemical weapons will be used," Ban said.

There was also a message to those nations that are not a part of the convention.

"It is crucial for the remaining seven states that are not party to the convention to join without delay," Ban said. "Their accession would build confidence in their respective regions and strengthen international peace and security in general" ([Bio Prep Watch, 2011](#)).

**Title:** Biological Weapons Convention To Be Held This Week

**Date:** December 6, 2010

**Source:** [Bio Prep Watch](#)

**Abstract:** The 2010 Meeting of States Parties to the Biological Weapons Convention will be held this week at the United Nations Office in Geneva.

The meeting will be chaired by Ambassador Pedro Oyarce of Chile and is expected to develop and further the work of the Meeting of Experts that was held in Geneva in August 2010, according to UNOG.ch.

Oyarce called the meeting, "An important opportunity to further the main themes that emerged from the Meeting of Experts: the crucial importance of a coordinated and cross-sector response to an alleged use of biological weapons, and the need to build national capacities in order to provide such a response," UNOG.ch reports.

The chairman also said that the improvement of national capabilities to respond to the use of biological weapons not only directly supports the convention's security objectives, but also promotes the development of biological sciences and technologies that are peaceful in nature.

The meeting will also directly address proposals made at the Meeting of Experts, including the development of training courses, simulation exercises and joint partnerships; the encouragement of cross-sector cooperation between law enforcement and public health agencies; the necessity of assistance for state parties in the implementation of the BWC; and the enhancement of international cooperation, UNOG.ch reports ([Bio Prep Watch, 2010](#)).



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## EXPOSING THE COMING BIO-TERROR PANDEMIC

**BIOTERRORBIBLE.COM:** Bio-terror and pandemic related conferences have occurred on a regular basis since 9/11, but have recently started occurring on a monthly basis since March of 2011.

**Title:** 2011 Biodefense And Emerging Diseases Research Meeting Set

**Date:** January 31, 2011

**Source:** [Bio Prep Watch](#)

**Abstract:** The 2011 Biodefense and Emerging Diseases Research Meeting, hosted by the American Society for Microbiology, will bring together researchers working to fight bioterrorism and decision makers who shape the future of the biodefense research agenda.

The meeting will be at the Omni Shoreham Hotel in Washington, D.C. between February 6 and 9 and will address concerns that emerging infectious diseases will be a major factor in the public threat of bioterrorism.

Scientists, policy makers and public health researchers will come together to learn about the latest scientific developments during the meeting, which will include a series of keynote addresses by leaders in the field of biodefense. There will also be poster sessions that present the latest research on vaccines, biothreat agents, diagnostic and detection procedures, plant and animal pathogens, global surveillance and more.

There will be a featured lecture by D.A. Henderson of the Center for Biosecurity of the University of Pittsburgh Medical Center titled "The Eradication of Smallpox: A Continuing Saga" on the first day of the conference.

Other sessions include "New Interventions and the Challenges of Emerging Infections," "Emerging Plant Diseases and Agricultural Biodefense," and "Medical Countermeasure Development in the U.S. Government."

The American Society of Microbiology has 40,000 members worldwide. Its mission is to gain a better understanding of the basic processes of life and to promote applying that knowledge to improved health and environmental and economic well-being ([Bio Prep Watch, 2011](#)).

**Title:** Experts Gather At Symposium To Discuss Transportation And Bioterrorism

**Date:** March 27, 2011

**Source:** [Bio Prep Watch](#)

**Abstract:** On March 21, Emergent BioSolutions, Inc., hosted a symposium in Washington, D.C. on transportation and bioterrorism featuring governmental leaders, experts in urban emergency preparedness, disaster response and biological warfare.

Issues presented concerned the development of clear governmental focal points; the challenges faced by local, state, regional and national agencies; and the importance of prevention, detection and response. A particular emphasis was placed on retooling inner and outer communication practices, which is what occurs between governmental bodies and what occurs between governmental bodies and the public.



Henrich Hololei, head of cabinet for European Union Transportation Commissioner Silim Kallas, spoke about several challenges he faces, some of which are endemic to the E.U structure itself.

Hololei said that Europe faced transportation challenges in the wake of Iceland's volcanic ash cloud. An individual nation could not open its own airspace without consent from the larger group, complicating efforts to jumpstart what then was a badly damaged economic reality.

"It is a complicated jigsaw," Hololei said. "Issues in Europe are specific and multi-layered, yet at the end of the day, we want safe transportation systems. We want ways to stop bioterrorism, and, if something does occur, we want to save as many people as possible".

How that might be done, and what should be avoided in the process, was Randy Larsen's focus. A retired colonel who served in the Air Force for 32 years, Larsen is a commentator and adviser on national security issues, particularly large-scale threats like biological warfare.

Larsen said that rigorous cooperation between the public and private sector is needed. Citing the 27 percent of all cargo in America that travels on private airplanes as an example, he said that the notion of a government-only effort ignores private and public sector overlap. Focusing on approaches like these will save more lives in the long run, he said.

Terrorists are also less likely to attack nations with better emergency-capable infrastructures, Larsen said.

"The holes are too great, the dangerous elements to be smuggled in too small, those who wish us harm too many," Larsen said. "It's a difficult pill to swallow, but one that will save this country millions – millions that can be better spent on things that really will work."

Jerry Hauer, a former director of the Office of Emergency Management under Rudy Giuliani, and later an assistant secretary within the Department of Health and Human Services, referenced the need for new communication patterns among agencies and new communication outreaches to the public. He expressed concern that local and national governmental agencies often presented overly confident approaches to the complicated demands that arise after a grave emergency.

Hauer described the difficulty in communicating directly to those underground in the event of a biological attack as a transportation issue that can be fixed. He also warned of a more enigmatic problem.

"Even now, just a decade after 9/11, our level of vigilance has decreased," Hauer said. "Complacency is a problem. Hopefully it won't take another event to remind people to be alert and watchful."

The event, hosted by Emergent BioSolutions, Inc., reflects the company's involvement in matters of government policy and disaster preparedness. Emergent BioSolutions, Inc., is the manufacturer of BioThrax, the only FDA-licensed vaccine for Anthrax ([Bio Prep Watch, 2011](#)).

**Title:** Experts Gather To Fight Bioterror Attacks On Food Chain

**Date:** April 28, 2011

**Source:** [Bio Prep Watch](#)

**Abstract:** With a significant portion of America's food supply being imported, consumers are vulnerable to tainted food and intentional bioterrorism attacks, according to experts gathering at this year's International Symposium on Agroterrorism in Kansas City.

Approximately 600 delegates attended the three day conference, sponsored in part by the FBI and the Heart of America Joint Terrorism Task Force, KansasCityStar.com reports. The main mission of the event is to protect the food supply worldwide while illustrating the importance of a coordinated effort.

U.S. food and agricultural product imports have been rising for decades, increasing from \$41 billion in 1998 to \$78 billion in 2007, according to the USDA. An estimated 50 percent of U.S. food is now imported.

"There are more firms registered with the Food and Drug Administration to supply food to the U.S. from outside the country than there are inside the country," Shaun Kennedy, deputy director of the National Center for Food Protection and Defense at the University of Maryland, said, according to KansasCityStar.com.

The CDC estimates that, each year, roughly one in six Americans, or approximately 48 million people, contract a food-borne disease.

To counter these threats, Congress passed and President Barack Obama signed into law the Food Safety Modernization Act of 2011 in January. This initiative aims to ensure the U.S. food supply is safe by shifting the focus of federal regulators from responding to contamination to preventing it.

Seen as an important first step, many health officials suspect it will take a great deal of vigilance to protect the American food supply, KansasCityStar.com reports ([Bio Prep Watch, 2011](#)).

**Title:** Nebraska Holds Two Day Symposium On Bioterror Preparedness

**Date:** May 12, 2011

**Source:** [Bio Prep Watch](#)

**Abstract:** Dozens of public health officials and emergency responders recently attended a two day symposium put on by the Nebraska Center for Preparedness Education on the subject of how to prepare for a bioterror attack.

The symposium, which took place in Norfolk, Neb., is meant to cover illness outbreaks, helping victims in a disaster and how to respond to acts of terrorism. The organizers of the event said that education on this subject is an important part in helping personnel plan and prepare for such an attack, KTIV.com reports.

"It gives us ideas for areas where people feel like they may have gaps in their disaster planning," Sharon Medcalf of the NE Center for Preparedness said, according to KTIV.com. "And then, we build programs based on some of the needs assessments they would get, and often it's feedback from this conference itself."

Nebraska Lt. Governor Rick Sheehy was also on hand to speak about a number of issues, including a new national watchdog program called "See Something, Say Something."

"It's primarily for citizens," Sheehy said, according to KTIV.com. "If they see suspicious activity, if they see suspicious packages...just something isn't what it should be or is out of the ordinary, that they report that."

In addition, Norfolk Fire Chief Shane Weidner discussed how his team of firefighters dealt with a December 2009 propane fire at the former Proteint Foods plant.

The event concluded on Wednesday ([Bio Prep Watch, 2011](#)).

**Title:** Biodetection Technologies Conference Set For June 24

**Date:** April 22, 2011

**Source:** [Bio Prep Watch](#)

**Abstract:** The 18th Biodetection Technologies Conference, an internationally recognized event for experts in detection and identification of biological and chemical threats, will be held on June 24 in Washington, D.C.

The event will explore the latest R&D developments and ready-to-market systems for major bioterror identification, bioterror detection and analysis both at the point-of-care and in the field.

The conference will be held at the Marriot Wardman Park and will feature Dr. Peter Emanuel as the keynote speaker.

Emanuel is the bioscience division chief at the U.S. Army Edgewood Chemical Biological Center.

During his address, Emanuel will discuss the results of a 2011 biosurveillance hardware systems survey. The survey targeted systems that have applicability in assessing human exposure to chemical, biological and radiological agents. It focused on information on commercially available and maturing diagnostic and identification/detection products that have technology readiness levels from TLR 4 to TLR 9, not including basic research concepts.

Emanuel will examine the findings of the survey and what it might mean for interagency needs for the purchase of technology in the future.

Other topics that will be discussed at the conference include bioinformatics for biodefense; challenges for rapid, early, specific and sensitive detection; and technological advances in detection and identification of biological threats ([Bio Prep Watch, 2011](#)).

**Title:** The Threat of Bioterrorism: Improving America's Response Capabilities

**Date:** June 16, 2011

**Source:** [George Washington University](#)

**Watch Video** [here](#)

**Abstract:** Panel of current and former members of Congress discusses the biological threats that keep them up at night at GW event.

When [Frank Cilluffo](#), director of the Homeland Security Policy Institute and associate vice president for homeland security, noted that the event at 1957 E Street featured "the titans of national security," he wasn't kidding.

The June 14 event, titled The Threat of Bioterrorism: Improving America's Response Capabilities ([video](#)), drew panelists Sen. Joe Lieberman (I-Conn.), Rep. Mike Rogers (R-Mich.) and former Senators [Bob Graham \(D-Fla.\)](#) and [Jim Talent \(R-Mo.\)](#).

The latter two are chairman and vice chairman of the [WMD Center](#), which cosponsored the event with the Homeland Security Policy Institute.

One topic that the panelists and Mr. Cilluffo, who moderated the event, kept returning to was what keeps them up at night, which was mostly a biological terrorist attack on the U.S.

Rep. Rogers added Iran and North Korea to the list of sleep-threatening dangers.

One of the most important sentences of the 9/11 Commission Report was the claim that the attacks occurred because of a failure of U.S. imagination, Sen. Lieberman said, interpreting the failure as an inability or refusal to imagine what al-Qaeda was plotting.

"We know that the intent to hurt us continues," he said. "It doesn't take a very aggressive imagination ... to believe that groups that are venomously anti-American would be considering biological attacks on us."

Part of the legislation Sen. Lieberman is working on now is creating a national bio-defense strategy. "I don't like to be kept up at night, so to whatever extent I can reduce the causes of the sleepless nights, not just for myself but also for other Americans, I'd like to do so," he said.

Former Sen. Talent explained why the prospect of a biological attack was so terrifying. Whereas the 9/11 attacks killed about 3,000 people, conservative estimates say a biological attack could claim 10 to 100 times that number of lives, and it would be easy for the terrorists to “reload and hit another city.” The attacks would also leave residue that would make it tough to rebuild.

“The American economy would just stop,” he said.

Former Senators Talent and Graham also discussed the annual report cards their center gives for U.S. efforts to protect itself from terrorist attacks.

Sen. Graham said his background working in higher education taught him about the importance of issuing something like a report card. “If you don’t evaluate a particular subject it’s not likely to be taught or not likely to be taught well,” he said.

Out of 18 items on last year’s report card, the U.S. government received four grades of F. The most significant F was for being unprepared to respond to an act of bioterrorism. “We think this is a serious national security risk,” Sen. Graham said.

Sen. Talent said the pair hadn’t realized the significance of biological threats at first, but after conducting hundreds of interviews as part of the Commission on the Prevention of Weapons of Mass Destruction Proliferation and Terrorism, which was tasked with following up on the 9/11 Commission Report, they realized a biological attack would be the most dangerous threat to the country.

The U.S. knows that al-Qaeda wanted to build biological weapons in the 1990s, it would not need to undergo intense organizational realignment to construct such a weapon and biological weapons are relatively easy to create and stock pile, he said.

“This is not a next generation threat. This is now.”

Rep. Rogers said elements of a national bio-defense strategy, like vaccines for Anthrax, are “something you hope you never use.”

“Everyone is always mad at the firefighters around budget time, but you love them when you pick up the phone and they show up and protect your house,” he said. “When you need them, you need them. Same with these vaccines. This is not something you can go back and say, ‘We’ve had an event. Oh, by the way, where do we go buy 8,000 doses of Anthrax vaccine.’ It’s not going to happen” ([George Washington University, 2011](#)).

**Title:** Pandemic Provides Backdrop For Fourth ESWI Conference

**Date:** September 12-14, 2011

**Source:** [ESWI](#) (PDF)

**Abstract:** The 2009 H1N1 pandemic makes this ESWI conference more relevant than ever and is driving EU efforts to improve pandemic preparedness. Science has a major role to play in addressing unanswered questions.

“It’s quite timely that we’re having this meeting now, just after the first pandemic of the 21st century,” said Dr. A.D.M.E. Osterhaus, ESWI Chair, as he opened the Fourth ESWI Influenza Conference in Malta. Osterhaus was referring, of course, to the swine flu outbreak of 2009. He noted that the pandemic provided the opportunity to explore lessons learned and prepare for the next one.

According to Osterhaus, this conference is also special because young scientists will present new data and all the scientific sessions will be co-chaired by a young scientist. “We’re cultivating the next generation of scientists,” said Osterhaus.

**EU prepares to update pandemic preparedness across Europe**

Osterhaus’ opening remarks were followed by a video message from John Dalli, European Commissioner for Health and Consumer Policy. Dalli recalled that back in December 2009, EU Member States agreed that by 2014, 75% of healthcare workers and people at risk would be

vaccinated against influenza. He said that the EU is encouraging Member States to meet their commitments and suggested that “the time has come to update guidance on influenza pandemic preparedness across Europe.” Dalli described EU efforts to ensure equitable access to vaccines for all Member States by developing a mechanism for joint procurement.

Dalli concluded his message by underlining the important role of science. “It is only by combining the latest scientific knowledge with effective policy planning, that we will succeed in addressing influenza,” he said.

### **Nobel Laureate says “there’s still a lot to be solved”**

Dr. Peter C. Doherty of St. Jude Children’s Hospital in Memphis, Tennessee and the University of Melbourne in Australia delivered the keynote address. Doherty gave a wide-ranging talk that presented influenza research performed over the past several decades. He summarized research findings, added his own conclusions and raised questions requiring further scientific investigation.

According to Doherty, the real problem with the influenza virus is that it’s highly contagious but the infected don’t necessarily feel sick while they’re infectious. On the plus side, unlike HIV, influenza infections are “self-limiting” provided one can limit the damage. “We just need to get people through the acute phase,” said Doherty. For this purpose, Doherty ended his keynote with a challenge: **“Can we make a universal vaccine?”**

### **Scientists provide strong evidence for pandemic threat**

Scientists have shown that H1N1 is geographically mobile and can reassort, and they have identified influenza virus strains that could mutate into the next pandemic virus. Experimental research has shown that with few mutations H5N1 can become airborne.

“Pigs DO fly.” That was the message from Dr. Malik Peiris of the University of Hong Kong. Peiris was one of two keynote speakers during the plenary session on Monday. His talk, “When pigs fly”: Insights on pandemic emergence”, examined potential pandemic threats, focusing on the 2009 H1N1 pandemic strain.

Dr. Peiris was well-positioned to study the issue as about half the global population of pigs is to be found in China and 4,000-5,000 pigs are slaughtered everyday in Hong Kong alone. He and his team have been conducting a 14 year surveillance study of swine influenza in China.

### **Flying pigs?**

Dr. Peiris’ aim was to trace the origins and genomic evolution of the 2009 H1N1 pandemic virus. He found that after the triple reassortant strain became dominant in North America, it did not remain geographically isolated. Peiris and his team found that swine flu viruses of various

lineages were repeatedly introduced in China. “These viruses readily moved across countries and continents, probably through breeder stock,” said Peiris. Furthermore, the North American strain reassorted in China. Peiris said that the reassortment events in China gave clues how the pandemic virus emerged, even though the pandemic virus did not originate there.

### **Viral determinants of human transmission**

Peiris next set out to identify viral factors that contribute to transmission risk for humans. He and his researchers studied tropism in the human upper respiratory tract in ex vivo cultures, transmission in ferrets and serological herd immunity. They identified one reassortant strain that severely infected both the nasopharynx and the bronchial tract. In the ferret study, this strain was also the only one which displayed any hint of aerosol transmission, according to Peiris.

### **On the hunt for a killer**

Given that this reassortant virus shares 7 gene segments of common origin with the pandemic virus (but does not pre-date it), Peiris and his colleagues decided it warranted further study. They added to the reassortant virus the neuraminidase enzyme it was missing as well as 3 polymerase genes that had shown high levels of activity in tests. The new strain was not more infectious (only one out of three ferrets got infected) but the severity of the disease was enhanced. “Despite these results, 915 – the reassortant virus – is the only virus of swine origin that does infect human tissue ex vivo and aerosol in humans,” said Peiris. He found that sero conversion is broadening human immunity to swine viruses but not to avian viruses. Thus, according to Peiris the biggest danger would be

reassortment of an H1N1 virus with an avian virus such as H5N1. Peiris concluded his presentation with a strong message: "There's a need for a step change in surveillance of swine viruses and animal viruses in general."

### **H5N1: a persistent danger**

Dr. Ron Fouchier of the Erasmus Medical Centre in the Netherlands delivered a similarly strong message during his presentation that H5N1 continues to be a pandemic threat. Fouchier has studied H5N1 in Indonesia, one of countries hardest hit by avian influenza. The island nation of 240 million people has had 178 confirmed cases of avian influenza of which 146 have been fatal.

### **Vaccine failure**

Intrigued by evidence that classical vaccines were failing, Fouchier and his colleagues used a Hemagglutination inhibition assay to study the antigenic drift of the new virus strains. "We discovered that only 1-3 substitutions are sufficient to cause large changes in antigenic drift," said Fouchier. Moreover, large antigenic differences between and within H5N1 clades could affect vaccine efficiency and even result in vaccine failure, warned Fouchier. Indonesia decided to switch to a different vaccine strain.

A "stupid" experiment leads to a valuable result Fouchier and his team's biggest discovery, however, was based on what he termed a "stupid" experiment. He and his team introduced mutations, under strict laboratory safety procedures, by reverse genetics into laboratory ferrets. They then collected a nasal wash from each infected ferret and inoculated another ferret after a few days. They repeated this process ten times. The result? H5N1 had been transmitted to three out of four ferrets. "This virus is airborne and as efficiently transmitted as the seasonal virus," said Fouchier. His research team found that only 5 mutations, 3 by reverse genetics and 2 by repeated transmission, were enough to produce this result. "This is very bad news, indeed," said Fouchier.

### **Clinical approaches to pandemic preparedness**

Early diagnosis and treatment is the key to stamping out a pandemic before it peaks and overwhelms the healthcare system. With this in mind, participants in the session "Clinical impact and diagnostic approaches" offered their views on ways to improve.

Dr. Peter Openshaw of Imperial College in London provided a fascinating inside view of the UK's efforts to combat the H1N1 pandemic, focusing on its clinical impact. "The UK had one of the most highly developed pandemic preparedness plans in the world," according to Openshaw, "and the risk of pandemic human disease was considered highest among threats as far as impact and likelihood, even higher than terrorism."

The UK's plan was centered on blunting the peak of any pandemic outbreak. "You can tolerate a slow-burning outbreak, but it's the peak that causes a breakdown in health services," said Openshaw. The pandemic hit the UK's shores in two waves: the first wave in the summer of 2009 and the second wave in the winter of 2009/10. During the first wave, flu-associated bed-days went from 4,163 in 2008 to 33,376 in 2009, a 7-fold rise, and, most alarmingly, the 17-39 year age group was particularly hard-hit, with bed-days increasing from 169 to 6,253 from October to December, a 37-fold increase.

### **Openshaw based his research on two studies:**

Flu-CIN, a study funded by the Department of Health that aimed to collect clinical information fast; and MOSAIC, a Wellcome/MRC funded study that focused more on the discovery of pathogenesis. The Flu-CIN study found that mild asthma increased patient risk, but that it was a risk factor for admission only, not for severe outcome. The studies' findings resulted in several changes including a revision of UK clinical guidance and a change to the UK's antiviral, antibiotic and vaccination policy, away from prophylactic use in the case of antivirals.

To Openshaw perhaps the most important lesson is that **"You need to be prepared in peacetime. You have to move very fast during a pandemic."**

### **Real-time PCR for mapping a whole entire genome sequences**

Dr. Martin Hibbard of the Genome Institute of Singapore described recent advances in Real-time Polymerase Chain Reaction (RTPCR) technology. He noted that if a physician's test for H5N1 is negative, RT-PCR could present an alternative to that process. "Genome sequences can be rapidly

analyzed and sequenced, so the technique can help with the rapid identification of outbreaks,” said Hibbard.

The process works by extracting a total nucleic acid from a clinical sample. This is then amplified and hybridized onto a micro-array chip. The result is detection signals for an entire genome sequence which can then be analyzed using automated bioinformatics. The technology has already proven itself useful. Singapore’s Ministry of Health used it to track which viruses were mutating most rapidly during the H1N1 flu pandemic, and in at least one instance even used it for person to person recognition.

### **In vivo imaging: a superior approach?**

Koet Stittelaar of Viroclinics Biosciences in the Netherlands presented a very different diagnostic approach. Using CT imaging on ferrets, he and his group overcame the limitations of current analytical approaches. Current preclinical animal models examine the severity of disease (necropsy) at a single fixed point in time. But antiviral efficacy, for example, depends greatly on when treatment was begun. Moreover, with in vivo imaging, Stittelaar and his colleagues can compare data from a single animal rather than from several different animals.

### **Seasonal influenza and acute myocardial infarction**

Dr. Charlotte Warren-Gash’s study of UK primary care data sought to see whether myocardial infarction might be triggered by respiratory infections. For her doctoral thesis at University College in London, she linked data from the General Practice Research Database of 5 million active patients with data from the Myocardial Ischaemia National Audit Project, adjusting the data for seasonality and other factors. “We found an increased risk of myocardial infection following acute respiratory infections,” said Warren-Gash, “but there was no strong evidence that the effect on myocardial infarction was greater for influenza than for other infections.”

### **Vaccination: history proves it works, whatever the disease!**

Does the world’s long history of vaccination justify – despite the associated risks – its use in reducing the burden of disease? For all panel members of ESWI’s final workshop on Day 1, the answer was a resounding “yes”.

From Chinese variolation techniques against small pox in the 1600s to today’s efforts to eradicate polio, “the history of vaccines in the fight against infectious diseases has been a success story,” Dr. Ab Osterhaus, ESWI chairman told the group, pointing to today’s near-eradication of diseases that were once the scourge of humanity such as measles. “We have the tools to fight these diseases with vaccines.”

Yet public fear and mistrust about the safety of vaccines often stand in the way of high vaccination rates. These obstacles can only be overcome by delivering the right information at the right time to those who communicate directly with the public: the media and other stakeholders.

“You have an opportunity every year to educate your media about the benefits of influenza vaccination: in the autumn when seasonal flu preparations begin,” Dr. Marc Van Ranst, researcher at Belgium’s University of Leuven, told his audience.

**“The knowledge you can impart to the media and thus to the public can influence them and prepare them for a pandemic whenever it hits.”** Public misperceptions about vaccination are rampant and can work heavily against the best efforts of science, however.

“Conspiracies of all kinds have always been there—even in Jenner’s time,” said Osterhaus, referring to the 18th English scientist who developed the first smallpox vaccine. “Today I’m most concerned with pseudo-scientists who say it is good to be exposed to disease in childhood to strengthen the immunological system! This has got to be fought. **However, we as scientists have got to package our message in a different way if we want more effective communication with the public.**”

Japanese health officials know that by direct experience, as panelist Dr. Masato Tashiro, told the group. Noting that Tokyo shifted away many years ago from mandatory flu vaccination for young children partly due to a hostile press that called the policy a violation of children’s rights, the government has since embraced voluntary vaccination and seen uptake rise – and mortality fall – among children since 2002. The reason? “The government simply did a much better job of promoting the positive effects [of vaccination] for children,” said Tashiro ([ESWI, 2011](#)).



**Title:** Charting The Future Of Biosecurity: Ten Years After The Anthrax Attacks

**Date:** October 4, 2011

**Source:** [Center for Biosecurity of UPMC](#)

**Abstract:** *Charting the Future of Biosecurity: Ten Years after the Anthrax Attacks* was held in Washington, DC, on October 4, 2011. Jointly hosted by the Alfred P. Sloan Foundation and the Center for Biosecurity of UPMC, this invitational meeting brought together thought leaders from the federal government, the policy community, think tanks, academia, and media outlets. The meeting provided a forum for leaders in the biosecurity community to reflect on progress made since 2001 and to consider priorities for the biosecurity policy agenda in the years ahead. This meeting was made possible by the generous support of the Alfred P. Sloan Foundation

### **.Opening Remarks by Thomas V. Ingles**

In his remarks, Thomas Inglesby, Director of the Center for Biosecurity emphasized the importance of preparing for the future of biosecurity given the looming threats of bioterrorism, pandemic flu, and other emerging infectious diseases. He acknowledged the difficulty of the mission but noted that there are reasons for optimism—including the breadth and depth of knowledge, experience, and dedication among those now in the field; the strength of American science and technology industries and the robust government programs now working to develop biodefense; and the notable progress to date. Dr. Inglesby also highlighted some significant gaps, such as early disease outbreak detection capabilities, post-event decontamination plans, and medical countermeasures. He emphasized that these pressing needs must be addressed regardless of growing budget constraints. Dr. Inglesby closed by urging all present to remain persistent and persuasive in their efforts to draw attention and resources towards biosecurity.

### **Challenges of Reporting on the 2011 Bio-attack**

Jeanne Meserve, former CNN Homeland Security Correspondent, presented a video montage of news coverage from the 2001 anthrax attacks. She recalled the difficulties of acquiring accurate information about the events surrounding the attacks, which she characterized as both a public health and a communications disaster. She described the press as feeling “whip sawed” by conflicting information from government and law enforcement representatives, and she noted that the unknowns and confusion about risk created fear among the public and among members of the press, who had trouble determining whether they were putting themselves and their families at risk by covering the events. Ms. Meserve recommended a policy of frank and proactive communication from government officials, and she suggested that members of the press improve both their communication skills and their scientific knowledge so they are better able to convey facts and evidence responsibly. She also emphasized that the press has an obligation to strike a tone that informs people without inciting fear.

### **Present & Future Biothreats**

Colonel Randall Larsen, D. A. Henderson, and Dr. Richard Danzig engaged in a discussion of present and future biothreats. As moderator, Col. Larsen first acknowledged that the panelists were visionaries in the field, and he asked them to comment about their experiences and to suggest priorities for the future.

Dr. Henderson replied by emphasizing the importance of continually asking and answering this question: “What would we do if there were a bio-attack tomorrow?” Dr. Henderson expressed concern that what he perceives as a lack of strong leadership in the federal government would hinder the nation’s ability to coordinate and marshal an effective response. He noted that the responsibility for a federal response to a biological attack is dispersed across a number of agencies, and he worried that a long interagency process could be slowing decisive decision making. Dr. Henderson called for a response plan that will have broad public support so as to avoid conflicting advice.

Dr. Danzig expanded on that notion to remind the audience that, in the face of catastrophe, the public often looks to leaders outside of government to validate recommendations, and he noted the need to reach and educate known leaders outside of government in advance. He also discussed what he considers systemic issues that hinder our response capabilities, the most serious of which, he argued, is our federalist system. That the federal role in preparedness and response must overlay and complement state and local response systems complicates planning. Another systemic problem is that government planning frameworks are often too narrowly focused on the immediate and acute

phase of a disaster. He argued for an expanded perspective on planning and response—one that accounts for the extended period of time and long term effort that will be required after an attack to restore normal functioning. Danzig contended that those working in biosecurity and biodefense should think beyond the casualty component of a biological attack, explaining that he has come to think of bioweapons not so much as weapons of mass destruction, but as weapons of *mass disruption*.

Both Drs. Henderson and Danzig acknowledged the uncertainty that attends the field of biosecurity, given the inherent difficulty in sound predictions about soundly predicting the outcome of a bio-attack. They encouraged the audience to acknowledge the potential threat of synthetic biology and other new pursuits in the biological sciences in preparing our defenses, noting in particular that our current focus on a finite set of threats may soon be an obsolete approach. Dr. Henderson closed by stressing the need for more biologists at high levels in the federal government who can raise awareness and help guide development of sensible, strategic defense strategies.

### **Looking Ahead in U.S. Health Security**

As moderator of a panel discussion among Nicole Lurie, Andrew Weber, and Thomas Frieden, Richard Besser opened the discussion by asking panel members what threats keep them up at night. Dr. Lurie described the recent events in Japan as what haunts her—multiple, serial disasters coalescing to wreak unprecedented devastation. Dr. Frieden worries about unknown and unplanned-for disasters against a backdrop of shrinking public health infrastructure and resources. Mr. Weber's concern, from his DoD vantage point, is terrorists' stated interest in biological weapons and the advances in the biological sciences and technology that are making the tools needed to make bioweapons increasingly accessible.

Mr. Weber suggested that efforts to strengthen interagency and international partnerships have made our capacity to detect and respond to threats more robust, and he cited as an example a recent drill that DoD conducted with the Republic of South Korea that included both South Korean authorities and senior members of DHS and CDC. Mr. Weber said that in more than 20 years in the federal government, he had never witnessed interagency coordination as strong as the coordination in effect in the current administration.

Dr. Besser then asked the panelists to address what he described as a popular perception that federal agencies spend too many resources on low-probability events and that they may even overreact to emerging biological threats, such as H1N1. In response, Dr. Lurie indicated that the H1N1 response underscored the need for a fully functional public health infrastructure capable of responding to all types of events, an assertion confirmed by Dr. Frieden, who also noted that a strong public health system is essential to both chronic disease response and emergency response. Cautioning that it is always better to overreact to emerging threats, Dr. Frieden pointed out that the H1N1 flu strain had probably been spreading in Mexico for months before it came to the attention of the United States, and that the lesson from H1N1 is that we could be more proactive in identifying infectious disease threats. Mr. Weber followed by adding that no country has a big enough "moat" to protect them from a communicable disease, and that a robust global disease surveillance system is an urgent need in the effort to improve biosecurity.

Dr. Besser pressed the panel members to explain international response efforts and their connections to homeland security. Pandemic and avian flu, according to Dr. Frieden, have catalyzed a partnership between the U.S. and Chinese CDCs, which now post weekly online updates about circulating flu strains in an effort to provide better awareness and advanced warning for emerging threats to homeland security.

Concluding with a discussion of domestic health security, panelists identified countermeasure distribution and resource allocation as pressing near-term challenges. Dr. Lurie promoted a federal approach that meshed with state and local infrastructures, but she cautioned that federal budget policies limit the ability to reallocate funds for immediate emergency use on the local level. Dr. Frieden pointed out that there is no broad plan for medical countermeasure acquisition and distribution and he suggested that a "quick and simple" answer to these complex problems is probably impossible. Instead, he suggested, the answer may be different strategies for different populations and circumstances.

### **Special Taped Interview of Tom Daschle**

In a taped interview prepared for this meeting, Senator Tom Daschle, former U.S. Senate Majority Leader, shared a few of his memories from the morning of 9/11 and the anthrax letters of October 2001. He also offered his thoughts on what is needed to better educate America's leaders about the threat of bioterrorism.

### **Transformative Science in Biosecurity**

Dr. Inglesby returned to the conference stage to moderate a discussion about advances in the life sciences and implications for biosecurity among Margaret Hamburg, George Poste, Tara O'Toole, and Craig Venter. Drs. Venter and Poste opened with their visions for the future: Dr. Venter asserted that automation of labor- and time-intensive processes would reduce the timeline for producing vaccines to days, if not hours. He cited his lab's recent experience in working with BARDA and Novartis to create a synthetic flu vaccine virus strain in 10 hours as a sign of medical countermeasure progress to come. Dr. Poste added that, in the future, proteins would be manufactured synthetically from cell-free systems, including vaccines, which would make regulating the vaccines significantly less burdensome. Dr. Poste also suggested that biosecurity challenges would expand in the coming years due to antibiotic resistance and as population growth creates added pressure on agriculture production due to population growth. He contended that synthetic biology would play a crucial role in revolutionizing the industrial ecology of modern society as it will help to secure food and energy resources.

While acknowledging that advances in the life sciences are "imbued with potential to lessen human suffering," Dr. O'Toole cautioned that advances in science are dangerously outpacing the government's ability to organize and regulate to ensure that biology and new technologies are not being applied to dangerous purposes. She explained that the concepts described by Drs. Venter and Poste are complex and difficult to translate to government officials and members of Congress who do not have years of training and experience in the field. Dr. Hamburg described how the FDA is working to change its processes and the ways in which it engages with the scientific community; she noted in particular her efforts to undo long held perceptions of the FDA as an agency bogged down by bureaucracy ([see Dr. Hamburg's remarks from the Center's March 2011 conference on the growing role of the life sciences for greater detail](#)). Dr. Hamburg encouraged her colleagues in the scientific community to think about not only science, but also about the tools regulators will need to evaluate science.

Dr. Inglesby asked the panelists if they thought the U.S. is losing its competitive edge in math and science. Drs. Venter and Poste suggested that, although we have not yet lost our edge, there are problems in both our educational system and our immigration policy that threaten to degrade the pool of talent available to the biotechnology and pharmaceutical industries.

The panel concluded with an overall assessment of the threat posed by synthetic biology. Dr. Venter cautioned that there are many other threats, such as naturally occurring agents, which call for immediate attention. Dr. Poste contended that the beneficent potential of synthetic biology outweighed its destructive potential. The scientists' optimism was shared by Drs. O'Toole and Hamburg, but they reiterated that the threat potential certainly should not be ignored.

### **Talking Biosecurity with the Public**

Senator Jim Talent spoke about the challenges of communicating the biological weapons threat to the public and to Congress. He acknowledged that it is difficult to raise consciousness without engendering fear. He also asserted that we are limited by our 18th century model of bureaucratic government, which is not well-positioned to respond to rapidly evolving threats, fast-moving disasters, and the attendant need to make decisions rapidly and to quickly communicate them to the public.

Senator Talent agreed with earlier speakers that biological weapons represent an increasing asymmetric threat, particularly as barriers to weaponizing pathogens diminish as a result of progress in the life sciences. Senator Talent described the WMD Center's efforts to address this threat, in particular the [Bio-Response Report Card](#) on the state of U.S. preparedness for a biological attack. He emphasized the need to develop systemic resilience to a biological attack, which would reduce the high cost of last-minute preparations and response when a threat is actualized. He concluded by

asserting that under current budget conditions, the U.S. government can no longer rely on a reactive approach to crisis.

### **The Next 5 Years of the Biological Weapons Convention**

Thomas Countryman discussed the U.S. State Department's perspective on next steps in advancing the Biological Weapons Convention (BWC), emphasizing his conviction that this is an influential forum for demonstrating the constructive potential of the biological sciences while discouraging destructive applications. The BWC serves as a norm against malevolent application of the life sciences. He said that maintaining that norm requires frequent and proactive consultations with relevant government, academic, and commercial entities. In the future, he noted, the BWC will include the emergency response community for better understanding of the resources and capacities that will help to mitigate a disease outbreak. Acknowledging that these new efforts would cost more, Mr. Countryman reminded the audience that in order for the BWC to contribute more to our security, we need to contribute more to the BWC.

### **Biosecurity Achievement Award Presentation to Paula Olsiewski**

The meeting concluded with the presentation of an achievement award to Dr. Paula Olsiewski for her leadership and support of the field of biosecurity. In presenting the award, Dr. Inglesby outlined the many accomplishments of Dr. Olsiewski and the Alfred P. Sloan Foundation and reminded the audience that the Foundation's support was in place well before the anthrax attacks. In accepting the award, Dr. Olsiewski thanked former Sloan Foundation president Ralph Gomory for his vision, and thanked current president Paul Jaskow and her colleagues, including her assistant Yolanda Wolf, for their support as well. Dr. Olsiewski concluded by thanking all of the grantees for all of their important work and contributions to the field ([Center for Biosecurity of UPMC, 2011](#)).

**Title:** Experts Optimistic At U.S. Biosecurity Outlook

**Date:** October 6, 2011

**Source:** [Bio Prep Watch](#)

**Abstract:** U.S. biosecurity policy has made significant progress since Sept. 11, 2001, terror attacks and the anthrax attacks of 2001, but continues to confront myriad challenges in dealing with future biological hazards, both natural and man-made.

At a conference of biosecurity experts hosted by the University of Pennsylvania Medical Center and the Alfred P. Sloan Foundation, progress made over the last 10 years was reviewed and problems for the future were outlined.

In opening remarks, Thomas Inglesby, the CEO of the Center for Biosecurity of UPMC, offered three main reasons for optimism regarding the outlook for biosecurity.

"The first reason for optimism is the community in this room," Inglesby said. "A second reason for optimism is we have U.S. science and technology as our fuel...And a third reason for optimism is the good work that has already happened."

Not only has the community of experts been greatly expanded, as evidenced by the number of attendees at the conference, but the U.S. science and technology base has been greatly expanded and a number of programs and policies have been implemented and refined. Laboratories to quickly characterize and develop vaccines have been established. The U.S. has greatly expanded capacity and has held field exercises and coordinated planning on an inter-agency basis. Rapid distribution channels for the distribution of vaccines have been established and universal antibiotics may well be on the horizon.

Despite these advances, however, much of the conference focused on remaining shortfalls that must be addressed. Most significantly, the lack of an attack over the past 10 years and the loss of personnel in Congress and the executive branch has resulted in a "out of sight, out of mind" mentality, the experts warned.

"Progress has been significant but clearly inadequate to the problem," Richard Danzig, chairman of the board for the Center for a New American Security, said.

In a panel on "Present and Future Biothreats," D.A. Henderson of the UPMC Center for Biosecurity said that much more needs to be done in terms of how best to inform cities and states on how to handle biological threats, whether to shelter in place or evacuate, how to clean up after a biological attack and the necessity to lay out a coherent plan well in advance of such an event.

Danzig added that even such rudimentary questions as whether citizens should open or close windows or whether or not to vacuum remain unanswered.

There is also a tendency for decision-makers to focus planning and exercises on a one or two day event while ignoring modeling for much longer incidents and the efforts that need to be established for handling the clean up associated with a major biological attack.

According to Danzig, economic consequences have been minimized and it is probably more accurate to refer to biological attacks "not as weapons of mass destruction, but as weapons of mass disruption."

In that regard, Randall Larsen of the WMD Center said that the Environmental Protection Agency spends 50 percent less studying how to clean up after a major incident than the military spends on the Marine Corps marching band.

In a panel on "Looking Ahead in U.S. Health Security," Thomas Frieden, the director of the Centers for Disease Control and Prevention, said that what keeps him awake at nights is the possibility of facing an attack for which we are unprepared. We are "not going to face what we have prepared for," Frieden said.

There are 44,000 fewer people working in state and local health departments today than there were two years ago," Frieden said, and, as a result our preparations at the state and local levels in detection and response are eroding.

Andrew Weber, the assistant Secretary of Defense for Nuclear, Chemical, and Biological Defense Programs, raised the issue of the potential for a "lone wolf" to cause a mass destruction event.

"The potential for a lone wolf bioterrorist to launch such an attack, is not a hypothetical," Weber said.

Similarly, Nicole Lurie, the assistant Secretary for Preparedness and Response at the Department of Health and Human Services, also expressed concern about facing unanticipated threats. If our detection systems prove to be inadequate to the task, we could find out about a biological attack too late to deal with it in the most efficacious manner, she warned. Globally, efforts to put in place an international detection system to recognize and respond to epidemics is also key to safeguarding the public.

For the most part the conference picked up on and expanded on the work of the 9/11 Commission, which identified biological threats as "the ultimate asymmetrical threat."

Former Senator Jim Talent, vice chairman of the WMD Center, said that the threat environment remains "dynamic and unpredictable," and that biological weapons were "the easiest to develop and deploy."

The final panel, "Transformative Science in Biosecurity," also emphasized Andrew Weber's point that "the march of technology, which is a wonderful thing in this area, also carries with it this very substantial risk. You cannot say who will pick up these weapons and use them."

Tara O'Toole, the Under-Secretary for Science and Technology at the Department of Homeland Security, worried that, "The accessibility of powerful technologies to people who aren't running an

army, who really are just a group of individuals, is a phenomenon that's going on... These powerful technologies are becoming more and more available and can be used even unintentionally to very detrimental effect on a large scale."

While Craig Venter of the Venter Institute held out the possibility of synthetic DNA leading to vaccines in hours instead of days, weeks or months, and George Poste, the chief scientist at Complex Adaptive Systems Initiative, saw promise in the fusion of molecular biology with computers as a way to speed vaccines and develop therapeutics, most shared the concern that the pace of biological sciences is far outpacing our capacity "to combat malignant uses."

Perhaps of greatest concern was Andrew Weber's fear that "the biggest difficulties associated with biological weapons is that when we talk about them, we're not just talking about terrorist using these weapons like terrorist who might get a nuclear weapon, we're talking about the ability to produce these weapons. And that then gives them the ability to repeatedly attack and reload. The question for our policing agencies is how do we thwart such an attack?"

While a host of responses were offered, including the need for research and budget constancy, enhanced capacity, more realistic planning exercises, the development of balanced portfolios and knocking down the silos that keep government agencies from greater levels of cooperation, the conference made clear that much work remains to be done ([Bio Prep Watch, 2011](#)).

**Title:** White House On Biological Weapons Convention Review Conference

**Date:** December 5, 2011

**Source:** [All Africa](#)

**Abstract:**

***FACT SHEET ON THE SEVENTH REVIEW CONFERENCE OF THE BIOLOGICAL AND TOXIN WEAPONS CONVENTION***

"We must come together to prevent, detect, and fight every kind of biological danger whether it is a pandemic like H1N1, a terrorist threat, or a treatable disease." President Obama, United Nations General Assembly, September 22, 2011

Today, the States Parties to the Biological and Toxin Weapons Convention (BWC) are meeting in Geneva for the start of the Seventh Review Conference (RevCon) of the Biological Weapons Convention to evaluate the implementation of the treaty and chart a course for the coming years.

To underscore the importance the United States places on the BWC as a critical tool to help counter biological threats, the President has asked Secretary of State Clinton to lead the United States delegation to the RevCon, where she will deliver the opening statement for the United States on December 7th.

**Part of a Broader National Strategy**

The BWC is a critical venue for advancing objectives set forth in the President's National Strategy for Countering Biological Threats, which emphasizes the need for multinational collaboration on concrete activities to help counter biological proliferation and bioterrorism.

The three-week BWC Review Conference presents an opportunity for countries to promote real action to improve global response capabilities, reinforce norms against the misuse of biological science, and to help identify and thwart those who would seek to cause harm.

**Revitalizing International Efforts to Reduce Biological Threats**

The United States believes the BWC should be the premier forum for bringing together the security, health, law enforcement, and science communities to raise awareness of evolving biological risks and

how to best manage them. The U.S. believes that revitalized international efforts and a coordinated series of actions can help reduce the threat of biological attacks.

At the RevCon, the United States will seek the endorsement of the BWC States Parties of a work program for the next five years in three broad areas of work that will greatly enhance international efforts to counter biological threats.

1. First, the United States is asking States Parties to establish an effort to develop constructive ways to strengthen implementation of the BWC and build confidence that all members are living up to their obligations. The dual-use nature of biological work simply makes it too easy to conceal prohibited activities - so the United States has proposed efforts to promulgate legislative and regulatory frameworks, safety and security measures, outreach to stakeholders, improved annual reporting, and options for addressing compliance concerns.

2. Second, the United States is proposing that the RevCon create a working group that will be tasked with taking concrete actions to make the BWC a more robust forum for building global capacities for preventing, detecting, and combating disease outbreaks, regardless of whether they are natural, deliberate or accidental. We need to be prepared, both nationally and internationally, to deal with a biological attack should one occur. The United States seeks to capitalize on synergies between security and public health communities and to do so through the sort of international cooperation called for in the BWC.

3. Third, the United States is asking States Parties to establish a mechanism for assessing developments in science and technology to better understand their potential benefits to the BWC as well as their potential misuse by terrorists or others. It is important for BWC States Parties to have a structured dialogue with the international scientific community on emerging technologies in order to better address the potential for their misuse.

In order to meet these goals, the United States will propose that the BWC RevCon establish a vigorous work program for the next five years that focuses on the common needs and interests of all States Parties in combating biological threats.

Pursuing this robust program will help the international community produce concrete results, thereby enabling successful annual Meetings of States Parties and a robust Eighth BWC Review Conference in 2016 ([All Africa, 2011](#)).

**Title:** Remarks at the 7th Biological and Toxin Weapons Convention Review Conference

**Date:** December 7, 2011

**Source:** [U.S. Department of State](#)

**Abstract:**

Hillary Rodham Clinton  
Secretary of State

Palais des Nations  
Geneva, Switzerland

December 7, 2011

Thank you, Mr. President. And I would also like to express my appreciation to all of the delegates and to my colleague, Minister Rosenthal, for his comments. I want to thank the Implementation Support Unit for all the efforts to advance the work here.

I want to start by acknowledging that our countries have accomplished a great deal together under the Biological and Toxin Weapons Convention. One hundred sixty-five states have now committed not to pursue these weapons, and I am delighted to welcome Burundi and Mozambique to the Convention, and I join in urging all states who have not yet done so to join.



President Obama has made it a top goal of his Administration to halt the spread of weapons of mass destruction, because we view the risk of a bioweapons attack as both a serious national security challenge and a foreign policy priority. In an age when people and diseases cross borders with growing ease, bioweapons are a transnational threat, and therefore we must protect against them with transnational action.

The nature of the problem is evolving. The advances in science and technology make it possible to both prevent and cure more diseases, but also easier for states and non-state actors to develop biological weapons. A crude, but effective, terrorist weapon can be made by using a small sample of any number of widely available pathogens, inexpensive equipment, and college-level chemistry and biology. Even as it becomes easier to develop these weapons, it remains extremely difficult – as you know – to detect them, because almost any biological research can serve dual purposes. The same equipment and technical knowledge used for legitimate research to save lives can also be used to manufacture deadly diseases.

So of course, we must continue our work to prevent states from acquiring biological weapons. And one of the unsung successes of the Convention is that it has engrained a norm among states against biological weapons. Even countries that have never joined the Convention no longer claim that acquiring such weapons is a legitimate goal. But unfortunately, the ability of terrorists and other non-state actors to develop and use these weapons is growing. And therefore, this must be a renewed focus of our efforts during the next 14 days, as well as the months and years ahead.

Now, I know there are some in the international community who have their doubts about the odds of a mass biological attack or major outbreak. They point out that we have not seen either so far, and conclude the risk must be low. But that is not the conclusion of the United States, because there are warning signs, and they are too serious to ignore.

Terrorist groups have made it known they would want to acquire and use these weapons. And in the 1990s, the apocalyptic cult, Aum Shinrikyo unleashed two attacks in Tokyo by spraying a liquid containing anthrax spores into the air and unleashing sarin gas into the subway. In 2001, we found evidence in Afghanistan that al-Qaida was seeking the ability to conduct bioweapons attacks. And less than a year ago, al-Qaida in the Arabian Peninsula made a call to arms for – and I quote – “brothers with degrees in microbiology or chemistry to develop a weapon of mass destruction.”

We all have an interest in ramping up our efforts to prevent outbreaks and attacks and then to be prepared to respond if they do occur. The 2001 anthrax attacks in the United States killed five people and sickened 17. More than 10,000 were required to go on to antibiotics. A mass outbreak could cripple an already fragile global economy by cutting off the movement of people, goods, and sparking food shortages. And of course, a victim of an attack could just as easily travel from one country to another.

So shoring up our domestic and international defenses will make it easier to detect and respond. We need public health systems that can quickly diagnose outbreaks, whatever their source, and mobilize the right medical resources and personnel. By making any one country more secure, we make the international community more secure at the same time.

Two years ago, the Obama Administration released our national strategy for countering biological threats, which is a whole-of-government approach designed to protect the American people and improve our global capacity. We support our partners' efforts to meet new international standards in disease preparedness, detection, and response. We are helping make laboratories safer and more secure, engaging 44 countries in these efforts this year. And since 2007, we've conducted more than a dozen workshops to help train public health and law enforcement officials.

But there is still more to do, and I want to briefly mention three areas. First, we need to bolster international confidence that all countries are living up to our obligations under the Convention. It is not possible, in our opinion, to create a verification regime that will achieve this goal. But we must take other steps. To begin with, we should revise the Convention's annual reporting systems to

ensure that each party is answering the right questions, such as what we are each all doing to guard against the misuse of biological materials.

Countries should also take their own measures to demonstrate transparency. Under our new Bio-Transparency and Openness Initiative, we will host an international forum on health and security to exchange views on biological threats and discuss the evolution of U.S. bioresearch programs. We will underscore that commitment by inviting a few state parties to the Convention to tour a U.S. biodefense facility next year, as Ambassador van den IJssel and the UN 1540 Committee did this past summer. And we will promote dialogue through exchanges among scientists from the United States and elsewhere. In short, we are intending and our meeting our obligation to the full letter and spirit of the treaty, and we wish to work with other nations to do so as well.

Second, we must strengthen each country's ability to detect and respond to outbreaks and improve international coordination. As President Obama said earlier this year at the UN, "We must come together to prevent and detect and fight every kind of biological danger, whether it's a pandemic like H1N1, or a terrorist threat, or a terrible disease." Five years ago, 194 countries came together at the World Health Organization and committed to build our core capacities by June 2012, and we should redouble our efforts to meet that goal. We will support the WHO in this area, and I urge others to join us.

Finally, we need thoughtful international dialogue about the ways to maximize the benefits of scientific research and minimize the risks. For example, the emerging gene synthesis industry is making genetic material widely available. This obviously has many benefits for research, but it could also potentially be used to assemble the components of a deadly organism. So how do we balance the need for scientific freedom and innovation with the necessity of guarding against such risks?

There is no easy answer, but it begins with open conversations among governments, the scientific community, and other stakeholders, in this forum and elsewhere. We have recently had our U.S. President's Commission on Bioethics develop ethical principles that could be helpful in this dialogue, and we urge a discussion about them. Ambassador Kennedy and the U.S. team look forward to working with all of you for a strong set of recommendations.

And let me conclude by saying we know the biological threats we face today are new, but our commitment to face threats together is not. More than 85 years ago, after the horrors of World War I, the international community took a stand against the use of poison gases and bacteriological weapons. And nearly a half-century later, that shared commitment brought us together to adopt the Biological Weapons Convention. So in that same spirit, let us move forward to address the challenges we face together in the 21<sup>st</sup> century.

Thank you very much ([U.S. Department of State, 2011](#)).

**Title:** Biological Weapons Convention Conference Issues Final Document

**Date:** December 23, 2011

**Source:** [Nuclear Threat Initiative](#)

**Abstract:** The seventh review conference for the Biological Weapons Convention ended on Thursday with a call for all member states to demonstrate their adherence to the accord's rules, the United Nations announced (see [GSN](#), Dec. 7).

Participating states agreed to a revised reporting document that nations would submit annually as a means of promoting confidence that their biological research and development activities have no warfare component.

"The conference recognizes the urgent need to increase the number of states parties participating in confidence-building measures and calls upon all states parties to participate annually," BWC nations said in the final declaration to the 14-day conference in Geneva, Switzerland. They also called on "those states parties, in a position to do so, to provide technical assistance and support, through

training for instance, to those states parties requesting it to assist them to complete their annual confidence-building measures submissions."

A U.N. press. release did not provide details of the updated reporting forms. In speaking to the conference earlier this month, U.S. Secretary of State Hillary Clinton said the revision should "ensure that each party is answering the right questions, such as what we are each all doing to guard against the misuse of biological materials."

The 1975 pact bans the development, production, stockpiling and use of biological materials for nonpeaceful purposes. It has been ratified by 165 nations, while another 12 states are signatories to the convention. Review conferences are scheduled every five years to consider the operation of the convention and possible threats to its strictures.

"In the final declaration, the conference reaffirms that under all circumstances the use of bacteriological (biological) and toxin weapons is effectively prohibited by the convention and affirms the determination of states parties to condemn any use of biological agents or toxins other than for peaceful purposes, by anyone at any time," the conference-ending document states.

Delegates agreed to maintain the "intersessional program" of annual meetings that are held between the five-year review conferences. A total of 10 days would be allowed each year for separate gatherings of experts and officials from member nations. "Standing agenda items" to be discussed annually from 2012 to 2015 are "cooperation and assistance, with a particular focus on strengthening cooperation and assistance under Article 10; review of developments in the field of science and technology related to the Convention; and strengthening national implementation," according to the final report.

Among the matters to be raised within those agenda items are advancements in science and technology that could lead to breaches of the convention, promoting responsible research by the scientific, academic and industry sectors; and augmenting states' implementation of the BWC rules.

"These are the three areas that the United States emphasized when Secretary Clinton spoke to the conference on Dec. 7," Thomas Countryman, assistant secretary of State for international security and nonproliferation, said on Friday. "They were adopted not because the United States pushed them, but because we selected the topics that it is clear the majority of states party agree are essential for future development."

Nations in Geneva also agreed upon the importance of achieving universal membership in the convention.

"The conference underlines that the objectives of the convention will not be fully realized as long as there remains even a single state not party that could possess or acquire biological weapons," they stated. "The conference urges states parties to take action to persuade non-parties to accede to the convention without delay, and welcomes regional initiatives that would lead to wider accession and adherence to the convention."

Participants also approved the creation of a database to "facilitate requests for and offers of exchange of assistance and cooperation among states parties." The BWC Implementation Support Unit was designated to produce and operate the system (United Nations Office at Geneva [release](#), Dec. 22).

"We are happy with the results," Countryman told reporters during a teleconference. "We think they are significant for not only the United States, as we move ahead on advancing the president's national strategy for countering biological threats, but that they have the same value for all of our partners around the world who share this concern about potential biological and toxic threats" ([Nuclear Threat Initiative, 2011](#)).

# Bio Terror Bible

## EXPOSING THE COMING BIO-TERROR PANDEMIC

**BIOTERRORBIBLE.COM:** Bio-terror and pandemic related conferences have occurred on a regular basis since 9/11, but have recently started occurring on a monthly basis since March of 2011.

**Title:** WHO Director-General Addresses Unprecedented Meeting On Neglected Tropical Diseases

**Date:** January 30, 2012

**Source:** [WHO](#) (World Health Organization)

### Abstract:

Dr Margaret Chan  
Director-General of the World Health Organization

Ladies and gentlemen,

Today's event sends a strong message of encouragement.

At a time of severe financial constraints, it is still possible to set ambitious targets for diseases, secure unprecedented commitments, and accelerate action to meet those targets.

This message is all the more heartening given the people who will benefit. The bottom billion. The poorest of the poor. People with little visibility and even less political voice.

For decades, WHO has been the champion of these people, steadily working to give them the vision of a better life. This leadership, supported by research, partners, and industry donations, has changed the face of NTDs.

Once considered inevitable companions of poverty, many NTDs are now being brought to their knees, with stunning speed.

Last week, WHO issued a roadmap for accelerating work to overcome these diseases. The targets for implementation are ambitious yet feasible, based on the best science available, but also on impressive results under some of the most challenging conditions in the world.

With the boost to this momentum being made today, I am confident almost all of these ancient diseases can be eliminated or controlled by the end of this decade.

The strategies set out in the WHO roadmap are tested and proven to be effective. Let me assure you: WHO knows how to deliver on these commitments in ways that bring results.

The roadmap follows two overarching approaches being covered today.

That is, using what exists while maximizing the impact through smart programme management. And innovation to improve or repurpose existing tools and develop better ones.

We know that programmes for disease elimination or eradication that stress innovation have the best chance of success. This is what we all want: success in relieving the misery of more than a billion people.

The payback will be enormous.

Thank you ([WHO, 2012](#)).

**Title:** Decision Time For Researchers Of Deadly Bird Flu

**Date:** February 14, 2012

**Source:** [MSNBC](#)

**Abstract:** When 22 bird flu experts meet at the World Health Organization (WHO) this week, they will be tasked with deciding just how far scientists should go in [creating lethal mutant viruses](#) in the name of research.

The hurriedly-assembled meeting is designed to try and settle an unprecedented row over a call to ban publication of two scientific studies which detail how to mutate H5N1 bird flu viruses into a form that could cause a deadly human pandemic.

But experts say whatever the outcome, no amount of censorship, global regulation or shutting down of research projects could stop rogue scientists getting the tools to create and release a pandemic H5N1 virus if they were intent on evil.

"It doesn't matter how much you restrict scientists from doing good, bad people can still do bad things," said Wendy Barclay, an expert in flu virology at Imperial College London.

The WHO called the meeting, for February 17 and 18 in Geneva, to work out how to break a deadlock between scientists who have studied the mutations needed to make H5N1 transmit between mammals and U.S. biosecurity chiefs who want their work censored or "redacted" before it goes into scientific journals.

Since the two research teams, one in the Netherlands and one in the United States, have found that just a small number of mutations would allow H5N1 to spread like ordinary flu between mammals - and remain just as deadly as it is now - the meeting is likely to be tense and highly secretive. WHO officials repeatedly stress it will be a "closed door" event.

The United Nations health body has said it is "deeply concerned about the potential negative consequences" of work by the two leading flu research teams who in December said they had found ways to make H5N1 into a easily transmissible form capable of causing lethal human pandemics.

Flu researchers from around the world - more than 30 teams in all - declared a 60-day moratorium starting on January 20 on "any research involving highly pathogenic avian influenza H5N1 viruses" that produce easily contagious forms of the virus.

The WHO has invited 22 people to this week's meeting, including the researchers who carried out the work, editors of the two journals, Science and Nature, who were asked to hold publication, and representatives from the U.S. National Science Advisory Board for Biosecurity (NSABB) which asked for the papers to be censored.

Keiji Fukuda, the WHO's Assistant Director-General for Health Security and Environment, who will chair the meeting, says he would like to secure agreement on whether the studies should be published, in full or part, and who should have access to them.

The scientific know-how is seen as vital for scientists to be able to develop vaccines, diagnostic tests and anti-viral drugs that could be deployed in the event of an H5N1 pandemic.

"It is important that research on these viruses should continue," Fukuda told Reuters. "They do pose a risk. There's a lot of things we don't know about them. The question is not really should we continue to do research ... but under what conditions can we do it so we don't unnecessarily create fears and risks."

The H5N1 virus, first detected in Hong Kong in 1997, remains entrenched among poultry in many countries, mainly in Asia, but so far remains hard for humans to catch. It is known to have infected nearly 700 people worldwide since 2003, killing half of them, a far higher fatality rate than the H1N1 swine flu which caused an influenza pandemic in 2009/2010.

Ron Fouchier, the scientist leading the Dutch team that gave H5N1 various genetic mutations and made it transmissible in mammals, argues the research must be published to help public health officials better prepare for a scenario where the virus could mutate and become more deadly, spreading from person to person via coughs and sneezes.

He has also said other research teams around the world are close to the same findings, some of them inadvertently, and should be warned in advance how the virus could become airborne.

In the short term, most scientists agree the moratorium is "a good gesture," as flu expert and former WHO health security adviser David Heymann describes it, one that offers the research community space to think.

But can it, or should it, go on forever?

Heymann, Barclay and many other scientists argue that stopping this type of research into flu viruses and other potentially lethal pathogens would set a dangerous precedent.

Although adding and deleting genes can create super-strains that put the entire world at risk, Heymann said, such work is also vital to developing tools such as effective vaccines and diagnostic tests which are needed quickly if a pandemic hits.

Preventing this research would also prevent legitimate and well-intentioned researchers from using all possible scientific options to prepare for naturally occurring, or deliberately caused, outbreaks.

John Edmunds, who heads the department of infectious disease epidemiology at the London School of Hygiene and Tropical Medicine, describes studies on genetic mutations of H5N1 as "very, very important work" that should not be stopped.

"This flu strain has the potential to cause such enormous damage, and it's important to know how far away we are from a horrible event like that," he said. "It appears we're not that far off it. That doesn't mean it's inevitably going to happen, but it makes it more important that we're vigilant."

Heymann, who now leads the Center on Global Health Security at the Chatham House think-tank in London, says the best possible outcome would be a globally-agreed "best practices framework on how you conduct this research and how you provide the information to others."

"It's also crucial to get understanding that even if you don't provide this research information, there are ways that rogue scientists can get it if they want to," he said ([MSNBC, 2012](#)).

**Title:** Asia Pacific CBRN Conference Kicks Off This Week

**Date:** February 21, 2012

**Source:** [Bio Prep Watch](#)

**Abstract:** The SMI Group has announced the details for its 2nd annual Chemical, Biological, Radioactive, Nuclear and Explosives Asia Pacific conference, which will be held from February 21 through February 24 in Singapore.

The conference, which will be located at the Grand Copthorne Waterfront Hotel, will include high level speakers from all over the world discussing CBRN-E issues. The conference will focus on initiatives to prepare for and prevent CBRN-E attacks in the Asia Pacific region of the world.

The four day event will discuss topics that range from medical countermeasures to regional programs. Attendees will see just how governments deal with such terrorist threats. The program will include presentations from various Asian countries, including South Korea, India, Japan, Singapore, Australia and Vietnam, as well as Emergent BioSolutions' Allen Shofe. There will also be a special pre-conference workshop focusing on the Fukushima Nuclear Power Plant incident one year later, including lessons learned from the disaster and regulations related to nuclear safety.

Speakers scheduled for the conference include

The event will also feature a post-conference workshop to discuss how to counteract a bioterrorism attack on a populated city in Asia. The workshop will have sessions on different bioterrorism agents, how they spread and how to contain a threat through first responder techniques. Emergent Biosolutions, a global biopharmaceutical company, will moderate the workshop.

"CBRN-E Asia Pacific is the leading CBRN-E event in Asia Pacific and is the largest gathering of high level government, military and industry CBRN-E experts," the SMi Group said. "CBRN-E Asia Pacific serves as a platform for decision makers, influencers and those at the forefront of current operations to come together to give attendees the crucial feedback and lessons learned. A vibrant exhibition runs parallel to the conference where vendors have the opportunity to showcase their latest products, technology and solutions for the CBRN-E community" ([Bio Prep Watch, 2012](#)).

**Title:** Discussion Of NSABB's Publication Recommendations For The NIH-Funded Research On The Transmissibility Of H5N1

**Date:** February 29, 2012

**Source:** [ASM Bio-Defense](#)

**Abstract:** Moderated by the Chair of the National Science Advisory Board for Biosecurity (NSABB), Paul Keim, Ph.D., this newly added session at the ASM Biodefense and Emerging Diseases Research Meeting will include discussions of the NSABB's recommendations for the publication of the controversial H5N1 research. This session will also provide an open forum for attendees to give their feedback on such policy issues as the appropriate mechanisms to allay public concerns about the safety of dual use research.

**Presentations will include:**



**NSABB Recommendations**

**Michael T. Osterholm, Ph.D., MPH**

University of Minnesota School of Public Health, Minneapolis, MN  
Director, Center for Infectious Disease Research and Policy (CIDRAP)





### **Government Response to the Recommendations**

**Anthony S. Fauci, M.D.**

Director, National Institute of Allergy and Infectious Diseases (NIAID)



### **Science's Response to the Situation**

**Bruce Alberts, Ph.D.**

Editor-in-Chief of *Science*



### **Perspective from an Investigator**

**Ron A.M. Fouchier, Ph.D.**

Erasmus MC, Rotterdam, Netherlands ([ASM Bio-Defense](#)).

**Title:** Thousands Of Scientists To Convene In Vancouver, B.C., For 2012 AAAS Annual Meeting

**Date:** January 23, 2012

**Source:** [AAAS](#)

**Abstract:** It is a question that frames the 21st century scientific enterprise: As the world population moves toward 9 billion, will it be possible to provide food, water, and energy for everyone without dangerously depleting natural resources and damaging the environment? These challenges will be the focus of the 178th AAAS Annual Meeting, which convenes from 16-20 February in Vancouver, British Columbia.

The meeting will feature thousands of top scientists, engineers, educators, policymakers, and science journalists from some 50 nations and a full spectrum of disciplines. More than 170 plenary addresses, lectures, seminars, and symposia—plus more than two dozen briefings and interview sessions for reporters—are scheduled under the theme “Flattening the World: Building a Global Knowledge Society.”

“The theme... is intended to focus the program on the complex, interconnected challenges of the 21st century and on pathways to global solutions through international, multidisciplinary efforts,” said AAAS President Nina V. Fedoroff in her [letter](#) of invitation.

The program will be rich and ambitious: Daily [plenary addresses and panels](#) featuring international science leaders such as climate expert **James Hansen**, director of NASA's Goddard Institute for Space Studies, and **Frans B. M. de Waal**, the Dutch behavioral biologist and author known for his work on the social intelligence of primates. [Lectures](#) by influential researchers in topics ranging from water security and volcanism to molecular motors and the genetic revolution. [Full-day seminars](#) featuring international panels of researchers focused on climate change in northern latitudes, understanding the universe, and the potential future impact of biology. [Symposia tracks](#) from a broad spectrum of disciplines, with special attention on energy, food security, communication, education, development, and international collaboration,

The AAAS Annual Meeting also will feature the traditional [Family Science Days](#), free and open to the public, on Saturday and Sunday, 18-19 February. Hands-on activities will focus on alien planets, sea creatures, rocketry, and other areas, and kids (along with their parents) will have the chance to meet and talk with scientists ([AAAS, 2012](#)).

**Title:** Sixty-Fifth World Health Assembly

**Date:** 2012

**Source:** [WHO](#)

**Abstract:** The Sixty-fifth session of the World Health Assembly will take place in Geneva during 21-26 May 2012. At this session, the Health Assembly will discuss a number of public health issues such as universal health coverage, Millennium Development Goals, noncommunicable diseases, mental disorders, nutrition and adolescent pregnancy. The Health Assembly will also discuss the programme budget, administration and management matters of WHO ([WHO, 2012](#)).

**Title:** Europe's Largest, General Science Meeting In Dublin This July

**Date:** February 4, 2012

**Source:** [Digital Hub](#)

**Abstract:** The Euroscience Open Forum (ESOF) - Europe's largest, general science meeting - will be hosted by Dublin this summer from the 11th to the 15th of July.

Held in a leading European city every two years the ESOF was last held in Turin in 2010 and Copenhagen will host then event in 2014. Dublin was awarded the honour of hosting ESOF in 2012, following an open competition.

The event is unique in the diversity of delegates who attend: it attracts top researchers from the natural sciences and the social sciences; business leaders; senior EU and government officials; and international scientific media. They come to discuss the best of European science and to address all of the current major global scientific challenges, including Energy, Climate Change, Food and Health.

The programme for this year's ESOF includes programmes on Science, Science 2 Business, Careers, a Social programme and a Science in the City Festival which will celebrate "where creativity and great science meet".

The Science 2 Business programme includes interactive workshops (which will debate the key issues facing nascent and existing entrepreneurs from a scientific background), advisory booths, business speed-dating opportunities, and a vibrant market place buzzing with the anticipation of potential collaborations.

The diverse range of speakers at the ESOF 2012 includes Rolf-Dieter Heuer, Director General of CERN, Jocelyn Bell Burnell, President of the Institute of Physics, Mary Robinson Former President of Ireland and Former UN High-Commissioner, Marcus du Sautoy, Professor for the Public Understanding of Science at Oxford University and five Nobel Laureates amongst others ([Digital Hub, 2012](#)).

# Bio Terror Bible

## EXPOSING THE COMING BIO-TERROR PANDEMIC

**BIOTERRORBIBLE.COM:** Bio-terror and pandemic related conferences have occurred on a regular basis since 9/11, but have recently started occurring on a monthly basis since March of 2011.

**Title:** Bioterrorism: Homeland Defense: The Next Steps

**Date:** February, 2000

**Source:** [Rand Corporation](#) (PDF)

**Abstract:** For many years, the United States has been concerned about domestic acts of terrorism using conventional weapons and explosives. More recently, these concerns have grown to include other weapons of mass destruction (WMD), particularly use by terrorists of chemical and biological weapons. Recent independent assessments have concluded that as a nation we are ill-prepared to deal with such events. This Symposium, focused on the Los Angeles area, was held to help remedy that situation by seeking to identify the elements of an integrated homeland defense against Bioterrorism, identifying critical gaps in current federal, state, and local government policies, programs, and capabilities, and offering suggestions on how a relatively cost-effective homeland defense program might be achieved.

This Symposium was organized and hosted by RAND with assistance from the staff of the many sponsoring organizations, and particularly by the Los Angeles County Terrorism Early Warning Group (TEWG).

Speakers included experts from all levels of government and the private sector. Nobel Laureate Dr. Joshua Lederberg of Rockefeller University, and Mr. Brian Jenkins, noted RAND expert on terrorism, gave invited luncheon talks. Mr. Jenkins also gave a wrap up talk at the Symposium's end. Ms. Cindy Conlon of RAND and ASIS (American Society for Industrial Security) was the Symposium Moderator. Opening remarks for this Symposium were given by Dr. Jeffrey Isaacson, Vice President, RAND, Mr. Dallas Jones, Director of California State Emergency Services, and Dr. James Wilburn, Dean, School of Public Policy, Pepperdine University.

This document is comprised of highly condensed summaries of each of the talks presented at the Symposium held on February 8, 9, and 10, 2000 at the Four Points Hotel in Santa Monica, California. The entire Proceedings of the Symposium, as well as the names and associations of participants, can be found on the RAND National Security Web Site ([RAND Corporation, 2000](#)).

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**Title:** Last Chance For Biological Arms Control?: Peace Activists Urge North-South Cooperation On Verification Protocol

**Date:** July 19, 2001

**Source:** [Sunshine Project](#)

**Abstract:** What may be the final round of negotiations on a protocol to strengthen the Bioweapons Convention will start in Geneva on Monday, July 23rd. With a hard-fought compromise text on the table, all eyes are now on the US, which has repeatedly said it may back out. Without a show of strength from the rest of the world, the US may do for the Bioweapons Convention what it has already done for the ABM Treaty – pull the plug on international arms control efforts.

Global protections against biological weapons and six years of diplomatic work are at stake. Signed in 1972, the BTWC bans biological weapons; but contains no means to verify that governments are in compliance. In 1995 governments began to create a Verification Protocol to make the BTWC enforceable for the first time ever. This important process was scheduled to be complete this year. Failure would signal that major powers are no longer in agreement against biological weapons, lowering the political penalty for engaging in offensive biological weapons research and possibly signaling the beginning of the end of the global ban.

### Non-Profit Peace Groups Appalled

"The Americans regularly deplore the danger of biological weapons and are pouring hundreds of millions into biodefense research," says the Sunshine Project's Edward Hammond, "If the US does another Kyoto and abandons these negotiations, it could be very destabilizing." The rest of the world will be forced to conclude that the US will go it alone on verifying compliance with the Bioweapons Convention. Sunshine Project attorney Susana Pimiento, who will attend the negotiations, says "Espionage and intelligence won't solve the biological weapons problem. That is a dangerous paradigm that could provoke belligerence and international crises. Cooperation on a strong UN verification regime can do far more than cruise missiles ever will. Political will to conclude the Verification Protocol is sorely needed."

Recently, an alliance of more than 100 international organizations including Friends of the Earth, Greenpeace, Third World Network and many others, called "on all governments to undertake every effort to reach consensus on a strong Protocol", a view that was also shared by the European Parliament in a resolution it passed. But with attention focused on Star Wars and the climate negotiations in Bonn, US backsliding on bioweapons control has escaped intense public scrutiny.

### Europe's Special Role

Jan van Aken, a Sunshine Project biologist based in Hamburg, says that Europe has a critical role: "It is now time for Europe to make it unmistakably clear to the Bush Administration that they will not tolerate a third treaty to be trashed by short-sighted American policy." The US argues that the Protocol is too weak and would not catch violators of the Bioweapons Convention. But the US obstructed the negotiations during the past six years and played a major role creating the watered-down compromises it now says are weakness. "Rather than pandering to the US," says van Aken, "Europe must reassume the banner of its earlier positions on key issues, work with the rest of the world to reconcile differences and make the text stronger, bringing a verification system with global

support to the critical November-December Review Conference where the Protocol's future will be decided."

### **More Details**

For a detailed but concise discussion of outstanding issues in the Protocol text, please consult the briefing paper [The Biological Weapons Convention and the Negotiations for a Verification Protocol](#) available on our website ([Sunshine Project, 2001](#)).

**Title:** Bioweapons Negotiations Focus On Forum, Not Substance

**Date:** December 6, 2001

**Source:** [Sunshine Project](#)

### **Abstract: Latin America Shines. Europe is Uninspired. A Quarrelsome U.S. Blocks Progress.**

With talks scheduled to conclude tomorrow, December 7th, the outcome of the Fifth Review Conference of the Biological and Toxin Weapons Convention (BTWC) remains in doubt. Presently the Review Conference appears unlikely to move ahead on substantive issues because countries are instead focusing on if and when to continue negotiations. Missing opportunities for more meaningful progress, the BTWC 5th Review Conference's "major decision" could be little more than an agreement to continue to talk. Key unresolved issues on substance include an unqualified reassertion of the BTWC's prohibition on all forms of biological warfare, the development of biological weapons for the Drug War ("Agent Green"), and the relationship between the BTWC and the Cartagena Biosafety Protocol.

Hopes for substantive progress were reduced early by a destructive US opening salvo on November 19th. A US Under Secretary of State sent from Washington unilaterally declared the Verification Protocol "dead, dead, dead" and announced US opposition to new multilateral efforts to stop development of biological weapons. On the other hand, China and several members of the Non-Aligned Movement (NAM) are advocating for the Verification Protocol and insist that the mandate of the Ad Hoc Group that negotiated the Protocol over the past six years is still alive. This conflict overshadows other discussions and could even prevent consensus on a Final Declaration, causing a complete failure of the Review Conference.

In a move to overcome the deadlock, the European Union (EU) tabled a compromise that would allow for ongoing negotiations while burying the Ad Hoc Group. This proposal includes annual Conferences of the Parties as well as the establishment of expert groups. While some NAM countries have expressed interest in this proposal, the US still has not openly announced its position.

While the EU sought to be a peacemaker in the harsh conflicts between the NAM and the United States, it was in a defensive posture from the outset, hesitant and intimidated by US belligerence. Outshining other regions on proposals to address substance, the new ideas are coming from Latin America, whose diplomats are trying to advance important proposals under difficult circumstances.

### **Scope**

Perhaps the most vexing issues confronting the Review Conference are the problems posed by so-called "non-lethal" biological weapons. These include new biochemical crowd control agents and genetically engineered anti-material microbes that degrade and destroy supplies and infrastructure, such as fuel, asphalt, plastics, and food stocks. These types of weapons are being researched by the US, at the Pentagon's Joint Non-Lethal Weapons Program and the US Naval Research Laboratory, and possibly by other countries.

While such weapons clearly fall within the BTWC's Article I prohibition on all biological weapons, formulating language to address this new technology in the Conference's Final Decision is proving difficult. Taking the lead are Brazil, Chile, Peru, and Mexico, who are encouraging the strongest possible decision with respect to the Convention's scope and have argued for inclusive and unambiguous language for the Final Declaration. Mexico, in particular, is working actively to ensure that the Conference asserts that biological warfare prohibitions apply everywhere in countries' territories, including all areas or under their jurisdiction or control.

### **Agent Green**

A number of countries have expressed concern about the development of biological weapons (called "Agent Green") to forcibly eradicate narcotics-producing crops such as coca, poppy, and cannabis. In an embarrassing gaffe, US Ambassador Don Mahley told diplomats that the US opposes Latin America's proposals on scope and needs items like Agent Green "to fight the Medellín Cartel". The Ambassador was confused because the Medellín Cartel, a drug smuggling group prominent in the 1980s, was dismantled by law enforcement a decade ago and its leader, Pablo Escobar, was killed in a 1993 shootout with Colombian police. Delegates privately pointed out the US double standard: While the US would surely condemn Iraq if it used biological weapons in its internal conflict with Kurds, it refuses to accept proposals that would restrain US promotion of biological or chemical weapons in the Drug War or "internal" conflicts.

The Review Conference may have missed the opportunity for action on Agent Green. Proposals by Mexico to explicitly link development of Agent Green with BTWC concerns are being fought by the US and are unlikely to succeed. A proposal by South Africa to require transparency and declaration of activities at facilities capable of producing arms such as Agent Green may be put off for consideration at a future meeting.

### **Biosafety Protocol**

After a US proposal for countries to adopt national biosafety laws, but not under any binding international framework, a number of countries proposed Final Declaration text to build linkages between the BTWC and the Cartagena Biosafety Protocol, a new legally-binding biosafety agreement opened for signature last year. Mexico and Peru encouraged States to use ideas from the Cartagena agreement to prevent acquisition and transfer of biological weapons, and for countries to study ways that the BTWC and Biosafety Protocol can be implemented together. These proposals also ran afoul of a nay-saying US delegation, which objects to multilateral efforts in general, and the Biosafety Protocol in particular because it incorporates the Precautionary Principle, a concept used in international law and policy to encourage countries to exercise caution (to protect the environment and human health) when adopting new technologies, particularly in the life sciences. But given the degree of influence that US biotechnology industry exercises over its government's policy, the US opposition isn't surprising.

More disturbing is the European Union's failure to rally behind the Latin American proposals and defend the Precautionary Principle, which is said to be a cornerstone of EU biosafety policy. If Europe fails to correct its course in the final phase of Review Conference negotiations, it will be the second time in a month that the EU has buckled under US pressure to abandon the Precautionary Principle, raising questions about the EU's true commitment to supporting international efforts to scrutinize biotechnology risks. In November, US delegates returned from the Doha, Qatar meeting of the World Trade Organization (WTO) gleeful that they had convinced the EU not to include the Precautionary Principle in new agriculture negotiations ([Sunshine Project, 2001](#)).



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**Title:** Bioethics And Bioterrorism

**Date:** February 28, 2002

**Source:** [The Journal of Philosophy, Science & Law](#)

**Abstract:** A day-long conference was convened to discuss bioethical concerns arising in the wake of September 11th and the subsequent anthrax mailing incidents. As Jonathan Moreno, Director of the Center for Biomedical Ethics at the University of Virginia, observed in his opening remarks, while substantial funds have been earmarked for combating bioterrorism, none of those funds have been set aside for studying the ethical, social and legal implications of the research and practices to be developed. It was, Moreno remarked, the stated purpose of the conference to “begin the public dialogue.”

The opening remarks of Arthur Caplan, Director for the Center for Bioethics at the University of Pennsylvania, echoed Moreno’s concern that this developing area of bioethics not be overlooked. Caplan identified a number of what he described as “systematic and thematic issues” posed by the recent acts of bioterrorism and by U.S. efforts to combat bioterrorist threats. It was around these themes that the five panels of the conference were organized: “Biological Weapons: Threat and Response”; “Vaccination Policy and Prevention”; “Patents, Profits and Public Health”; “The Duty to Face Danger”; and “Science in the Interest of National Security.”

Among the panels, some further themes emerged: a blurred line between treatment and research in emergency response care; the need for diverse public involvement in ethics dialogue; and the risk that ethics will be compromised in times of war. The following report covers the conference speakers in order of presentation.

### Biological Weapons: Threat & Response

#### The New Jersey Anthrax Crisis

The first speaker, Dr. Eddy Bresnitz, is a State Epidemiologist for the state of New Jersey, and was integrally involved with the state’s response to the anthrax contamination incidents. Bresnitz made the point that New Jersey, as well as the nation as a whole, had been preparing for bioterrorism, albeit with minimal resources. The thinking on bioterrorism, he said, was shaped by the preparations for a pandemic influenza outbreak, which some thought would be more likely to occur than a bioterrorism incident. Further, it shares some of the same public health concerns as bioterrorism responses. Among the common issues, Bresnitz named allocation of treatment, supplies and vaccines; coordination of response; and surveillance of outbreaks.

While prior thought had been given to public health and medical responses, Bresnitz believed that decision-makers primarily acted without any deliberate ethical analyses to guide them. The ethos, Bresnitz suggested, was one of “do the right thing.” The difficulty, he contended, was that the “right thing” changes based on the information available at the time, resulting in a “moving target.”

Bresnitz then explored anecdotally the substantial ethical questions that arose in New Jersey regarding post-exposure prophylaxis policy. Bresnitz attempted, in his anecdotal overview, to give the participants a “taste of what happened in New Jersey.” The three main issues Bresnitz discussed were: treatment allocation; acting in the face of medical uncertainty; and coercion in treatment.



In terms of treatment allocation, a question arose relating to who should receive prophylactic medication. The guiding ethos, according to Bresnitz, became one of risk analysis—those at the most risk should receive the medication. A fairly straightforward approach, as long as resources aren't scarce.

Additionally, questions need to be answered concerning appropriate and effective treatment. As there were no developed civilian treatment protocols, there was uncertainty about appropriate prophylaxis, duration of medication, and best first-line medication in the event of exposure. A related issue was that the vaccine, which had previously only been available to the military, had yet to be approved by the FDA for general use. Ultimately, acting on preliminary data, New Jersey extended the period of prophylactic antibiotics to 100 days. The vaccine and antibiotic combination treatment was brought in and administered by the CDC, which gave rise to Bresnitz's third concern: coercion.

According to Bresnitz, the CDC provided the drug as part of an "investigational new drug trial," requiring all participants to sign informed consent releases. Bresnitz suggested that the forms sought to limit the government's liability, and had a statement to the effect of 'refusing the treatment may result in [the patient's] death'. The situation is inherently coercive, and therefore ethically problematic in Bresnitz's view.

In closing, Bresnitz observed that these issues were a fertile area for policy and ethics debate, and that while he had posed many questions, he offered few answers. In many ways, however, Bresnitz's speech was a microcosm of the core issue that would be discussed throughout the day: bioterrorism presents problems for which we don't yet have systems of response.

For example, Bresnitz pondered at one point, what if the disease had not been anthrax, but highly contagious smallpox? Would we be obligated to treat those exposed, potentially against their will, as a matter of public health? Would we forcibly quarantine, through use of police powers, those refusing medicines? We do have public health systems for dealing with communicable disease, but rarely do we press citizens to use experimental medications, even for the common good.

A number of audience members pointed out that there were analogous systems which addressed some of the issues presented. One example cited was emergency medicine where a treatment protocol may be used which has not been proven when the emergent condition fails to respond, or has no known treatment. Emergent conditions can also be inherently coercive, as the patient's life is often at risk. The point several audience members made, and which was echoed by speakers throughout the day, is that while we may be facing new problems, medicine, public health, and bioethics have an existing platform of relevant work on which to build.

### **"Psychological Responses to Bioterrorism: It's About Time"**

The second speaker, Dr. Greg Saathoff, serves as the Executive Director of the Critical Incident Analysis Group at the University of Virginia. Saathoff sought to distinguish the critical difference between bioterrorism and other forms of terrorist attacks using more conventional "NICE weapons" (Nuclear, Incendiary, Chemical, and Explosive). Unlike NICE weapons, which are self-limiting in impact by the nature of the weapons materials themselves, bioterrorism weapons can be deployed without victims knowing they are under attack. Further, some of these weapons have the capacity to reproduce. Bioterror weapons, therefore, are not limited (or fixed) in time. Bioterror carries on, and can advance substantially before we are even aware of a problem.

Saathoff echoed the concerns of Bresnitz, stating that we do not yet have an establishment for dealing with bioterroristic infectious disease. Not only do we lack models and studies, but we already know we have "limited surge capabilities," generally defined as the ability to provide emergency care for situations resulting in mass injuries or mass casualties. Further, vaccine availability and response protocols may be insufficient.

The psychological response to such insidious attacks, and to the fear created by them, depends on a number of factors articulated by Saathoff: leadership response; medical resources; media; law enforcement; communications; individual responses; community responses; and governmental emergency responses.

Saathoff indicated that there are seven elements to the leader's response that would help determine the psychological response of the public. First, the leader must have clear and effective communication skills. Second, the existing level of trust in the leader at the time of the response is vitally important. (Similarly, Saathoff stated that the leader's charisma was critical, which he defined as the leader's ability to be trusted and be followed.) Third, the leader's relationship with, and understanding of, the media is important. The leader must understand that the media's critical role is not adversarial, but one which more rapidly fosters solutions. The fourth element is the leader's previous training and experience dealing with bioterrorism. Fifth, the leader must have a thorough understanding of the interaction and availability of local, state and federal response systems. Sixth, the leader must be able to transcend partisanship and lead the entire group or entire society. And finally, the leader must be able to express what Saathoff calls "vigilant hope," an ability to deal with the uncertainty presented by the situation and move forward.

Some of the other factors Saathoff mentioned rather briefly. The "medical resources" factor, he said, will turn on the following: experience of clinicians, especially in managing disasters and working with incomplete information; relationship of medical institutions with the government, the media and public alliances; having and using a communication network to disseminate information about the bioterrorism event; and adequate mental health resources, not just for victims, but also care providers. For the "media" factor, the critical elements are: their own leadership; the level to which the community trusts them; their bioterrorism knowledge and training; their prior experience with disasters; their relationship with medical service providers; their local and national perspective, and ability to see the relationship between the two arenas; and their ability to recognize their role as one which fills an important information void for the public. For "law enforcement", the key elements are: prior experience with disasters; bioterrorism training; relationship with the media; and sensitivity to their own medical and other needs. For "communications," Saathoff identified the critical elements as: the level of overlap or redundancies; prior disaster experience; and surge capability.

In closing, Saathoff remarked that although predicting the psychological response of the public to bioterrorism attacks should be sought after, the ability to do so will depend largely on the aforementioned factors.

### **A Brief Response**

Colonel Dr. Art Anderson, Chief of Clinical Pathology at the U.S. Army Medical Research Institute of Infectious Diseases, addressed some of issues raised by Bresnitz and Saathoff. Col. Anderson suggested that his comments represented his own views, and not those of the Department of Defense or USAMRIID.

Anderson pointed out that the military makes top-down, scenario-driven response plans, so that when catastrophic events occur, be they bioterrorism or battle, there is an institutional protocol in place to handle the response. He added that a mechanism is needed for promoting and disseminating the military response protocols for bioterrorism incidents for the benefit of the public, something which was not done well with the anthrax exposures. One problem, Anderson noted, was that there is a stigma attached to military research because its dissemination and discussion among scientists and physicians might be restricted.

### **Conference Discussion & Questions**

Following the presenters' speeches, much of the discussion focused on how consent forms could be developed for an investigational trial performed in response to a terrorist incident. The general consensus among audience members and speakers was that state and local communities must be involved in all levels of planning the network of response, including such items as consent forms. Several audience members, as well as Col. Anderson, urged an open, inclusive process similar to the one currently used by local Institutional Research Boards, a process which Anderson said needed to avoid becoming "politicized."

Additionally, many were concerned by the nature of the CDC prophylaxis response to the anthrax incidents by making medication and vaccination available as an "investigational new drug trial." As Bresnitz observed, many individuals in New Jersey felt they were being experimented upon, rather than prophylactically treated. Bresnitz asserted that it might be problematic ethically, because you are acting with intent to benefit, but portraying the treatment as research, because the treatment is not yet

proven or licensed. Anderson suggested that perhaps a contingency licensing scheme be developed for use in the event of emergencies.

## **Vaccination Policy & Prevention**

### **“Approaching Vaccines for Agents of Bioterrorism”**

The second panel started with the comments of Dr. David Weiner, a molecular immunologist and professor in the Department of Pathology at the University of Pennsylvania, who touched briefly on the types of bioterrorist threats we might face in the future and how we might develop appropriate vaccines to reduce our risk.

Weiner noted that there were numerous agents which could be used in a bioterrorism attack, but that recent attention had been focused on “chimeric viruses” as a possible new threat. A chimeric virus is typically created out of two or more separate viruses, for example, a combination of smallpox and the Ebola/Marburg virus. The terrorist goal could be to create a virus which would spread rapidly and that would be highly lethal.

Weiner expressed the opinion that the threat posed by chimeric viruses might not be as grave as many seemed to think. First, he pointed out that, paradoxically, chimeras may be less lethal than their counterparts are separately (or perhaps only as lethal). What makes smallpox so lethal, for example, is its lengthy incubation period (leaving hosts infectious, but not yet symptomatic), which is eliminated by a cross with fast-acting Ebola. Thus, if hosts die quickly, then the chimeric disease may not spread as well as the original smallpox. In addition, Weiner said that it was not clear that there would be a need for new vaccines, as the current multi-strain vaccines may be more effective than many assumed initially.

What is clearly needed is a vaccine strategy for containment, Weiner claims. He added that prophylaxis is typically given to confirmed cases, caregivers, hospital staff, mortuary staff, and others who have had contact with infected persons. Those at risk from vaccination itself include persons with suppressed immune systems (organ transplant recipients, cancer patients, etc.), people with autoimmune disorders, the elderly, and infants. Weiner pointed out that many of these risk groups were larger than when we last battled smallpox in the 1960's, so that the exact impact of a current vaccination campaign is harder to predict.

Weiner concluded by setting out some possible future directions. First, he mentioned the possibility of future gene-based vaccines as possibly both safer than current live vaccines, and with a stronger response than current non-live vaccines. In addition, gene-based vaccines could be very complex, so it would be difficult for bioterrorists to “engineer around” the vaccine.

### **Bioterrorism & Public Health**

Dr. Phillip Nieberg, Associate Director for Public Health in the Global AIDS Program at the Centers for Disease Control, followed Dr. Weiner with a macro-scale perspective of issues that might arise in respond to a bioterrorist attack. It was noted that Dr. Nieberg's remarks are his own views, and do not reflect the opinions of his employer.

Nieberg framed the issues presented by bioterrorism as public health issues, and applied a different set of ethical standards than many bioethicists, who have tended to treat bioterrorism as more of a medical issue. The ethics of public health and the ethics of biomedicine can vary, with biomedicine typically acting to protect the interests of the individual and public health acting on behalf of the state to protect the health and well-being of citizens generally. The “public” in “public health,” Nieberg asserted, refers to the public decision-making process, not the intended target of the policies.

As an illustrative example, Nieberg pointed to the public health laws that mandate vaccinations for school children. From a public health view, the citizens are somewhat inconvenienced, but the health of the community is improved—even for those students who are exempted for religious reasons. It is, he said, a classic case of the tension between a public interest and an individual one.

Nieberg gave three examples where public health concerns would likely arise, and where public health ethics might be most appropriate: rationing of medical resources; mobility restrictions; and dealing with human remains. With rationing of resources like vaccines, there are many possible

metrics that could be used, he said. Some common ones are “first come, first served,” “ability to pay,” or a lottery. When you take into account public health concerns, other metrics may come into play, based on societal or role values: “first responders,” “medical care providers,” “those at highest risk,” or exposed familial caregivers. A situation may arise where the government may have to take “control of health care supplies” to ensure a uniform society-wide policy, Nieberg proposed. The implied question, it seems, is when should we, as a society, have a discussion about that possibility.

The next example was that of the state using its police powers to restrict mobility to prevent or reduce exposure. The modern analogues for bioterror attack response may well be the systems for infectious disease control already in place, or those used in the not-too-distant past: isolation/quarantine; voluntary curfew; prohibition of mass gatherings; and compulsory treatment or vaccines. Again, a sharp example of balancing individual freedom with community protection—a classic public health concern.

The final example, which Nieberg briefly touched on, was that of safe disposal of human remains. Previous epidemics lead to requirements for rapid burial or embalming, even though often risk was actually fairly low. Public health here seeks to balance religious, cultural and personal beliefs with protection of the larger community.

In conclusion, Nieberg stated that all the concerns he raised require public discussion, with a transparent process for decision making and policy setting. Good communication with the public, as well as refined risk assessments when information is unavailable, will facilitate the process.

#### **“Of Utmost National Urgency: Lynchburg Colony Hepatitis Study, 1942”**

Dr. Paul Lombardo, director of the Law and Medicine Program at the Center for Biomedical Ethics at the University of Virginia, asked the question “do ethical touchstones change (or go out the window) during war?” An attorney and historian, Lombardo used the 1942 Lynchburg Colony Hepatitis Study as an example and cautionary note in exploring his question.

Lombardo presented the following case: in the early 1940’s, the Yellow Fever Vaccine had been given to US soldiers, which resulted in an outbreak of jaundice, with one death for every 461 cases. In 1942, a study began at the Lynchburg Training School and Hospital in Lynchburg, Virginia to examine the link between the vaccine and jaundice. Researchers at the Training School injected approximately 190 children with a host of potential pathogens, including the vaccine and infected blood from jaundice patients. The research was conducted upon the institutionalized children without informed consent, and the goal was to observe the children to see if they became ill. While some of the children had permanent liver damage, none died. Ultimately, the researchers concluded, correctly, that the serum being used to produce the vaccine was contaminated with hepatitis and causing jaundice. The serum was modified, the study was published, and there was no public outcry over the treatment of these children as unwilling experimental subjects.

As Lombardo pointed out, such work was considered ethical at the time, some even invoking language to describe the children as “draftees in the war against disease.” Certainly, Lombardo said, there are uncomfortable parallels to the Nazi practices roundly and rightly condemned by the world, but the Lynchburg experiment was not as malignant in its intent and purpose as the acts of the Nazis. It does, however, help to illustrate the question Lombardo asked the audience to consider: do ethical rules change to accommodate the exigencies of war?

It seems, Lombardo concluded, that we always answer the question in retrospect, rather than by proactive discussion. Public health and war are a volatile mix, he said, adding that “combining official secrecy and the fear of disease can yield ethically problematic situations.”

### **Patents, Profits & Public Health**

#### **Lessons from the Cipro Case**

Arti Rai, a professor of law at the University of Pennsylvania Law School, sought to raise some “provocative points” about the potential effects of “breaking” pharmaceutical patents under the “Takings Clause” of the U.S. Constitution.<sup>[4]</sup> Under certain circumstances, the Takings Clause allows the federal government to take the property of persons (including corporations, who are an “artificial person” in the eyes of the law) by utilizing their power of eminent domain. The government is required

to pay some amount of “just compensation,” an amount often determined by litigation.

During the initial anthrax incidents, the Department of Health and Human Services suggested that the government might use eminent domain and the Takings Clause to “break” the patent on Cipro, a broad-spectrum antibiotic produced by the Bayer pharmaceutical company. Breaking the patent, according to Rai, would allow the government to arrange to have the drug manufactured without compensating Bayer beyond the amount determined as “just compensation.” With this threat in the background, the government then negotiated a lower-than-market price for the purpose of creating a Cipro stockpile.

While the recent WTO Agreement on Trade Related Aspects of Intellectual Property (TRIPS) may preclude such takings, the federal government can and has taken patents previously, said Rai. Typically, she added, the “just compensation” was about ten percent of the monopoly sales price.

Rai is concerned that the threat of breaking a patent with the Takings Clause may have a chilling effect on pharmaceutical research and development. One alternative that has been proposed is the “voluntary buy-out,” whereby the government buys the right to manufacture the drug from the patent holder. The obvious concern is that there will be extortive pricing in the case of an emergency or disaster situation, like a bioterrorist attack.

Rai proposed a model where public funds are used for research and development, much like the government currently does with National Defense. This model seems to make particular sense in light of bioterrorism concerns, as bioterrorism touches on issues of defense and public health, Rai added.

This model, Rai suggests, would stimulate research on vaccines and antibiotics, which are not often big moneymakers for pharmaceutical companies. It would be important, she added, to evaluate closely which cases would get public funding, so as not to waste research funds.

### **Scarce Resources, Triage and Bioterrorism**

Dr. James Childress, Professor of Religious Studies and Faculty Member of the Center for Biomedical Ethics at the University of Virginia, raised the question of what to do in situations of scarce medical resources, and proposed that we consider a triage model in advance. Childress referred directly to an article by Pesik, et al. as a starting point for considering a triage model, though he made some general comments as well.

Generally, Childress said, triage models are expressly utilitarian, and thus come under attack by biomedical ethicists that tend to support more individualistic and egalitarian viewpoints. Yet, Childress argued, we do have a prima facie duty to maximize good within the constraints of our ethical principles. He would put forth, then, a triage model for doing so.

Childress pointed out that a frequent metric for determining who receives treatment first is those who can satisfy medical utility concerns. Obviously excluded, he continued, are constructs and categories such as ethnicity, age, gender, disabilities, antisocial behaviors, and socioeconomic status. Coupled with these distinctions are factors such as the likelihood of responding to treatment, especially to minimal treatment, if medical resources are limited.

Such a model can be constructed, Childress argues, in an ethical framework, but it must be acceptable and justifiable to the public. We must have a collective consensus, he argued, on how to treat and how to react to bioterrorism.

Childress argued that the dialogue on triage response systems must begin, and it must consider the following issues in addition to those mentioned above: justice; public cooperation, even in face of increasing illness; possibility of a weighted lottery favoring those with essential medical and social functions; and what we do when infected victims become transmission vectors, or unwitting “secondary agents of terror.”

### **Pharmaceutical Companies & Pricing**

Dr. Patricia Danzon, an economist and professor at the Wharton School of Business, made some brief comments on issues regarding pharmaceutical companies, drug pricing, and patents. Economists, she said, use the criterion of “economic efficiency” to evaluate policy. Economists will

favor the policy that delivers the greatest value from limited resources from the perspective of both current and future users.

Danzon argued that the pharmaceutical industry is unique, as pharmaceutical companies must spend a substantially higher amount of earnings on research and development than any other industry. In addition, the pharmaceutical companies have a high cost to market, many research failures, a lengthy approval process for products, and like other companies, responsibilities to shareholders for return on investment. Patents, she argued, protect the pharmaceutical companies' investments, and should only be broken in rare circumstances.

One such circumstance, Danzon suggested, would be where there is a production restraint preventing access to a medication, rather than a price restraint. Her particular concern for a chilling effect is in the development end. Who, she asked, would risk money developing a vaccine, if the patent might get broken? Who should take the risk? While Danzon had no suggested model, she clearly felt that patent breaking was too heavy-handed a tactic, and that other solutions should be considered.

### **Research & Health System Efforts**

Dr. William Haseltine, CEO of Human Genome Sciences, was brief but posed several questions to consider. First, he observed that the US is attempting to deal with bioterrorism threats by increasing funding to the National Institutes of Health (NIH). This, he said, means that we have turned the health system to war efforts. We should ask, Haseltine asserted, "Is this good for us?" This is a dialogue we need to have, even if we have it post facto, Haseltine argued.

He encouraged people to think through the issues involved, and not to act without careful consideration. As examples of the kinds of issues to consider, Haseltine posed the following questions:

1. Should we use this effort to reinvigorate our research programs in defense?
2. Should we use this effort to reinvigorate our research programs in public health?
3. Should there be vaccine research for anti-biowarfare?
4. What will be the reactions of universities? How will their policies affect this research?
5. Should graduate students be working on biowarfare issues?

Although Haseltine did not offer solutions to these questions, he suggested that the governmental responses to these issues were overly complex and viewed governmental complexity as a barrier to solutions.

### **The Duty to Face Danger**

An introduction given by Dr. Ann Hamric, professor of Nursing and Faculty Member of the Center for Biomedical Ethics at the University of Virginia, preceded the full presentations by the panel members. Hamric noted that the panel chose to focus on the duties of doctors and nurses, rather than all possible responders, and to conceive of the "duty to face danger" as a continuum construct.

### **HIV as a Model for Epidemic Coping**

Dr. Leslie Blackhall, Director of Research at the Center for Biomedical Ethics at the University of Virginia, argued that the medical community's response to HIV disease might offer a good model for coping with epidemic illnesses, such as those which might result from a bioterrorism incident. Early reaction from medical personnel, Blackhall said, was typically overreaction: fear of contagion, reluctance to provide care, extreme precautions to avoid contact, and other unnecessary behaviors. Blackhall argued that the risk of contagion and the reasonable desire to avoid contagion are not uncommon aspects of the medical profession. There were predictions that the medical system would never be able to respond to HIV-positive patients, she said. Yet, the medical system held and began to treat HIV patients appropriately.

What led to the medical system's success in responding, Blackhall argued, was not volunteerism by physicians and medical professionals who felt it was their duty to provide care. The actions of selfless

volunteers were only a part of the solution, she claimed. Blackhall identified four factors integral to the medical system finally responding in an appropriate fashion. These factors are: 1) the illness was seen as a crisis by affected communities, who organized and mobilized resources to cope, including demanding care; 2) involved institutions, including medical schools and professional organizations, created disincentives for those who refused to provide treatment; 3) incentives became available for those who did provide treatment, including funding for research and palliative treatment; and finally, 4) early predictions about high levels of contagion were groundless.

From the HIV experience, Blackhall concluded that in order to provide adequate care, there must be: volunteer care providers, responding to a call to duty; disincentive and incentive systems, with the support of the medical establishment; an effort to reasonably protect health care providers; and a perception of opportunity for those who provide care, be it prestige, wealth, or some other reward.

### **Reconsidering the Common Law Rule of “No Duty”**

Dr. Eric Feldman, professor of law at University of Pennsylvania School of Law, argued that bioterrorism concerns might lead us to reconsider the Common Law rule regarding the duty to help. According to Common Law, there is no duty to render aid or assistance to a person in need, even if one could do so with no risk to oneself.

Feldman argued that there are a number of mechanisms that could be used to encourage health care providers to face danger by reframing the duty to care, both legally and ethically. For example, Feldman pointed out that health providers could be required to provide care in the event of an emergency through licensure requirements. In addition, while individual doctors don't have a duty to provide care, hospitals and other institutions sometimes do, particularly for emergent situations. Feldman says the current legal regime, including the requirements of the Americans with Disabilities Act, seek to protect doctors, while still encouraging them to act. The system provides “weak incentives to be a hero,” he says.

So far, only the Model State Emergency Health Powers Act (MSEHPA) had systematically addressed the duty to care issues. While the MSEHPA is not law, it does serve to offer guidance to state legislators, and may influence the types of laws and schemes enacted. MSEHPA would allow states to require health care providers to provide care in the event of emergencies, Feldman noted. The duty does vary by risk, he continued, since no one would want a scheme which would overburden health care providers.

In closing, Feldman offered five reasons why the current situation offers an opportunity to reconsider the Common Law rule. First, it is the right political climate, in light of the development of the Model Act, as well as the recent bioterrorist concerns. Second, if provision of care is only linked to bioterrorism incidents, you could end up with people who put themselves in the zone of risk to get access to other needed care. Third, reliance on the ethos of “volunteerism” will be insufficient to provide adequate care. Fourth, the hierarchy of medicine means that doctors can refuse to treat, but medical aides and nursing staff cannot, without the risk of being fired. This hierarchy results in the least empowered providers being required to face dangers that others do not have to face. And finally, the duty should be imposed to reflect the societal status and professionalism of health care providers. Feldman added that even though we would require the duty, health care providers should be given credit for acting well in the face of danger.

### **The Ethical Duty to Face Danger**

Dr. Hamric presented the view that facing danger was ethically obligatory for the health care professional. This obligation, she argued, is rooted in the professional roles of physicians and nurses and in the prominent status accorded these professions. In addition, this obligation stems from the responsibility of having increased skills and knowledge to help others, which intertwines with the duty



of beneficence.

In nursing, Hamric noted, there is a strong presumption of a duty to treat, and of an altruistic duty to provide care. This presumption (really, a set of presumptions) is part of the culture of nursing, and those who refuse are informally sanctioned within the community of nurses.

Additionally, Hamric said, the presumption is reflected in both the 2001 American Nursing Association Code of Ethics and in the 1994 American Nursing Association Risk versus Responsibility Statement. Both documents encourage nurses to provide care in the face of danger, though they recognize that nurses also must be concerned with their own safety, Hamric noted. One of the difficulties nurses will face in evaluating appropriate levels of risk to self, Hamric concluded, is that bioterrorism may present situations where the risk is not known.

### **Medicine & Limits**

Dr. Walt Davis, the Director of Education for the Center for Biomedical Ethics at the University of Virginia, examined the “duty to face danger” as it applies to doctors. He noted that the earliest American Medical Association (AMA) codes of ethics referred to a doctor’s “responsibility to provide treatment”, but that this language was dropped from the code in the 1950s.

Following the events of September 11th, the AMA’s Council on Ethical and Judicial Affairs issued a “Declaration of Responsibility” addressing the responsibility of doctors to respond to bioterrorism.[\[10\]](#) The Declaration uses an aspirational, not mandatory, form of a voluntary pledge. The Declaration used language which implies a strong duty, such as “bound,” “fulfilled this obligation,” and to “(a) pply our knowledge and skills when needed, though doing so may put us at risk.”

“Risk,” Davis noted, is undefined. It seems clear, he added, that the “duty to face danger” is context dependent, and balances the risk of harm to the provider and the potential benefits to the patient. To adequately render service and “face danger”, there is an expectation on the part of health care providers that they will have adequate information, a coherent plan, protective mechanisms in place, and that the obligations of others (such as government agencies and officials) will be met, Davis said. Davis concluded by echoing the remarks of Dr. Hamric, saying that the difficulty we currently face is that we are in a time of unprecedented uncertainty regarding possible threats and harms.

### **Conference Discussion and Questions**

In discussion with conference participants, there were two primary issues of concern. A number of participants were concerned about laws or regulations “forcing” health care providers to provide care. Most participants framed the issue as one of “who wants to be treated by someone who doesn’t want to treat them, and what kind of care can you expect?”

The other main issue related to which health care providers can refuse to provide care and which cannot, and what the ethical implications of that difference might be for providers, a point raised by Dr. Feldman in his talk. For example, where a doctor might be free to refuse care, a physician’s aide or orderly might not, particularly where instructed to provide said care by a doctor or nurse. The doctor might refuse without the risk of losing her job, but the situation may differ for an orderly. In addition, Dr. Hamric made the point that the doctor usually is in a position to dictate the conditions under which the care will be provided, whereas the nurse or orderly is not typically in that position. Many participants asserted that this differential authority in decision-making must be addressed for a fair and ethical response system to be developed.

### **Science in the Interest of National Security**

#### **“Ethics of Enrolling Vulnerable Subjects into Research”**

Dr. Jason Karlawish put forth what many might cast as a contrarian viewpoint regarding research with vulnerable subjects. Karlawish, a Professor of Medicine in the Division of Geriatrics at the University of Pennsylvania, made a case for including physically frail and cognitively impaired subjects in research designed to protect us (and them) from bioterrorist incidents.

Karlawish argued that it is time for researchers to recognize that while some people are more vulnerable than others, scientists can do a vulnerable population a grave disservice by developing medicines and treatment protocols whose efficacy in treating vulnerable patients is not known. By utilizing only the healthiest subjects, no information is gathered regarding the efficacy of the experimental protocol on less healthy people.

Using a hypothetical example of a frail, cognitively impaired 75 year old woman, Karlawish asked, "Will the fruits of bioterror research be available to her?" Karlawish argued that researchers typically put the vulnerable last in line for experimental trials, but that they should be moved more towards the front.

In identifying some barriers to vulnerable people's opportunity to participate in research, Karlawish pointed out the following: the institutions which care for vulnerable persons are usually have a preponderance of low-paid staff, and are frequently understaffed besides; health issues in the frail, elderly, and other wise vulnerable person introduces experimental confounds and increases the risk to the subject; and issues of cognitive impairment obviously complicate the issue of consent (or proxy consent for which there is little to no guidance). In addition, Karlawish said, we must be able to ensure access to the "fruits of research" and find a way to monitor the trial efficacy and safety for the vulnerable population.

### **Government Reorganizes to Respond**

Gary Ellis is the Executive Secretary of the National Science and Technology Council, a Cabinet-level group by which the President coordinates the diverse parts of the Federal research and development enterprise as regards science and technology. It is, Ellis said, a "virtual agency" comprised of the President, Vice President, Cabinet members, and Agency heads. Since September 11th, the NSTC has been focusing on the vulnerabilities "laid bare" by the terrorist attacks.

Ellis said that Dr. John Marburger III from the Office of Science and Technology Policy had taken the lead in creating an interagency taskforce designed to address concerns about terrorism. The working groups were created focusing on chemical and biological weapon detection and response, radiological weapon detection and response, protection of vulnerable systems, and social, educational, and behavioral sciences. In addition, there is a rapid response group for emergencies.

The NTSC, Ellis said, has been planning for a systemic approach, and has received a tremendous amount of advice regarding terrorism, especially from citizens not working directly for the government. The Department of Defense, Ellis noted, has formalized the process for garnering advice, and has received over 1200 responses to a Broad Agency Announcement soliciting ideas.

The NTSC's office role is to form partnership, and is currently focusing on short-term issues, he said. The fight against terrorism "needs new tools," and the NSTC is trying to coordinate that effort, according to Ellis.

### **Ethics of Research in Classified Contexts**

Dr. Jonathan Moreno examined the issue of how to ethically conduct human subjects research in classified contexts for the military. He briefly reviewed some of the previous classified research where soldiers and citizens were used in experiments, sometimes with the knowledge and consent of those affected, and sometimes without valid consent.

One of the problems, Moreno asserted, is that the Food and Drug Administration is not set up to handle approving drugs for biowarfare defense. Some options have been explored, including an informed waiver process, an expedited process for “countering bioterrorism initiatives,” and a supplementary approval process based on historical experience, clinical experience, and other available information. No clear system has yet been established, according to Moreno.

The return in the U.S. to what Moreno characterized as a “Cold War stance” raises concern that an increase in classified research is likely to occur. Two items which Moreno pointed out as particularly important in this context were: 1) the granting of authority to the Department of Health and Human Services to classify information as “secret”; and 2) the government’s failure to put into place human subject research guidelines for classified research. Moreno pointed out that the federal Advisory Committee on Human Radiation Experiments, of which he was a member, had suggested some guidelines for classified research, but none had yet been adopted. Moreno expressed concern that failure to develop an ethical framework for bioterror and bioweapon research would contribute to a “legacy of mistrust” which already overshadows much of the federal government’s medical experimentation history.

### **Preparation for Bioexposure Research**

For the final presentation, Dr. Caplan sought to comment and build on much of what other speakers had said before him at the conference. Caplan, who drew on his experiences with the federal Advisory Committee on Gulf War Veteran’s Illnesses, stated that the current system is not set up to undertake bioexposure research and that the system, as it is now, will not adequately protect subjects.

In the Gulf War, Caplan noted, studying the soldiers who became ill was difficult as there was no baseline health data, no rigorous assessment those soldiers who mustered out, poor or nonexistent records detailing who was exposed to which agent and in what area of the battlefield, and no sampling or analysis of the environment in which the soldiers were fighting. These hurdles to good epidemiological analyses and response planning are substantial. Data must be gathered to answer these types of questions if we are to be able to respond to bioexposure attacks, or even to environments made toxic by conventional attacks, such as the ones on the World Trade Center.

Caplan argued that we must change the way we view warfare, and we must look at the battlefield from an epidemiological view. We must be prepared to learn from disaster, he said, and have a system in place to consider the effects for five, ten, or twenty years down the road. Caplan concluded that we cannot design an experiment that will teach us how to respond to bioterrorism, but we can prepare to learn as much from natural and man-made disasters as possible, and to use that experience to prepare for the future.

### **Commentary**

In this author’s opinion, what was particularly informative about this conference is how well it drove home the point that we are just at the beginning of a dialogue regarding the appropriate societal and medical response to bioterrorism, and the scope of the discussion to be had. This conference, and hopefully this report on it, makes clear the current need to continue the necessary dialogue in earnest. If this dialogue had been scheduled earlier, the bioethics field might have been in a better position to advise on secure research methods, attack response protocols, and other important issues. It is, of course, easier to look back and criticize in hindsight ([The Journal of Philosophy, Science & Law, 2002](#))

# Bio Terror Bible

## EXPOSING THE COMING BIO-TERROR PANDEMIC

**BIOTERRORBIBLE.COM:** Bio-terror and pandemic related conferences have occurred on a regular basis since 9/11, but have recently started occurring on a monthly basis since March of 2011.

**Title:** No World Health Assembly Approval For Expanding Smallpox Virus Research

**Date:** May 25, 2005

**Source:** [Sunshine Project](#)

**Abstract:** At the 58th World Health Assembly (WHA), which ended today, the leadership of the World Health Organization (WHO) was requested by member states to reconsider proposals to expand risky smallpox research and to reassess the process by which such research recommendations are produced.

WHA discussed, but did not approve, experiments to genetically engineer smallpox and other proposals that would dramatically expand risky experiments with live smallpox virus. Rather, it “noted” a report containing the proposals, after the WHO Secretariat “especially welcomed” and took “special note” of the serious cautions and criticisms made by member governments. WHO must now move to resolve the issues that governments have raised and which it has committed to address.

Most of the countries speaking about smallpox research expressed serious concerns. These included calls for ongoing research to be terminated, for greater transparency, for a new destruction date for remaining virus stocks, and for strengthened WHO oversight mechanisms that are more independent and scientifically and regionally balanced.

According to the Sunshine Project and Third World Network, WHO's leadership has been given a mandate to radically restructure its oversight of smallpox in the interim before destruction of the remaining stocks. This includes the terms of reference, membership, and procedures of its Advisory Committee on Variola Virus Research (or "VAC", for Variola Advisory Committee). Once restructured, the VAC then needs to reconsider past recommendations and seek approval from the WHA before any research that goes beyond the existing limits (established in 1994) is allowed.

Governments requested that WHO smallpox oversight be transformed into a stronger and more independent process that separates research proponents from those who perform reviews, that is regionally-balanced, and which incorporates heretofore neglected perspectives of public health, biosafety, and preparedness for deliberate outbreaks of disease. NGOs say that major world regions are underrepresented or entirely unrepresented on WHO's current committee. WHO should heed the calls from governments and NGOs for this problem to be addressed.

Third World Network and the Sunshine Project are requesting that WHO take the following steps in response to the concerns and objections raised about smallpox virus research at the WHA:

**1.** Launch a transparent and balanced process to overhaul the VAC, including its terms of reference, membership, and procedures, aimed to:

- a.** Prevent research proponents from reviewing their own proposals,
- b.** Incorporate neglected areas of expertise, such as public health and biosafety,
- c.** Achieve regional balance among members and advisors,
- d.** Institute a separate, and transparent, laboratory safety review procedure
- e.** Reform committee modalities to create greater transparency, including that of subcommittees, and to create more frequent, high quality reporting to WHA.

**2.** Once the VAC has been so restructured, it should reassess its prior recommendations, forwarding revised ones to the WHA for its consideration and (dis)approval.

**3.** In keeping with prior WHA resolutions and as requested by member states, WHO should prepare a resolution to fix a new destruction date for all remaining stocks of smallpox virus.

**4.** Prepare a WHO Secretariat study for the next WHA on options for how possession of live smallpox virus may be deemed a crime against humanity following destruction of remaining stocks ([Sunshine Project, 2005](#)).

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**Title:** The Threat Of Bioterrorism: Private Sector Coordination With Governments

**Date:** October 16, 2007

**Source:** [EWI](#) (East West Institute)

**Abstract:** Public-private cooperation in combating the proliferation of weapons of mass destruction (WMD) and the threat of bioterrorism will be addressed by a panel of experts convened by the EastWest Institute (EWI) and Columbia University on Thursday, October 18, 2007, from 4 pm to 6 pm at the Columbia University School of International and Public Affairs, Room 1512, 420 West 118th Street, New York City.

There are deep flaws in the structure of global regimes designed to control access to WMD technology and sharp disagreement among major powers over the use of sanctions and military force to address potential threats. Often overlooked is the role of the private sector in issues surrounding WMD proliferation and responding to the threat of bioterrorism.

Distinguished leaders from business and the United States government will join Columbia and EWI experts to explore how the private sector can collaborate with governments to devise an effective response to these threats.

### The presenters are:

Dr. Mark Chandler  
Chairman and CEO, Biophysical Corporation  
Member of the Board of Directors, the EastWest Institute

Brandon D. Declet  
Counsel to the US House of Representatives, Committee on Homeland Security

Stuart Gottlieb  
Lecturer in the Discipline of International and Public Affairs, Columbia University

Dr. Greg Austin  
Vice President at the EastWest Institute and Director of EWI's Global Security Program and Policy Innovation ([EWI, 2007](#)).

# Bio Terror Bible

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**BIOTERRORBIBLE.COM:** Bio-terror and pandemic related conferences have occurred on a regular basis since 9/11, but have recently started occurring on a monthly basis since March of 2011.

**Title:** Two-Day Training Session Simulates Pneumonic Plague Attack

**Date:** September 14, 2009

**Source:** [Bio Prep Watch](#)

**Abstract:** Members of U.S. humanitarian aid groups learned how to deter biological terrorist attacks during a recent two-day training session in Montreux, Switzerland.

The Red Cross and other groups, including the UN's World Food Program and the World Health Organization, participated in the International Bioterrorism Response Coordination Exercise (Black ICE II).

The training, featuring an attack scenario involving pneumonic plague, was designed to facilitate the international cooperation of health, security, transportation and law enforcement sectors.

Pneumonic plague is almost invariably fatal, unless the infection is treated quickly.

Representatives of the North Atlantic Treaty Organization, the Counter-Terrorism Committee of the Organization of the American States, and the Organization for Security and Co-operation in Europe also participated in the training session ([Bio Prep Watch, 2009](#)).

**Title:** Prevention Of Biothreats: A Look Ahead

**Date:** October 6, 2009

**Source:** [UPMC](#)

### Introduction

On October 6, 2009, the Center for Biosecurity of UPMC organized a one-day conference, *Prevention of Biothreats: A Look Ahead*, in Washington, DC. The conference was hosted in collaboration with the Commission on the Prevention of Weapons of Mass Destruction Proliferation and Terrorism, and it was funded by the Alfred P. Sloan Foundation.

This meeting convened nearly 200 administration officials, policy analysts, scientists, health leaders, congressional staff members, and members of the media to discuss strategies for countering biological weapons threats.

During the conference, participants discussed a wide range of U.S. government programs, international approaches, and non-governmental efforts aimed at preventing the development and use of biological weapons, including: arms control and multilateral agreements; efforts to prevent the unlawful acquisition of materials, equipment, and information; deterrence, intelligence, and surveillance; and improving resiliency to biological attacks as a means of dissuasion and prevention.

Given the wide range of activities and professional groups engaged in biothreat prevention efforts, it is rare for the entire community to convene as a single group. This meeting accomplished that—the first



step toward generating promising new ideas and directions for biothreat prevention and promoting greater coherence in the biopreparation community.

This summary report has been prepared by the staff of the Center for Biosecurity of UPMC to provide a brief synopsis of each day's panel discussions and individual presentations.

We invite you to explore this conference website, where you will find videos of the day's discussions as well as the conference agenda, speaker bios, attendee list, and background readings.

### **Welcome and Introductory Remarks: Thomas V. Inglesby, Deputy Director, Center for Biosecurity of UPMC**

In his opening remarks, Dr. Inglesby said that the purpose of the conference was to “have a serious discussion about biothreat prevention issues across a community of people who work on distinct elements of biological threat prevention and response.” He then asked the audience to consider 4 propositions to help guide the day's discussion.

1. Biological threats are an increasingly serious and complex threat to national security. The most recent National Intelligence Estimate identified the threat of bioterrorism as the intelligence community's most significant WMD-related concern. This is because the knowledge, equipment, and pathogens required to construct a biological weapon (BW) are now globally dispersed, and there is no single technological methodology chokepoint or process that can be regulated to prevent the development of BW.

Historical evidence confirms the effectiveness of BW, on both a small scale such as the 2001 anthrax attacks, and on a large scale, such as the trials and demonstrations undertaken during the development of offensive BW programs in the U.S., UK, and former Soviet Union. Multiple assessments and reports from the U.S. government, World Health Organization, and others have concluded that, absent a rapid and robust response, a BW attack could result in thousands of casualties or many more.

Equally concerning is the extant intention to utilize BW against the U.S. and other countries, as recently voiced by Al Qaeda (corroborated by discovery of evidence of BW development following the U.S. invasion of Afghanistan in 2001) and radical environmentalist organizations. Barriers to the development have fallen quickly as necessary technologies advance and grow more accessible. It is now plausible for a terrorist organization, a small group, or even an individual to develop BW.

2. The nuclear nonproliferation and prevention model does not apply to BW; BW requires its own framework. As a point of reference, Dr. Inglesby briefly outlined the primary goals of nuclear non-proliferation and prevention efforts:

1. Secure fissile material around the world.
2. Secure highly technical information about nuclear weapons development.
3. Prevent the emergence of new nuclear states and nuclear testing by utilizing inspections, aerial reconnaissance, and sophisticated seismic, hydroacoustic, radionuclide, and other forms of monitoring.
4. Prevent the divergence of nuclear fuel into the weapons cycle.
5. Maintain current and seek new treaty arrangements (NPT, Fissile Material Cut-off Treaty, CTBT) in pursuit of these policy goals.
6. Maintain deterrence through nuclear forensics, attribution, and the promise of retribution.

BW prevention requires a different model because biological material (pathogens) cannot be accounted for or regulated in the same way as fissile material. Unlike the relatively scarce supply of weapons grade uranium and plutonium in the world, biological materials are widely available in labs and in nature. It will be increasingly possible to synthesize organisms *de novo*. Additionally, nuclear weapons and technologies are almost universally controlled by countries, whereas biotechnologies and materials are widely dispersed and are not generally controlled by governments.

Detection and identification of BW development is considerably more difficult than detection of nuclear weapons. Nuclear facilities have specific infrastructure requirements and signatures, and they are discoverable through a variety of techniques. In contrast, biological science facilities are small, heterogeneous, widely dispersed, and almost all are dedicated to benevolent science aimed at improving health and economic well being. It will, therefore, remain exceptionally difficult to detect a BW development facility.

Nuclear forensics is a well established field, and the U.S. government is confident in its ability to attribute a nuclear attack to a foreign power. However, as evidenced by the tremendous effort required to attribute the Amerithrax attack, BW forensics is far more complicated and challenging.

Because there are significant differences the nuclear weapons threat and the BW, BW requires a unique approach to prevention that takes into account the unique nature of the threat.

3. The goals of the bio-prevention framework should be feasible. Dr. Inglesby observed that the day's discussion would be most valuable if it focused on *feasible goals* of bioprevention first, followed by evaluation of the merit of those goals, i.e., will a particular policy or program bring us closer to achieving these goals. He offered the following questions for consideration:

1. Can we control biological materials or information in ways that slow BW development or use?
2. Can we improve transparency among countries on BW issues?
3. Can we strengthen moral and behavioral norms against BW?
4. Can we improve intelligence and interdiction?
5. Can we improve surveillance and international collaboration on infectious disease monitoring and response?
6. Can we improve forensics, attribution, or deterrence?
7. Can we strengthen biodefense as a means of dissuasion?

For each, Dr. Inglesby stressed the need to evaluate the feasibility, potential benefits, and potential adverse consequences.

4. Success is not guaranteed. Dr. Inglesby noted finally that, regardless of the prevention strategy pursued by the U.S., effectiveness cannot be assumed. Therefore, it is fundamentally important to national security that the U.S. bolster its capacity to respond rapidly and effectively to a BW attack.

### **Panel 1: Approaches to Controlling Materials and Information**

***What role does strict control play in lowering the risk that biological weapons will be developed and used?***

Moderator: [Gigi Kwik Gronvall](#), Senior Associate, Center for Biosecurity of UPMC

1. [Carol Linden](#), Principal Deputy Director, Biomedical Advanced Research and Development Authority (BARDA), Office of the Assistant Secretary for Preparedness and Response, Department of Health and Human Services
2. [Gerald Epstein](#), Director, Center for Science, Technology, and Security Policy, American Association for the Advancement of Science (AAAS)
3. [Michael Gelles](#), Senior Manager, Deloitte Consulting LLP
4. [David Franz](#), Former Commander, USAMRIID, Member, National Science Advisory Board for Biosecurity
5. [Carrie Wolinetz](#), Director of Scientific Affairs and Public Relations, Federation of American Scientists for Experimental Biology (FASEB)

### **Overview & Background**

This panel examined whether attempts to control biological materials and information play a role in reducing the risk that biological weapons will be developed and used. Such efforts are based on the

premise that, without access to pathogens, relevant information, and/or laboratory equipment, potential U.S. adversaries will be unable to make biological weapons.

Current efforts to control materials and information include U.S. export controls and the U.S. Select Agent Program, as well as personnel reliability programs, enhanced physical lab security, and guidelines on the communication and development of dual use information. The U.S. Select Agent Program registers and monitors laboratories and personnel that research and transport 82 human, animal, and plant pathogens. It is administered by the U.S. Centers for Disease Control and Prevention (CDC), the U.S. Department of Agriculture (USDA), and USDA's Animal and Plant Health Inspection Service (APHIS).

Personnel reliability programs are based on the model of the nuclear weapons complex and seek to ensure that those who work with biological agents of concern are trustworthy. Such programs may entail rigorous background checks and psychological tests prior to granting an individual clearance to work in a laboratory that handles select agents. There are no national standards for personnel reliability at this time, but some have called for this. Panelists discussed the efficacy of such controls and offered suggestions for improvement.

### **Greater Control of Science Is Not the Answer**

Dr. Epstein emphasized the idea that, in contrast to nuclear technologies, it is no longer possible to limit the proliferation of expertise in the biological sciences or the materials, facilities, and infrastructure to support research, development, and invention in the field. The practice of life sciences is now ubiquitous in the world. Dr. Epstein asserted that this is, fundamentally, a positive progression in science, and that further development of the biological sciences should be promoted for its potential to improve the quality of life around the world. Because of that potential, Dr. Epstein observed, restricting the use of biology is not only impossible, but is also immoral. Rather than control, Dr. Epstein promoted the idea of monitoring and transparency, suggesting that security should be the product of international engagement, collaboration, and enhanced epidemiological capabilities. Dr. Linden concurred, noting that, since the insider threat cannot be reduced to zero, efforts to enhance security should focus on creating an open and transparent global bioscience community.

### **Dangers of Over Regulation of Science**

Dr. Linden provided an overview and history of the personnel reliability and lab security efforts in the U.S. Select Agent Program. She explained that, substantial strengthening of lab security has been made since the anthrax attacks of 2001. However, some of the regulations enacted to date have produced unanticipated and unfortunate consequences. Dr. Linden said that, without justification, the addition of more restrictions and security measures may be overzealous.

Dr. Franz noted that the U.S. should continue to lead in the field and to lead the way in achieving security without hindering scientific research. To that end, he encouraged the avoidance of approaches that constitute "fighting the last war" and that will lead to over-regulation of science; he advocated for creation of international partnerships in life sciences and health as being ultimately better for U.S. security, as it will lead to greater transparency among nations and development of better, shared biodefenses.

### **Positive Workplace Culture: More Effective than Personnel Reliability Programs**

Dr. Gelles described the challenges of combating the insider threat, focusing specifically on the problems that attend (often misguided) efforts to screen for reliability using psychological testing. He explained that because people and their circumstances are dynamic, and screening methods are static, screening is not the most effective approach. The more likely scenario is one in which a personal crisis leads a previously "secure" or reliable employee to engage in a potentially dangerous behavior that screening will not catch. The approach advocated by Dr. Gelles is one of astute and attentive management and collegial work relationships that support recognition of important changes in colleagues. A secure laboratory workforce is one in which crises that may lead to potentially dangerous changes in personnel are noticed and addressed. Dr. Franz also emphasized that a positive work culture in the life sciences will provide more security than additional regulations.

## **Sensible Approaches to Regulation of Life Sciences**

Dr. Wolinetz said that the scientific community is already committed to the nation's security, is already subject to significant regulation and oversight, and is not, on principle, opposed to regulation. She urged, however, that regulations should directly support the goal of security. Dr. Wolinetz called for a review of current systems, with an eye toward identifying areas in need of improvement, and she discouraged a reactive approach that leads to implementation of hastily construed new regulations in response to crises.

## **Panel Conclusions**

The panel concluded that nuclear laboratory security programs simply do not apply to the biological sciences and that biodefense requires its own approach, emphasizing the need for expanded international partnerships and enhanced capabilities in surveillance, diagnostics, and the life sciences around the world. While the insider threat cannot be eliminated, the U.S. government should be wary of creating unnecessary regulations and overly aggressive personnel reliability programs. Instead, the focus should be on making adjustments to the current system and building a culture in the life sciences that supports community-wide commitment to security.

## **Panel 2: International Treaties and Agreements**

***What role do they play in increasing transparency and setting moral and behavioral norms among nations?***

**Moderator:** [Gigi Kwik Gronvall](#), Senior Associate, Center for Biosecurity of UPMC

1. [Jonathan B. Tucker](#), Senior Fellow, James Martin Center for Nonproliferation Studies, Monterey Institute of International Studies
2. [Julie E. Fischer](#), Senior Associate, Global Health Security Program, Henry L. Stimson Center
3. [Terence Taylor](#), Vice President for Global Health and Security, Nuclear Threat Initiative, President of the International Council for Life Sciences
4. [Kenneth Luongo](#), President, Partnership for Global Security

## **Overview & Background**

Panelists examined the role that international treaties and agreements may have in increasing transparency between nations and in setting moral and behavioral norms. The international treaties and agreements that address biological threats include the [Biological Weapons and Toxins Convention](#) (BWC), the [International Health Regulations](#) (IHR), and [United Nations Security Council Resolution \(UNSCR\) 1540](#).

**For background, Dr. Gronvall outlined a brief history and the purpose of these agreements:**

1. The BWC is the first treaty to ban an entire class of weapons. While it upholds a strong moral norm, some nations have flagrantly disregarded it. This led to an attempt to create a verification regime, which failed in 2001. Many experts believe that, unlike nuclear weapons, verification for biological weapons (BW) is not possible. Currently, states parties hold a series of annual expert reviews focusing on BWC implementation.
2. The IHR were originally intended to minimize disruption of trade in times of disease emergencies. In 2005, the World Health Organization (WHO) revised the IHR, transforming the agreement to serve as a means of enhancing transparency about disease outbreaks among nations. Under the IHR, nations are required to report an event constituting as a "public health emergency of international concern" to the WHO.
3. UNSCR 1540 aims to ensure that no state or non-state actor is a source or beneficiary of weapons of mass destruction (WMD) proliferation. Under full implementation, the actions of each state are intended to strengthen international standards relating to the export of sensitive materials and to ensure that non-state actors do not gain access to nuclear, biological, or chemical weapons, their means or delivery, or related materials.

### **Strengthening the BWC**

Dr. Tucker emphasized that the BWC embodies a norm against the hostile use of disease. While necessary, this norm is not sufficient to promote adherence to the treaty. The BWC lacks a Secretariat and robust institutional mechanisms for support, limiting the ability of some countries to actively participate in the BWC process. Dr. Tucker encouraged policymakers to focus on practical ways of building capacity to address the full spectrum of disease threats within the BWC expert group meetings. He explained the need to expand the current process of data exchanges with decision-making capabilities so states can reach agreements on the understandings and interpretations of the treaty, respond to changes in technology, and establish a set of best practices for biosecurity rules and regulations.

### **Universality and the BWC**

Dr. Tucker addressed the issue of universality, explaining that there are currently only 163 states that are parties to the BWC, whereas the Chemical Weapons Convention (CWC) has 188 states parties and has been in force for only 12 years. He also explained that the 3-person Implementation Support Unit in Geneva is supposed to promote universality of the BWC but lacks the resources to do so effectively. Dr. Tucker also emphasized that once the majority of countries have signed and ratified the BWC, it may become part of customary international law, meaning it will bind all states whether or not they are actually member parties. It is difficult to assess which member states are actually in compliance with the BWC due to the lack of verification measures.

### **Challenges In Implementing the IHR**

Dr. Fischer highlighted how awareness of failed reporting of disease during the SARS outbreak catalyzed the adoption of IHR 2005. She explained how the revised IHR requires its 194 member states to develop the capacity to detect, report, and respond effectively to a public health crisis in near real-time (24-48 hours), and how the WHO now collects information from non-governmental organizations (NGOs).

The current H1N1 outbreak illustrates ways in which the IHR has been successful, as nations did indeed report cases as they occurred and the WHO responded accordingly. While the outbreak revealed the new emerging norm to share information, many countries took “non-evidence based actions,” such as restricting trade and travel without scientific bases. This highlighted a challenge in the implementation of the IHR— namely the economic ramifications for countries that do report cases.

The main challenge in implementing the IHR is a state’s ability to develop the capacity to detect, report, and respond to public health crises; otherwise the system is only as good as its weakest link.

### **BW Non-Proliferation Is Not Nuclear Non-Proliferation**

Mr. Luongo addressed transnational challenges and the differences inherent in nuclear and biological weapons non-proliferation. While many nuclear non-proliferation efforts have been successful, prevention of biological warfare must be approached independently of the nuclear agenda. He stated that an arms control model would not work in biological nonproliferation, mainly because of the variety of stakeholders and the constant change in technology. Mr. Luongo identified a need to create partnerships within the private sector, and particularly within the biotechnology industry. He also noted that a more appropriate goal for the BWC may be to develop more confidence building measures, as opposed to seeking verification.

Mr. Luongo further suggested that, just as the United Nations Security Council has put forth resolution 1887 to focus on nuclear non-proliferation, a similar treaty should be developed to address the proliferation of biological weapons. He focused on the need to develop a framework for identifying existing biological threats, but not mandating implementation of a treaty. Treaties should allow for flexible implementation among countries, leaving detailed implementation up to individual governments.

### **Networks Enhance Prevention**

Mr. Taylor discussed examples of effective networking and explained how their success is attributable to stakeholders’ ability to control and set priorities. To ensure their effectiveness, prevention strategies must be complemented by direct actions in the private sector and among non-state actors. Networks

involving a variety of stakeholders, in addition to governments, can increase information sharing. He ultimately advocated for government support of such networks. Mr. Taylor offered examples of disease surveillance networks now operating that cross national lines, such as those in the Mekong Delta and the Middle East.

### **Panel Conclusions**

The panelists concluded that the United States government can act in a variety of ways to strengthen the BWC and clarify reasons for state membership. The international community should also explore how to provide more incentives to countries to report emergencies without opening themselves up to economic damage. While governments must be engaged in dialogues, there is a role for non-state actors and the private sector in setting moral and behavioral norms among nations. All agreed that non-proliferation of BW requires a specifically tailored approach, rather than one based on nuclear non-proliferation efforts.

### **Luncheon Conversation: Intelligence Community Efforts at Detecting or Interrupting Biological Weapons Development or Use**

1. [Lawrence Kerr](#), Senior Advisor for Biological Sciences, National Counterproliferation Center, Officer of the Director of National Intelligence
2. [Col. Randall Larsen](#), USAF (Ret), Executive Director, the Commission on the Prevention of Weapons of Mass Destruction Proliferation and Terrorism
3. [Linda Millis](#), Director, Private Sector Partnerships, Office of the Director of National Intelligence

### **Overview and Background**

This panel provided an overview of the progress and challenges faced by the intelligence community in preventing the development and/or use of biological weapons (BW). Historically, the U.S. has both overestimated and underestimated other nations' BW because of the difficulty in discerning the intent and motivation behind the purchase of dual use equipment for a laboratory. Col. Larsen illustrated the nature of this uncertainty by providing a recent example: On October 6, South Korea reported that North Korea has the ability to produce BW using 13 different agents, including smallpox. While gathering intelligence on nation-states is not easy, gathering intelligence on activities of non-state actors in time to prevent or respond to an attack is even more difficult.

### **Current Efforts**

The panelists first provided an overview of the different types of intelligence, and described how various disciplines are applied to the task of collecting information. They distinguished among several types of intelligence:

1. HUMINT (Human Intelligence) information gathered by interpersonal contact
2. SIGINT (Signals Intelligence) information acquired through radar, telemetry, and interception and analysis of communications, such as emails, phone calls, and text messages among and between person of interest
3. MASINT (Signals and Measurement) qualitative and quantitative analysis of specimens, such as DNA, metallurgy, and electromagnetic radiation
4. GEOINT (Geo Spatial) information gathered by use of imagery to confirm consistency between images and other intelligence information.
5. OSINT (Open Source) the majority of useful intelligent information actually exists in open source materials. This is particularly true for life sciences.

### **Intelligence Workforce**

The panelists stressed that, to further enhance bio-intelligence capabilities, more life scientists are needed in the intelligence workforce--they pointed out that the approximately 150 members of the conference audience outnumbered those currently working on BW intelligence. Dr. Kerr also noted that, although many young scientists enter the intelligence arena, once they do so, they find it difficult to maintain their laboratory skills and expertise, and many are drawn to more profitable private sector positions. One current retention effort is a sabbatical program that allows scientists to return to academia to refresh their skills and conduct laboratory research. Dr. Kerr also described a proposal to create a program similar to the military's ROTC; the proposal calls for creation of a reserve corps of

life scientists who could maintain their security clearances and be called to work during a national crisis.

### **Private Sector Partnerships**

The panelists acknowledged that it would be impossible to develop internal expertise in the life sciences equal to that available externally, and emphasized that the intelligence community must focus on outreach to private sector partners that can enhance biological intelligence capabilities. Such a program currently exists, but it is limited to private sector experts with security clearances; Ms. Millis suggested that this type of outreach should be expanded and not necessarily limited by security clearance. The panel noted private sector willingness to partner with the federal government in national security initiatives.

### **Panel Conclusions**

The discussion of this panel focused sharply on the need to build and maintain a life sciences workforce within the intelligence community and to leverage the vast expertise of the private sector to bolster biological intelligence capabilities. However, while preventing development and use of BW is a high priority for the intelligence community, personnel and funding are not adequate to the task. In closing, the panelists observed that U.S. scientists should be aware that they may be targets of foreign intelligence efforts, and called for an emphasis on maintaining a culture of safety and security within the scientific community.

## **Presentation 2: Kenneth A. Myers III, Director, Defense Threat Reduction Agency**

### **Overview**

The Defense Threat Reduction Agency (DTRA) is a Department of Defense (DoD) agency charged with safeguarding the United States and its allies from the threat posed by weapons of mass destruction (WMD), including biological weapons (BW). For the past 15 years, DTRA's Cooperative Threat Reduction (CTR) program has worked to identify and secure WMDs or their components in countries around the world, focusing primarily on nuclear weapons in the former Soviet Union.

Mr. Meyers described his firsthand knowledge of the BW threat, which is based on his experience at the Hart Senate Office Building, where he was a congressional staff member during the anthrax attack of October 2001. Mr. Myers said that DTRA's biological threat reduction strategy is largely predicated on overlaying the successful Nunn Luger CTR model onto the BW threat. DTRA has constructed reference laboratories in partner nations such as Armenia, Azerbaijan, and Georgia in order to secure "dangerous pathogens." Mr. Myer's said that such aid should be expanded to failing states in order to deny America's adversaries' access to the materials necessary to construct a biological weapon.

### **Future Directions**

A recent National Academy of Sciences report entitled [Global Security Engagement: a New Model for Cooperative Threat Reduction](#) recommended expanding CTR programs to include additional geographic locations and threats. Although the original CTR model was effective in Russia, Mr. Myers asserted that future programs must be sensitive to cultural differences as well as the practical needs of a partner nation in order to be effective. Next generation CTR programs will likely include an increased emphasis on global health security, with particular emphasis on assisting with the promotion and development of infectious disease surveillance systems. Mr. Myers noted that existing CTR programs do have a history of engaging with the Russian bioscience community, and plans to maintain and expand those relationships. Finally, future DTRA initiatives will utilize a flexible framework of bilateral and multilateral partnerships in order to maximize America's investment.

## **Panel 3: Surveillance, Attribution, and Deterrence**

***What roles do early outbreak warning systems, forensics, and deterrence play in lowering the risks of biological weapons development and use?***



**Moderator:** [Jennifer Nuzzo](#), Center for Biosecurity of UPMC

1. [Anne Harrington](#), Executive Director, U.S. National Academies of Sciences' Committee on International Security and Arms Control
2. [Louise Gresham](#), Executive Director, Health Security and Epidemiology, NTI Global Health and Security Initiative
3. [Jenifer Smith](#), Former Section Chief, Federal Bureau of Investigation (FBI) WMD Directorate
4. [John Vitko](#), Former Director of Biological and Chemical Countermeasures for the Science and Technology Directorate of the U.S. Department of Homeland Security

### **Overview**

This panel considered whether and how disease surveillance, microbial forensics, and methods of deterrence are useful to lower the risks of a biological attack. Ms. Harrington and Dr. Gresham highlighted successes and challenges in building disease surveillance systems, while Dr. Smith discussed the emerging field of microbial forensics and its promises and limitations in attribution of biological weapons (BW) to specific adversaries. Finally, Dr. Vitko discussed ways in which the U.S. might deter attacks with biological weapons.

### **Disease Surveillance Systems: Potentially Useful if Well Designed**

Ms. Harrington and Dr. Gresham argued that disease surveillance systems, which are designed to detect and monitor naturally occurring outbreaks, could also help countries to prevent BW development. They also observed that surveillance systems must be a collaborative effort among nations. Dr. Gresham commented that it is particularly important that the country providing disease outbreak information benefits from the surveillance system because some countries fear that the information they collect will not benefit them directly.

It was noted that the influenza tracking system is currently the best available in disease surveillance—it is a global system and is used annually. Ms. Harrington suggested that the broader bio-surveillance community build on the success of influenza surveillance, and design a robust system capable of tracking many diseases.

### **Microbial Forensics: Necessary, but not Sufficient for Attribution**

Dr. Smith addressed the use of microbial forensics for attribution, which entails tracking microbes based on their genetic and other scientifically distinguishable characteristics. Because microbial forensics does not lead directly to the source of an intentional biological agent release, attribution is the joint responsibility of science, law enforcement, and intelligence communities working together. Dr. Smith emphasized that the field of microbial forensics is still in its early years, and it requires continued development, research, and oversight. Currently, the White House Office of Science and Technology Policy (OSTP) is developing a strategy for research and development of microbial forensics.

### **Deterrence: Possible, but Challenging**

While Dr. Vitko believes it may be possible to deter the use of biological weapons, it is critical to understand the inherent challenges. The first challenge is the difficulty and impracticality (indeed, impossibility) of limiting the illicit transfer of materials, technologies, and knowledge, given that the proliferation of dual use biotechnologies is accelerating at a pace comparable to that of information technologies. While global advances in biotechnology promise myriad positive health and economic benefits, the task of trying to control these new technologies out of concern for their potential danger is daunting at best. Dr. Vitko further suggested that it may be immoral to prevent dispersion of beneficial technologies, and he emphasized the need to strike a constant balance between advancing new technologies to derive great benefit vs. attempting to limit or control them out of concern for safety and security.

Dr. Vitko identified attribution as the second challenge to deterrence and dissuasion as the third. The third major challenge in deterrence, though perhaps the most easily overcome, is convincing potential adversaries that they have more to lose than gain in attacking with biological weapons. Addressing this challenge requires making the necessary case to Congress and the American people that the

biological threat requires investment in preparedness and response systems. When investments are made in these areas, it lets an adversary know that the success of an attack will be uncertain. To widen this uncertainty, we need to put policies in place that hold nation states responsible for harboring groups or individuals that commit bioterrorist attacks. Finally, we need to strengthen the social and cultural norms against bioterrorism.

### **Panel Conclusions**

National response efforts to outbreaks depend on an accurate understanding of a disease and how it is spreading. Therefore, shared and transparent disease reporting systems are necessary for effective response to outbreaks. The U.S. government should build upon current disease surveillance efforts, such as the Cooperative Threat Reduction (CTR) program, but new approaches are needed as well. Microbial forensics can play an important role in identifying and attributing the source of a biological attack, but there are limits to the capabilities of forensic efforts. Attribution of a biological weapons attack requires inputs from several sources in addition to forensics, among them, intelligence and law enforcement. Consequently, efforts to strengthen capabilities beyond forensics are important. There are a number of steps the U.S. can take to improve deterrence policies.

### **Presentation 3: Richard Danzig, Chairman of the Board, Center for New American Security**

Dr. Danzig framed his talk by asking the audience to consider what the president or a policymaker would want to know immediately following an attack with a bioweapon—what type of system would give us more information about the attacker, how the attack was carried out, and how the next attack could be stopped? Dr. Danzig asserted that we have fundamental deficiencies in our detection systems that require dramatic changes and improvement. He outlined the deficiencies of the BioWatch program and recommended investing in several specific enhances to spark evolution of detection systems.

**What's Wrong With Biowatch?**1. BioWatch does not support interdiction: Dr. Danzig explained that because BioWatch does not provide data in real time, and because the system relies on too few sensors, spread too far apart, it cannot reliably detect an attack with a biological weapon. Consequently, BioWatch does not support interdiction, which is crucial. He emphasized that any multibillion dollar system that has been years in development but does not allow the U.S. to know who attacked, when, and with what, and then to stop the next attack, is simply not justifiable. An effective tool for informing decision-making, must provide real-time information about the nature, location, and perpetrator of an attack; without this capacity, Dr. Danzig emphasized, BioWatch is inadequate.

2. BioWatch cannot provide situational awareness: Situational awareness, which depends on real-time data, is imperative for informed and rapid decision-making. Dr. Danzig highlighted that BioWatch acts only as an alarm because it can provide an alert about the occurrence of an event, but will not provide the types of information necessary to create situational awareness for decision-makers. As a result, decision-makers will not have the data they need to execute an effective response or to engage in effective consequence management.

BioWatch will not detect new and engineered pathogens: Dr. Danzig emphasized that the current system is vulnerable and will be increasingly inadequate to the task of detecting bioattacks in the coming decade and beyond. Rapid advancements in the biological sciences will lead to engineered pathogens that are currently not, and likely never will be, on standard threat lists. He urged the development of future systems able to detect spectrums of pathogens.

3. Interdiction, situational awareness, and the ability to address the full spectrum of threats are fundamental to effective biodetection systems. While no system can be assured in its successes, efforts to improve systems are necessary to maximize the development of efficient and robust consequence management programs. Dr. Danzig explained that the most powerful form of deterrence is the ability to catch a perpetrator and prevent future attacks. A system that robustly addresses this concern warrants investment. Furthermore, Dr. Danzig outlined his recommendations for future investment to improve the BioWatch program.

### **What Technological Advancements Warrant Future Investment?**

1. Greater specificity in smaller, less expensive technology: Dr. Danzig emphasized the need for building greater specificity into BioWatch to enhance pathogen detection and to enable location of an attack. He also called for smaller and automated sensors that can be produced at significantly lower cost. This would allow for deployment to a much greater number of sites in much greater concentration, which will significantly enhance real-time surveillance, detection, and location capabilities. Additionally, he suggested that smaller, less expensive BioWatch sensors could be imbedded within existing systems and that new sensing technologies possibly could be incorporated into HVAC systems in buildings in a more widely distributed way.

2. Lidar technology to improve detection: Dr. Danzig suggested that the BioWatch system integrate the use of lidar (short-range lasers that examine clouds as they form). This would provide the ability to see aerosol clouds as they rise in the atmosphere, which would provide more real-time data. However, this type of technology can generate too many false-positives, because of other factors that create clouds, and it can only detect aerosol attacks, limiting its potential utility to outdoor attacks.

3. Tracking exposure in human hosts: Finally, Dr. Danzig recommended evaluating human hosts to determine exposure to a pathogen. He suggested that perhaps baseline measures of populations, - such as volunteers from the emergency management community, followed by regular testing of the same persons, would allow for detection of exposure in those specific populations, and results could be extrapolated to the larger population in a given area.

Dr. Danzig concluded his remarks by saying that biological threats will persist far beyond any of the specific groups currently posing a threat to national security. Biological threats will persist because of the growth and power of biotechnology and the life sciences.

#### **Panel 4: Biodefense & Resilience**

##### ***What role does resilience play in dissuading and deterring biological attacks?***

**Moderator:** [Thomas Inglesby](#), Deputy Director, Center for Biosecurity of UPMC

1. [Col. Randall J. Larsen](#), USAF (Ret.), Executive Director of the Commission on the Prevention of Weapons of Mass Destruction Proliferation and Terrorism

2. [Robert Kadlec](#), Former Director for Biodefense, Homeland Security Council

3. [Daniel Hamilton](#), Director of the Center for Transatlantic Relations at the Paul H. Nitze School of Advanced International Studies (SAIS), Johns Hopkins University

##### **Overview**

This discussion focused on the role that resilience might play in deterring a bioterror attack. For the purposes of this discussion refers to the ability to rapidly recover from and diminish the consequences of an otherwise catastrophic event. In the context of BW, it is worth considering both deterrence by dissuasion—convincing adversaries that they should not pursue BW—as well as deterrence by denial—convincing adversaries that they are likely to fail at their objectives with BW. Dr. Inglesby noted that, throughout history, potential attackers have been deterred by denial, either through the introduction of a new technology that denied them a previously available means of attack, or through development of a much stronger defense that convinced an adversary that an attack would fail (e.g., strengthened embassy protections). In this context, therefore, the ability to deter by dissuasion or denial suggests the importance of building a strong and resilient biodefense that will convince adversaries that they will not succeed in their objectives by using BW.

##### **Preparedness as a Deterrent**

Col. Larsen noted that if a nation, organization or individual mounted a successful BW attack, it would inspire others to attempt to achieve the same effect, thus increasing the odds of more BW attacks. Conversely, an adversary observing little or no effect might be more likely to change tactics, reducing the odds of a BW attack. Col. Larsen then asserted that the U.S. should focus its efforts on improving response capability, especially the ability to rapidly produce and administer a range of medical countermeasures (drugs, vaccines) to the population. If the U.S. were to become truly resilient to BW, then these weapons could effectively be removed from the broader category of weapons of mass

destruction (WMDs). Limiting the consequences of a BW attack by preventing the potential for a “bio-Katrina” is a primary focus of the [Commission on the Prevention of Weapons of Mass Destruction Proliferation and Terrorism](#).

### **Goals of Deterrence**

Dr. Kadlec views deterrence as a “mind game” with two goals: 1) Make would-be bioterrorists believe that the effects of a BW attack will be far less severe than intended because the U.S. is able to mount a coordinated, robust response; and 2) Make it well-understood that use of WMD, including BW, will unquestionably result in harsh consequences for those deemed responsible. In the previous panel, Dr. Smith noted that, though our ability to attribute a BW attack is limited, great progress has been made since the Amerithrax investigation. As attribution capability is developed, it will increase America’s resilience and enhance deterrence. Dr. Kadlec closed by noting that we need to “maximize our collective security” by increasing the resilience of our allies, as our security depends upon their resilience.

### **Resilience Requires International Collaboration**

Dr. Hamilton echoed Dr. Kadlec’s last point by saying that it would be insufficient to focus U.S. efforts on building resilience solely in the American homeland because “our resilience will rely on that of others.” In addition to protecting human health, a goal of ongoing U.S. biodefense efforts should be to defend and strengthen the networks that uphold free societies and prevent major social disruption. Toward that end, Dr. Hamilton proposed that a collaborative, multi-sectoral approach that engages the international community would be of great benefit. Finally, Dr. Hamilton closed by advocating for the support of moral and behavioral norms against the use of biological weapons as a means to “dishonor the act.”

### **Conclusion**

The panelists concluded that a resilient nation may indeed act as a deterrent to would-be bioterrorists, and that the U.S. government should continue to implement measures that improve the nation’s ability to substantially diminish the consequences of a BW attack. The role of deterrence in the context of BW is still evolving. Building resilience through partnerships with other countries (e.g., international partnerships to create medicines and vaccines or to conduct disease surveillance) requires increased effort and attention.

### **Closing Remarks: Tom Inglesby, Deputy Director, Center for Biosecurity of UPMC**

Dr. Inglesby closed the conference by summarizing the main points he would take away from the day’s discussion:

1. International norms must be robust. Moral and behavioral norms against development and use of biological weapons are essential, and the international community must strive to deepen and preserve norms such as those embodied in the Biological and Toxins Weapons Convention (BWC).
2. Changes to the U.S. lab security regime must be evaluated carefully. Serious unintended consequences could result from efforts to control pathogens, materials, and information, beyond those controls already in place. Dr. Inglesby encouraged policymakers to assess carefully the current approach to U.S. lab security and the potential consequences of any planned changes to the U.S. lab security regime before introducing any new regulations.
3. Transparency is essential to national biodefense. Efforts should continue to make U.S. national biodefense programs as fully transparent as possible. Dr. Inglesby noted that the U.S. program seems at least as transparent as other national biodefense programs in the world, and other countries should be encouraged to pursue transparency along with the U.S. Because physical inspection and verification of all bioscience laboratories in the world is impossible, calls for such measures are distractions from improving transparency.
4. Intelligence plays a strategic role, but it is not likely to provide the tactical warning necessary for prevention. Intelligence will continue to be a key component of prevention, but intelligence in this arena is particularly challenging, and there is no guarantee of its reliability in preventing development or use of BW or in providing tactical warning of an imminent attack.

5. International engagement has a role in prevention. Cooperative Threat Reduction (CTR) programs and other surveillance efforts are key to international engagement and to improving international public health, and they warrant continued support. It is important to examine how such programs can contribute most effectively toward the goals of preventing biothreats.

6. Microbial forensics is a critical aspect of prevention. Microbial forensics is a young but advancing field that can be an important element of attribution. Policy makers should support the advancement of this field.

7. Biodefense and resilience are key for prevention. Prevention efforts are a critical component of building dissuasion and deterrence to development and use of BW. They have the additional benefit of building our capacity to respond to diseases outbreaks domestically and internationally. Because we cannot guarantee the success of the nation's collective prevention efforts, the U.S. must build both its resilience and a strong biodefense in order to diminish the consequences of potential biological threats ([UPMC, 2009](#)).

# Bio Terror Bible

## EXPOSING THE COMING BIO-TERROR PANDEMIC

**BIOTERRORBIBLE.COM:** Bio-terror and pandemic related conferences have occurred on a regular basis since 9/11, but have recently started occurring on a monthly basis since March of 2011.

**Title:** Conferences Will Review U.S.'s Ability To Reduce Biothreat

**Date:** February 10, 2010

**Source:** [Bio Prep Watch](#)

**Abstract:** A pair of conferences over the next few weeks will enact a comprehensive review of the United States' ability to reduce the impact of a biological weapons attack.

The review of the HHS' recently announced Public Health Emergency Medical Countermeasures Enterprise comes on the heels of numerous vaccine delivery delays during last fall's H1N1 pandemic.

A two-day workshop on improving medical countermeasure development to respond to health emergencies, originally scheduled for this week in Washington DC, has been postponed to Feb. 22 through the 24 as a result of snowstorms, Gretchen Michael, spokeswoman in the Office of the Assistant Secretary for Preparedness and Response at the Department of Health and Human Services, said.

The meeting will discuss methods of removing obstacles to developing drugs, vaccines and diagnostics meant to counter threats including anthrax attacks.

The other workshop, organized by the National Biodefense Science Board, will review the management and structure of the countermeasures development program.

The workshop's agenda notes that the problem with countermeasures development is that there is little commercial market for most medical countermeasures, which means that the government must provide incentives for private companies to develop them.

"However, certain structural, strategic, and technical elements of the enterprise continue to impede research, development, and production of medical countermeasures," the agenda states according to CIDRAP News ([Bio Prep Watch, 2010](#)).

**Title:** U.N. Secretary-General Opens Chemical Weapons Convention

**Date:** December 1, 2010

**Source:** [Bio Prep Watch](#)

**Abstract:** The United Nations Secretary-General Ban Ki-moon opened the 15th Session of the Conference of the States Parties to the Chemical Weapons Convention on November 29 by lauding the convention's more significant contributions to world safety.

"I welcome the significant progress that has been made, including the destruction of more than 60 percent of the world's declared stockpiles of chemical weapons under strict verification," the Secretary-General said, according to the meeting's official transcripts.



Ban also said that he believes that the convention remains an effective, non-discriminatory and comprehensive legal instrument that has the ability to verify the existence and destruction of chemical weapons stockpiles, as well as prevent their proliferation.

He further lauded the progress of three possessor states that recently completed their destruction programs and commended the actions of the remaining possessor signatories. The challenge, according to Ban, will be for them to fulfill all of their obligations by the April 2012 deadline.

The secretary-general paid particular attention to the global nature of the convention.

"With 188 states parties encompassing 98 percent of the global population, the convention is approaching universal membership, thereby moving ever closer to eliminating the possibility that chemical weapons will be used," Ban said.

There was also a message to those nations that are not a part of the convention.

"It is crucial for the remaining seven states that are not party to the convention to join without delay," Ban said. "Their accession would build confidence in their respective regions and strengthen international peace and security in general" ([Bio Prep Watch, 2011](#)).

**Title:** Biological Weapons Convention To Be Held This Week

**Date:** December 6, 2010

**Source:** [Bio Prep Watch](#)

**Abstract:** The 2010 Meeting of States Parties to the Biological Weapons Convention will be held this week at the United Nations Office in Geneva.

The meeting will be chaired by Ambassador Pedro Oyarce of Chile and is expected to develop and further the work of the Meeting of Experts that was held in Geneva in August 2010, according to UNOG.ch.

Oyarce called the meeting, "An important opportunity to further the main themes that emerged from the Meeting of Experts: the crucial importance of a coordinated and cross-sector response to an alleged use of biological weapons, and the need to build national capacities in order to provide such a response," UNOG.ch reports.

The chairman also said that the improvement of national capabilities to respond to the use of biological weapons not only directly supports the convention's security objectives, but also promotes the development of biological sciences and technologies that are peaceful in nature.

The meeting will also directly address proposals made at the Meeting of Experts, including the development of training courses, simulation exercises and joint partnerships; the encouragement of cross-sector cooperation between law enforcement and public health agencies; the necessity of assistance for state parties in the implementation of the BWC; and the enhancement of international cooperation, UNOG.ch reports ([Bio Prep Watch, 2010](#)).



# Bio Terror Bible

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**BIOTERRORBIBLE.COM:** Bio-terror and pandemic related conferences have occurred on a regular basis since 9/11, but have recently started occurring on a monthly basis since March of 2011.

**Title:** 2011 Biodefense And Emerging Diseases Research Meeting Set

**Date:** January 31, 2011

**Source:** [Bio Prep Watch](#)

**Abstract:** The 2011 Biodefense and Emerging Diseases Research Meeting, hosted by the American Society for Microbiology, will bring together researchers working to fight bioterrorism and decision makers who shape the future of the biodefense research agenda.

The meeting will be at the Omni Shoreham Hotel in Washington, D.C. between February 6 and 9 and will address concerns that emerging infectious diseases will be a major factor in the public threat of bioterrorism.

Scientists, policy makers and public health researchers will come together to learn about the latest scientific developments during the meeting, which will include a series of keynote addresses by leaders in the field of biodefense. There will also be poster sessions that present the latest research on vaccines, biothreat agents, diagnostic and detection procedures, plant and animal pathogens, global surveillance and more.

There will be a featured lecture by D.A. Henderson of the Center for Biosecurity of the University of Pittsburgh Medical Center titled "The Eradication of Smallpox: A Continuing Saga" on the first day of the conference.

Other sessions include "New Interventions and the Challenges of Emerging Infections," "Emerging Plant Diseases and Agricultural Biodefense," and "Medical Countermeasure Development in the U.S. Government."

The American Society of Microbiology has 40,000 members worldwide. Its mission is to gain a better understanding of the basic processes of life and to promote applying that knowledge to improved health and environmental and economic well-being ([Bio Prep Watch, 2011](#)).

**Title:** Experts Gather At Symposium To Discuss Transportation And Bioterrorism

**Date:** March 27, 2011

**Source:** [Bio Prep Watch](#)

**Abstract:** On March 21, Emergent BioSolutions, Inc., hosted a symposium in Washington, D.C. on transportation and bioterrorism featuring governmental leaders, experts in urban emergency preparedness, disaster response and biological warfare.

Issues presented concerned the development of clear governmental focal points; the challenges faced by local, state, regional and national agencies; and the importance of prevention, detection and response. A particular emphasis was placed on retooling inner and outer communication practices, which is what occurs between governmental bodies and what occurs between governmental bodies and the public.

Henrich Hololei, head of cabinet for European Union Transportation Commissioner Silim Kallas, spoke about several challenges he faces, some of which are endemic to the E.U structure itself.

Hololei said that Europe faced transportation challenges in the wake of Iceland's volcanic ash cloud. An individual nation could not open its own airspace without consent from the larger group, complicating efforts to jumpstart what then was a badly damaged economic reality.

"It is a complicated jigsaw," Hololei said. "Issues in Europe are specific and multi-layered, yet at the end of the day, we want safe transportation systems. We want ways to stop bioterrorism, and, if something does occur, we want to save as many people as possible".

How that might be done, and what should be avoided in the process, was Randy Larsen's focus. A retired colonel who served in the Air Force for 32 years, Larsen is a commentator and adviser on national security issues, particularly large-scale threats like biological warfare.

Larsen said that rigorous cooperation between the public and private sector is needed. Citing the 27 percent of all cargo in America that travels on private airplanes as an example, he said that the notion of a government-only effort ignores private and public sector overlap. Focusing on approaches like these will save more lives in the long run, he said.

Terrorists are also less likely to attack nations with better emergency-capable infrastructures, Larsen said.

"The holes are too great, the dangerous elements to be smuggled in too small, those who wish us harm too many," Larsen said. "It's a difficult pill to swallow, but one that will save this country millions – millions that can be better spent on things that really will work."

Jerry Hauer, a former director of the Office of Emergency Management under Rudy Giuliani, and later an assistant secretary within the Department of Health and Human Services, referenced the need for new communication patterns among agencies and new communication outreaches to the public. He expressed concern that local and national governmental agencies often presented overly confident approaches to the complicated demands that arise after a grave emergency.

Hauer described the difficulty in communicating directly to those underground in the event of a biological attack as a transportation issue that can be fixed. He also warned of a more enigmatic problem.

"Even now, just a decade after 9/11, our level of vigilance has decreased," Hauer said. "Complacency is a problem. Hopefully it won't take another event to remind people to be alert and watchful."

The event, hosted by Emergent BioSolutions, Inc., reflects the company's involvement in matters of government policy and disaster preparedness. Emergent BioSolutions, Inc., is the manufacturer of BioThrax, the only FDA-licensed vaccine for Anthrax ([Bio Prep Watch, 2011](#)).

**Title:** Experts Gather To Fight Bioterror Attacks On Food Chain

**Date:** April 28, 2011

**Source:** [Bio Prep Watch](#)

**Abstract:** With a significant portion of America's food supply being imported, consumers are vulnerable to tainted food and intentional bioterrorism attacks, according to experts gathering at this year's International Symposium on Agroterrorism in Kansas City.

Approximately 600 delegates attended the three day conference, sponsored in part by the FBI and the Heart of America Joint Terrorism Task Force, KansasCityStar.com reports. The main mission of the event is to protect the food supply worldwide while illustrating the importance of a coordinated effort.

U.S. food and agricultural product imports have been rising for decades, increasing from \$41 billion in 1998 to \$78 billion in 2007, according to the USDA. An estimated 50 percent of U.S. food is now imported.

"There are more firms registered with the Food and Drug Administration to supply food to the U.S. from outside the country than there are inside the country," Shaun Kennedy, deputy director of the National Center for Food Protection and Defense at the University of Maryland, said, according to KansasCityStar.com.

The CDC estimates that, each year, roughly one in six Americans, or approximately 48 million people, contract a food-borne disease.

To counter these threats, Congress passed and President Barack Obama signed into law the Food Safety Modernization Act of 2011 in January. This initiative aims to ensure the U.S. food supply is safe by shifting the focus of federal regulators from responding to contamination to preventing it.

Seen as an important first step, many health officials suspect it will take a great deal of vigilance to protect the American food supply, KansasCityStar.com reports ([Bio Prep Watch, 2011](#)).

**Title:** Nebraska Holds Two Day Symposium On Bioterror Preparedness

**Date:** May 12, 2011

**Source:** [Bio Prep Watch](#)

**Abstract:** Dozens of public health officials and emergency responders recently attended a two day symposium put on by the Nebraska Center for Preparedness Education on the subject of how to prepare for a bioterror attack.

The symposium, which took place in Norfolk, Neb., is meant to cover illness outbreaks, helping victims in a disaster and how to respond to acts of terrorism. The organizers of the event said that education on this subject is an important part in helping personnel plan and prepare for such an attack, KTIV.com reports.

"It gives us ideas for areas where people feel like they may have gaps in their disaster planning," Sharon Medcalf of the NE Center for Preparedness said, according to KTIV.com. "And then, we build programs based on some of the needs assessments they would get, and often it's feedback from this conference itself."

Nebraska Lt. Governor Rick Sheehy was also on hand to speak about a number of issues, including a new national watchdog program called "See Something, Say Something."

"It's primarily for citizens," Sheehy said, according to KTIV.com. "If they see suspicious activity, if they see suspicious packages...just something isn't what it should be or is out of the ordinary, that they report that."

In addition, Norfolk Fire Chief Shane Weidner discussed how his team of firefighters dealt with a December 2009 propane fire at the former Proteint Foods plant.

The event concluded on Wednesday ([Bio Prep Watch, 2011](#)).

**Title:** Biodetection Technologies Conference Set For June 24

**Date:** April 22, 2011

**Source:** [Bio Prep Watch](#)

**Abstract:** The 18th Biodetection Technologies Conference, an internationally recognized event for experts in detection and identification of biological and chemical threats, will be held on June 24 in Washington, D.C.

The event will explore the latest R&D developments and ready-to-market systems for major bioterror identification, bioterror detection and analysis both at the point-of-care and in the field.

The conference will be held at the Marriot Wardman Park and will feature Dr. Peter Emanuel as the keynote speaker.

Emanuel is the bioscience division chief at the U.S. Army Edgewood Chemical Biological Center.

During his address, Emanuel will discuss the results of a 2011 biosurveillance hardware systems survey. The survey targeted systems that have applicability in assessing human exposure to chemical, biological and radiological agents. It focused on information on commercially available and maturing diagnostic and identification/detection products that have technology readiness levels from TLR 4 to TLR 9, not including basic research concepts.

Emanuel will examine the findings of the survey and what it might mean for interagency needs for the purchase of technology in the future.

Other topics that will be discussed at the conference include bioinformatics for biodefense; challenges for rapid, early, specific and sensitive detection; and technological advances in detection and identification of biological threats ([Bio Prep Watch, 2011](#)).

**Title:** The Threat of Bioterrorism: Improving America's Response Capabilities

**Date:** June 16, 2011

**Source:** [George Washington University](#)

**Watch Video** [here](#)

**Abstract:** Panel of current and former members of Congress discusses the biological threats that keep them up at night at GW event.

When [Frank Cilluffo](#), director of the Homeland Security Policy Institute and associate vice president for homeland security, noted that the event at 1957 E Street featured "the titans of national security," he wasn't kidding.

The June 14 event, titled The Threat of Bioterrorism: Improving America's Response Capabilities ([video](#)), drew panelists Sen. Joe Lieberman (I-Conn.), Rep. Mike Rogers (R-Mich.) and former Senators [Bob Graham \(D-Fla.\)](#) and [Jim Talent \(R-Mo.\)](#).

The latter two are chairman and vice chairman of the [WMD Center](#), which cosponsored the event with the Homeland Security Policy Institute.

One topic that the panelists and Mr. Cilluffo, who moderated the event, kept returning to was what keeps them up at night, which was mostly a biological terrorist attack on the U.S.

Rep. Rogers added Iran and North Korea to the list of sleep-threatening dangers.

One of the most important sentences of the 9/11 Commission Report was the claim that the attacks occurred because of a failure of U.S. imagination, Sen. Lieberman said, interpreting the failure as an inability or refusal to imagine what al-Qaeda was plotting.

"We know that the intent to hurt us continues," he said. "It doesn't take a very aggressive imagination ... to believe that groups that are venomously anti-American would be considering biological attacks on us."

Part of the legislation Sen. Lieberman is working on now is creating a national bio-defense strategy. "I don't like to be kept up at night, so to whatever extent I can reduce the causes of the sleepless nights, not just for myself but also for other Americans, I'd like to do so," he said.

Former Sen. Talent explained why the prospect of a biological attack was so terrifying. Whereas the 9/11 attacks killed about 3,000 people, conservative estimates say a biological attack could claim 10 to 100 times that number of lives, and it would be easy for the terrorists to “reload and hit another city.” The attacks would also leave residue that would make it tough to rebuild.

“The American economy would just stop,” he said.

Former Senators Talent and Graham also discussed the annual report cards their center gives for U.S. efforts to protect itself from terrorist attacks.

Sen. Graham said his background working in higher education taught him about the importance of issuing something like a report card. “If you don’t evaluate a particular subject it’s not likely to be taught or not likely to be taught well,” he said.

Out of 18 items on last year’s report card, the U.S. government received four grades of F. The most significant F was for being unprepared to respond to an act of bioterrorism. “We think this is a serious national security risk,” Sen. Graham said.

Sen. Talent said the pair hadn’t realized the significance of biological threats at first, but after conducting hundreds of interviews as part of the Commission on the Prevention of Weapons of Mass Destruction Proliferation and Terrorism, which was tasked with following up on the 9/11 Commission Report, they realized a biological attack would be the most dangerous threat to the country.

The U.S. knows that al-Qaeda wanted to build biological weapons in the 1990s, it would not need to undergo intense organizational realignment to construct such a weapon and biological weapons are relatively easy to create and stock pile, he said.

“This is not a next generation threat. This is now.”

Rep. Rogers said elements of a national bio-defense strategy, like vaccines for Anthrax, are “something you hope you never use.”

“Everyone is always mad at the firefighters around budget time, but you love them when you pick up the phone and they show up and protect your house,” he said. “When you need them, you need them. Same with these vaccines. This is not something you can go back and say, ‘We’ve had an event. Oh, by the way, where do we go buy 8,000 doses of Anthrax vaccine.’ It’s not going to happen” ([George Washington University, 2011](#)).

**Title:** Pandemic Provides Backdrop For Fourth ESWI Conference

**Date:** September 12-14, 2011

**Source:** [ESWI](#) (PDF)

**Abstract:** The 2009 H1N1 pandemic makes this ESWI conference more relevant than ever and is driving EU efforts to improve pandemic preparedness. Science has a major role to play in addressing unanswered questions.

“It’s quite timely that we’re having this meeting now, just after the first pandemic of the 21st century,” said Dr. A.D.M.E. Osterhaus, ESWI Chair, as he opened the Fourth ESWI Influenza Conference in Malta. Osterhaus was referring, of course, to the swine flu outbreak of 2009. He noted that the pandemic provided the opportunity to explore lessons learned and prepare for the next one.

According to Osterhaus, this conference is also special because young scientists will present new data and all the scientific sessions will be co-chaired by a young scientist. “We’re cultivating the next generation of scientists,” said Osterhaus.

### **EU prepares to update pandemic preparedness across Europe**

Osterhaus’ opening remarks were followed by a video message from John Dalli, European Commissioner for Health and Consumer Policy. Dalli recalled that back in December 2009, EU Member States agreed that by 2014, 75% of healthcare workers and people at risk would be

vaccinated against influenza. He said that the EU is encouraging Member States to meet their commitments and suggested that “the time has come to update guidance on influenza pandemic preparedness across Europe.” Dalli described EU efforts to ensure equitable access to vaccines for all Member States by developing a mechanism for joint procurement.

Dalli concluded his message by underlining the important role of science. “It is only by combining the latest scientific knowledge with effective policy planning, that we will succeed in addressing influenza,” he said.

### **Nobel Laureate says “there’s still a lot to be solved”**

Dr. Peter C. Doherty of St. Jude Children’s Hospital in Memphis, Tennessee and the University of Melbourne in Australia delivered the keynote address. Doherty gave a wide-ranging talk that presented influenza research performed over the past several decades. He summarized research findings, added his own conclusions and raised questions requiring further scientific investigation.

According to Doherty, the real problem with the influenza virus is that it’s highly contagious but the infected don’t necessarily feel sick while they’re infectious. On the plus side, unlike HIV, influenza infections are “self-limiting” provided one can limit the damage. “We just need to get people through the acute phase,” said Doherty. For this purpose, Doherty ended his keynote with a challenge: **“Can we make a universal vaccine?”**

### **Scientists provide strong evidence for pandemic threat**

Scientists have shown that H1N1 is geographically mobile and can reassort, and they have identified influenza virus strains that could mutate into the next pandemic virus. Experimental research has shown that with few mutations H5N1 can become airborne.

“Pigs DO fly.” That was the message from Dr. Malik Peiris of the University of Hong Kong. Peiris was one of two keynote speakers during the plenary session on Monday. His talk, “When pigs fly”: Insights on pandemic emergence”, examined potential pandemic threats, focusing on the 2009 H1N1 pandemic strain.

Dr. Peiris was well-positioned to study the issue as about half the global population of pigs is to be found in China and 4,000-5,000 pigs are slaughtered everyday in Hong Kong alone. He and his team have been conducting a 14 year surveillance study of swine influenza in China.

### **Flying pigs?**

Dr. Peiris’ aim was to trace the origins and genomic evolution of the 2009 H1N1 pandemic virus. He found that after the triple reassortant strain became dominant in North America, it did not remain geographically isolated. Peiris and his team found that swine flu viruses of various

lineages were repeatedly introduced in China. “These viruses readily moved across countries and continents, probably through breeder stock,” said Peiris. Furthermore, the North American strain reassorted in China. Peiris said that the reassortment events in China gave clues how the pandemic virus emerged, even though the pandemic virus did not originate there.

### **Viral determinants of human transmission**

Peiris next set out to identify viral factors that contribute to transmission risk for humans. He and his researchers studied tropism in the human upper respiratory tract in ex vivo cultures, transmission in ferrets and serological herd immunity. They identified one reassortant strain that severely infected both the nasopharynx and the bronchial tract. In the ferret study, this strain was also the only one which displayed any hint of aerosol transmission, according to Peiris.

### **On the hunt for a killer**

Given that this reassortant virus shares 7 gene segments of common origin with the pandemic virus (but does not pre-date it), Peiris and his colleagues decided it warranted further study. They added to the reassortant virus the neuraminidase enzyme it was missing as well as 3 polymerase genes that had shown high levels of activity in tests. The new strain was not more infectious (only one out of three ferrets got infected) but the severity of the disease was enhanced. “Despite these results, 915 – the reassortant virus – is the only virus of swine origin that does infect human tissue ex vivo and aerosol in humans,” said Peiris. He found that sero conversion is broadening human immunity to swine viruses but not to avian viruses. Thus, according to Peiris the biggest danger would be

reassortment of an H1N1 virus with an avian virus such as H5N1. Peiris concluded his presentation with a strong message: "There's a need for a step change in surveillance of swine viruses and animal viruses in general."

### **H5N1: a persistent danger**

Dr. Ron Fouchier of the Erasmus Medical Centre in the Netherlands delivered a similarly strong message during his presentation that H5N1 continues to be a pandemic threat. Fouchier has studied H5N1 in Indonesia, one of countries hardest hit by avian influenza. The island nation of 240 million people has had 178 confirmed cases of avian influenza of which 146 have been fatal.

### **Vaccine failure**

Intrigued by evidence that classical vaccines were failing, Fouchier and his colleagues used a Hemagglutination inhibition assay to study the antigenic drift of the new virus strains. "We discovered that only 1-3 substitutions are sufficient to cause large changes in antigenic drift," said Fouchier. Moreover, large antigenic differences between and within H5N1 clades could affect vaccine efficiency and even result in vaccine failure, warned Fouchier. Indonesia decided to switch to a different vaccine strain.

A "stupid" experiment leads to a valuable result Fouchier and his team's biggest discovery, however, was based on what he termed a "stupid" experiment. He and his team introduced mutations, under strict laboratory safety procedures, by reverse genetics into laboratory ferrets. They then collected a nasal wash from each infected ferret and inoculated another ferret after a few days. They repeated this process ten times. The result? H5N1 had been transmitted to three out of four ferrets. "This virus is airborne and as efficiently transmitted as the seasonal virus," said Fouchier. His research team found that only 5 mutations, 3 by reverse genetics and 2 by repeated transmission, were enough to produce this result. "This is very bad news, indeed," said Fouchier.

### **Clinical approaches to pandemic preparedness**

Early diagnosis and treatment is the key to stamping out a pandemic before it peaks and overwhelms the healthcare system. With this in mind, participants in the session "Clinical impact and diagnostic approaches" offered their views on ways to improve.

Dr. Peter Openshaw of Imperial College in London provided a fascinating inside view of the UK's efforts to combat the H1N1 pandemic, focusing on its clinical impact. "The UK had one of the most highly developed pandemic preparedness plans in the world," according to Openshaw, "and the risk of pandemic human disease was considered highest among threats as far as impact and likelihood, even higher than terrorism."

The UK's plan was centered on blunting the peak of any pandemic outbreak. "You can tolerate a slow-burning outbreak, but it's the peak that causes a breakdown in health services," said Openshaw. The pandemic hit the UK's shores in two waves: the first wave in the summer of 2009 and the second wave in the winter of 2009/10. During the first wave, flu-associated bed-days went from 4,163 in 2008 to 33,376 in 2009, a 7-fold rise, and, most alarmingly, the 17-39 year age group was particularly hard-hit, with bed-days increasing from 169 to 6,253 from October to December, a 37-fold increase.

### **Openshaw based his research on two studies:**

Flu-CIN, a study funded by the Department of Health that aimed to collect clinical information fast; and MOSAIC, a Wellcome/MRC funded study that focused more on the discovery of pathogenesis. The Flu-CIN study found that mild asthma increased patient risk, but that it was a risk factor for admission only, not for severe outcome. The studies' findings resulted in several changes including a revision of UK clinical guidance and a change to the UK's antiviral, antibiotic and vaccination policy, away from prophylactic use in the case of antivirals.

To Openshaw perhaps the most important lesson is that **"You need to be prepared in peacetime. You have to move very fast during a pandemic."**

### **Real-time PCR for mapping a whole entire genome sequences**

Dr. Martin Hibbard of the Genome Institute of Singapore described recent advances in Real-time Polymerase Chain Reaction (RTPCR) technology. He noted that if a physician's test for H5N1 is negative, RT-PCR could present an alternative to that process. "Genome sequences can be rapidly



analyzed and sequenced, so the technique can help with the rapid identification of outbreaks,” said Hibbard.

The process works by extracting a total nucleic acid from a clinical sample. This is then amplified and hybridized onto a micro-array chip. The result is detection signals for an entire genome sequence which can then be analyzed using automated bioinformatics. The technology has already proven itself useful. Singapore’s Ministry of Health used it to track which viruses were mutating most rapidly during the H1N1 flu pandemic, and in at least one instance even used it for person to person recognition.

### **In vivo imaging: a superior approach?**

Koet Stittelaar of Viroclinics Biosciences in the Netherlands presented a very different diagnostic approach. Using CT imaging on ferrets, he and his group overcame the limitations of current analytical approaches. Current preclinical animal models examine the severity of disease (necropsy) at a single fixed point in time. But antiviral efficacy, for example, depends greatly on when treatment was begun. Moreover, with in vivo imaging, Stittelaar and his colleagues can compare data from a single animal rather than from several different animals.

### **Seasonal influenza and acute myocardial infarction**

Dr. Charlotte Warren-Gash’s study of UK primary care data sought to see whether myocardial infarction might be triggered by respiratory infections. For her doctoral thesis at University College in London, she linked data from the General Practice Research Database of 5 million active patients with data from the Myocardial Ischaemia National Audit Project, adjusting the data for seasonality and other factors. “We found an increased risk of myocardial infection following acute respiratory infections,” said Warren-Gash, “but there was no strong evidence that the effect on myocardial infarction was greater for influenza than for other infections.”

### **Vaccination: history proves it works, whatever the disease!**

Does the world’s long history of vaccination justify – despite the associated risks – its use in reducing the burden of disease? For all panel members of ESWI’s final workshop on Day 1, the answer was a resounding “yes”.

From Chinese variolation techniques against small pox in the 1600s to today’s efforts to eradicate polio, “the history of vaccines in the fight against infectious diseases has been a success story,” Dr. Ab Osterhaus, ESWI chairman told the group, pointing to today’s near-eradication of diseases that were once the scourge of humanity such as measles. “We have the tools to fight these diseases with vaccines.”

Yet public fear and mistrust about the safety of vaccines often stand in the way of high vaccination rates. These obstacles can only be overcome by delivering the right information at the right time to those who communicate directly with the public: the media and other stakeholders.

“You have an opportunity every year to educate your media about the benefits of influenza vaccination: in the autumn when seasonal flu preparations begin,” Dr. Marc Van Ranst, researcher at Belgium’s University of Leuven, told his audience.

**“The knowledge you can impart to the media and thus to the public can influence them and prepare them for a pandemic whenever it hits.”** Public misperceptions about vaccination are rampant and can work heavily against the best efforts of science, however.

“Conspiracies of all kinds have always been there—even in Jenner’s time,” said Osterhaus, referring to the 18th English scientist who developed the first smallpox vaccine. “Today I’m most concerned with pseudo-scientists who say it is good to be exposed to disease in childhood to strengthen the immunological system! This has got to be fought. **However, we as scientists have got to package our message in a different way if we want more effective communication with the public.**”

Japanese health officials know that by direct experience, as panelist Dr. Masato Tashiro, told the group. Noting that Tokyo shifted away many years ago from mandatory flu vaccination for young children partly due to a hostile press that called the policy a violation of children’s rights, the government has since embraced voluntary vaccination and seen uptake rise – and mortality fall – among children since 2002. The reason? “The government simply did a much better job of promoting the positive effects [of vaccination] for children,” said Tashiro ([ESWI, 2011](#)).

**Title:** Charting The Future Of Biosecurity: Ten Years After The Anthrax Attacks

**Date:** October 4, 2011

**Source:** [Center for Biosecurity of UPMC](#)

**Abstract:** *Charting the Future of Biosecurity: Ten Years after the Anthrax Attacks* was held in Washington, DC, on October 4, 2011. Jointly hosted by the Alfred P. Sloan Foundation and the Center for Biosecurity of UPMC, this invitational meeting brought together thought leaders from the federal government, the policy community, think tanks, academia, and media outlets. The meeting provided a forum for leaders in the biosecurity community to reflect on progress made since 2001 and to consider priorities for the biosecurity policy agenda in the years ahead. This meeting was made possible by the generous support of the Alfred P. Sloan Foundation

### **.Opening Remarks by Thomas V. Ingles**

In his remarks, Thomas Inglesby, Director of the Center for Biosecurity emphasized the importance of preparing for the future of biosecurity given the looming threats of bioterrorism, pandemic flu, and other emerging infectious diseases. He acknowledged the difficulty of the mission but noted that there are reasons for optimism—including the breadth and depth of knowledge, experience, and dedication among those now in the field; the strength of American science and technology industries and the robust government programs now working to develop biodefense; and the notable progress to date. Dr. Inglesby also highlighted some significant gaps, such as early disease outbreak detection capabilities, post-event decontamination plans, and medical countermeasures. He emphasized that these pressing needs must be addressed regardless of growing budget constraints. Dr. Inglesby closed by urging all present to remain persistent and persuasive in their efforts to draw attention and resources towards biosecurity.

### **Challenges of Reporting on the 2011 Bio-attack**

Jeanne Meserve, former CNN Homeland Security Correspondent, presented a video montage of news coverage from the 2001 anthrax attacks. She recalled the difficulties of acquiring accurate information about the events surrounding the attacks, which she characterized as both a public health and a communications disaster. She described the press as feeling “whip sawed” by conflicting information from government and law enforcement representatives, and she noted that the unknowns and confusion about risk created fear among the public and among members of the press, who had trouble determining whether they were putting themselves and their families at risk by covering the events. Ms. Meserve recommended a policy of frank and proactive communication from government officials, and she suggested that members of the press improve both their communication skills and their scientific knowledge so they are better able to convey facts and evidence responsibly. She also emphasized that the press has an obligation to strike a tone that informs people without inciting fear.

### **Present & Future Biothreats**

Colonel Randall Larsen, D. A. Henderson, and Dr. Richard Danzig engaged in a discussion of present and future biothreats. As moderator, Col. Larsen first acknowledged that the panelists were visionaries in the field, and he asked them to comment about their experiences and to suggest priorities for the future.

Dr. Henderson replied by emphasizing the importance of continually asking and answering this question: “What would we do if there were a bio-attack tomorrow?” Dr. Henderson expressed concern that what he perceives as a lack of strong leadership in the federal government would hinder the nation’s ability to coordinate and marshal an effective response. He noted that the responsibility for a federal response to a biological attack is dispersed across a number of agencies, and he worried that a long interagency process could be slowing decisive decision making. Dr. Henderson called for a response plan that will have broad public support so as to avoid conflicting advice.

Dr. Danzig expanded on that notion to remind the audience that, in the face of catastrophe, the public often looks to leaders outside of government to validate recommendations, and he noted the need to reach and educate known leaders outside of government in advance. He also discussed what he considers systemic issues that hinder our response capabilities, the most serious of which, he argued, is our federalist system. That the federal role in preparedness and response must overlay and complement state and local response systems complicates planning. Another systemic problem is that government planning frameworks are often too narrowly focused on the immediate and acute

phase of a disaster. He argued for an expanded perspective on planning and response—one that accounts for the extended period of time and long term effort that will be required after an attack to restore normal functioning. Danzig contended that those working in biosecurity and biodefense should think beyond the casualty component of a biological attack, explaining that he has come to think of bioweapons not so much as weapons of mass destruction, but as weapons of *mass disruption*.

Both Drs. Henderson and Danzig acknowledged the uncertainty that attends the field of biosecurity, given the inherent difficulty in sound predictions about soundly predicting the outcome of a bio-attack. They encouraged the audience to acknowledge the potential threat of synthetic biology and other new pursuits in the biological sciences in preparing our defenses, noting in particular that our current focus on a finite set of threats may soon be an obsolete approach. Dr. Henderson closed by stressing the need for more biologists at high levels in the federal government who can raise awareness and help guide development of sensible, strategic defense strategies.

### **Looking Ahead in U.S. Health Security**

As moderator of a panel discussion among Nicole Lurie, Andrew Weber, and Thomas Frieden, Richard Besser opened the discussion by asking panel members what threats keep them up at night. Dr. Lurie described the recent events in Japan as what haunts her—multiple, serial disasters coalescing to wreak unprecedented devastation. Dr. Frieden worries about unknown and unplanned-for disasters against a backdrop of shrinking public health infrastructure and resources. Mr. Weber's concern, from his DoD vantage point, is terrorists' stated interest in biological weapons and the advances in the biological sciences and technology that are making the tools needed to make bioweapons increasingly accessible.

Mr. Weber suggested that efforts to strengthen interagency and international partnerships have made our capacity to detect and respond to threats more robust, and he cited as an example a recent drill that DoD conducted with the Republic of South Korea that included both South Korean authorities and senior members of DHS and CDC. Mr. Weber said that in more than 20 years in the federal government, he had never witnessed interagency coordination as strong as the coordination in effect in the current administration.

Dr. Besser then asked the panelists to address what he described as a popular perception that federal agencies spend too many resources on low-probability events and that they may even overreact to emerging biological threats, such as H1N1. In response, Dr. Lurie indicated that the H1N1 response underscored the need for a fully functional public health infrastructure capable of responding to all types of events, an assertion confirmed by Dr. Frieden, who also noted that a strong public health system is essential to both chronic disease response and emergency response. Cautioning that it is always better to overreact to emerging threats, Dr. Frieden pointed out that the H1N1 flu strain had probably been spreading in Mexico for months before it came to the attention of the United States, and that the lesson from H1N1 is that we could be more proactive in identifying infectious disease threats. Mr. Weber followed by adding that no country has a big enough "moat" to protect them from a communicable disease, and that a robust global disease surveillance system is an urgent need in the effort to improve biosecurity.

Dr. Besser pressed the panel members to explain international response efforts and their connections to homeland security. Pandemic and avian flu, according to Dr. Frieden, have catalyzed a partnership between the U.S. and Chinese CDCs, which now post weekly online updates about circulating flu strains in an effort to provide better awareness and advanced warning for emerging threats to homeland security.

Concluding with a discussion of domestic health security, panelists identified countermeasure distribution and resource allocation as pressing near-term challenges. Dr. Lurie promoted a federal approach that meshed with state and local infrastructures, but she cautioned that federal budget policies limit the ability to reallocate funds for immediate emergency use on the local level. Dr. Frieden pointed out that there is no broad plan for medical countermeasure acquisition and distribution and he suggested that a "quick and simple" answer to these complex problems is probably impossible. Instead, he suggested, the answer may be different strategies for different populations and circumstances.

### **Special Taped Interview of Tom Daschle**

In a taped interview prepared for this meeting, Senator Tom Daschle, former U.S. Senate Majority Leader, shared a few of his memories from the morning of 9/11 and the anthrax letters of October 2001. He also offered his thoughts on what is needed to better educate America's leaders about the threat of bioterrorism.

### **Transformative Science in Biosecurity**

Dr. Inglesby returned to the conference stage to moderate a discussion about advances in the life sciences and implications for biosecurity among Margaret Hamburg, George Poste, Tara O'Toole, and Craig Venter. Drs. Venter and Poste opened with their visions for the future: Dr. Venter asserted that automation of labor- and time-intensive processes would reduce the timeline for producing vaccines to days, if not hours. He cited his lab's recent experience in working with BARDA and Novartis to create a synthetic flu vaccine virus strain in 10 hours as a sign of medical countermeasure progress to come. Dr. Poste added that, in the future, proteins would be manufactured synthetically from cell-free systems, including vaccines, which would make regulating the vaccines significantly less burdensome. Dr. Poste also suggested that biosecurity challenges would expand in the coming years due to antibiotic resistance and as population growth creates added pressure on agriculture production due to population growth. He contended that synthetic biology would play a crucial role in revolutionizing the industrial ecology of modern society as it will help to secure food and energy resources.

While acknowledging that advances in the life sciences are "imbued with potential to lessen human suffering," Dr. O'Toole cautioned that advances in science are dangerously outpacing the government's ability to organize and regulate to ensure that biology and new technologies are not being applied to dangerous purposes. She explained that the concepts described by Drs. Venter and Poste are complex and difficult to translate to government officials and members of Congress who do not have years of training and experience in the field. Dr. Hamburg described how the FDA is working to change its processes and the ways in which it engages with the scientific community; she noted in particular her efforts to undo long held perceptions of the FDA as an agency bogged down by bureaucracy ([see Dr. Hamburg's remarks from the Center's March 2011 conference on the growing role of the life sciences for greater detail](#)). Dr. Hamburg encouraged her colleagues in the scientific community to think about not only science, but also about the tools regulators will need to evaluate science.

Dr. Inglesby asked the panelists if they thought the U.S. is losing its competitive edge in math and science. Drs. Venter and Poste suggested that, although we have not yet lost our edge, there are problems in both our educational system and our immigration policy that threaten to degrade the pool of talent available to the biotechnology and pharmaceutical industries.

The panel concluded with an overall assessment of the threat posed by synthetic biology. Dr. Venter cautioned that there are many other threats, such as naturally occurring agents, which call for immediate attention. Dr. Poste contended that the beneficent potential of synthetic biology outweighed its destructive potential. The scientists' optimism was shared by Drs. O'Toole and Hamburg, but they reiterated that the threat potential certainly should not be ignored.

### **Talking Biosecurity with the Public**

Senator Jim Talent spoke about the challenges of communicating the biological weapons threat to the public and to Congress. He acknowledged that it is difficult to raise consciousness without engendering fear. He also asserted that we are limited by our 18th century model of bureaucratic government, which is not well-positioned to respond to rapidly evolving threats, fast-moving disasters, and the attendant need to make decisions rapidly and to quickly communicate them to the public.

Senator Talent agreed with earlier speakers that biological weapons represent an increasing asymmetric threat, particularly as barriers to weaponizing pathogens diminish as a result of progress in the life sciences. Senator Talent described the WMD Center's efforts to address this threat, in particular the [Bio-Response Report Card](#) on the state of U.S. preparedness for a biological attack. He emphasized the need to develop systemic resilience to a biological attack, which would reduce the high cost of last-minute preparations and response when a threat is actualized. He concluded by

asserting that under current budget conditions, the U.S. government can no longer rely on a reactive approach to crisis.

### **The Next 5 Years of the Biological Weapons Convention**

Thomas Countryman discussed the U.S. State Department's perspective on next steps in advancing the Biological Weapons Convention (BWC), emphasizing his conviction that this is an influential forum for demonstrating the constructive potential of the biological sciences while discouraging destructive applications. The BWC serves as a norm against malevolent application of the life sciences. He said that maintaining that norm requires frequent and proactive consultations with relevant government, academic, and commercial entities. In the future, he noted, the BWC will include the emergency response community for better understanding of the resources and capacities that will help to mitigate a disease outbreak. Acknowledging that these new efforts would cost more, Mr. Countryman reminded the audience that in order for the BWC to contribute more to our security, we need to contribute more to the BWC.

### **Biosecurity Achievement Award Presentation to Paula Olsiewski**

The meeting concluded with the presentation of an achievement award to Dr. Paula Olsiewski for her leadership and support of the field of biosecurity. In presenting the award, Dr. Inglesby outlined the many accomplishments of Dr. Olsiewski and the Alfred P. Sloan Foundation and reminded the audience that the Foundation's support was in place well before the anthrax attacks. In accepting the award, Dr. Olsiewski thanked former Sloan Foundation president Ralph Gomory for his vision, and thanked current president Paul Jaskow and her colleagues, including her assistant Yolanda Wolf, for their support as well. Dr. Olsiewski concluded by thanking all of the grantees for all of their important work and contributions to the field ([Center for Biosecurity of UPMC, 2011](#)).

**Title:** Experts Optimistic At U.S. Biosecurity Outlook

**Date:** October 6, 2011

**Source:** [Bio Prep Watch](#)

**Abstract:** U.S. biosecurity policy has made significant progress since Sept. 11, 2001, terror attacks and the anthrax attacks of 2001, but continues to confront myriad challenges in dealing with future biological hazards, both natural and man-made.

At a conference of biosecurity experts hosted by the University of Pennsylvania Medical Center and the Alfred P. Sloan Foundation, progress made over the last 10 years was reviewed and problems for the future were outlined.

In opening remarks, Thomas Inglesby, the CEO of the Center for Biosecurity of UPMC, offered three main reasons for optimism regarding the outlook for biosecurity.

"The first reason for optimism is the community in this room," Inglesby said. "A second reason for optimism is we have U.S. science and technology as our fuel...And a third reason for optimism is the good work that has already happened."

Not only has the community of experts been greatly expanded, as evidenced by the number of attendees at the conference, but the U.S. science and technology base has been greatly expanded and a number of programs and policies have been implemented and refined. Laboratories to quickly characterize and develop vaccines have been established. The U.S. has greatly expanded capacity and has held field exercises and coordinated planning on an inter-agency basis. Rapid distribution channels for the distribution of vaccines have been established and universal antibiotics may well be on the horizon.

Despite these advances, however, much of the conference focused on remaining shortfalls that must be addressed. Most significantly, the lack of an attack over the past 10 years and the loss of personnel in Congress and the executive branch has resulted in a "out of sight, out of mind" mentality, the experts warned.

"Progress has been significant but clearly inadequate to the problem," Richard Danzig, chairman of the board for the Center for a New American Security, said.

In a panel on "Present and Future Biothreats," D.A. Henderson of the UPMC Center for Biosecurity said that much more needs to be done in terms of how best to inform cities and states on how to handle biological threats, whether to shelter in place or evacuate, how to clean up after a biological attack and the necessity to lay out a coherent plan well in advance of such an event.

Danzig added that even such rudimentary questions as whether citizens should open or close windows or whether or not to vacuum remain unanswered.

There is also a tendency for decision-makers to focus planning and exercises on a one or two day event while ignoring modeling for much longer incidents and the efforts that need to be established for handling the clean up associated with a major biological attack.

According to Danzig, economic consequences have been minimized and it is probably more accurate to refer to biological attacks "not as weapons of mass destruction, but as weapons of mass disruption."

In that regard, Randall Larsen of the WMD Center said that the Environmental Protection Agency spends 50 percent less studying how to clean up after a major incident than the military spends on the Marine Corps marching band.

In a panel on "Looking Ahead in U.S. Health Security," Thomas Frieden, the director of the Centers for Disease Control and Prevention, said that what keeps him awake at nights is the possibility of facing an attack for which we are unprepared. We are "not going to face what we have prepared for," Frieden said.

There are 44,000 fewer people working in state and local health departments today than there were two years ago," Frieden said, and, as a result our preparations at the state and local levels in detection and response are eroding.

Andrew Weber, the assistant Secretary of Defense for Nuclear, Chemical, and Biological Defense Programs, raised the issue of the potential for a "lone wolf" to cause a mass destruction event.

"The potential for a lone wolf bioterrorist to launch such an attack, is not a hypothetical," Weber said.

Similarly, Nicole Lurie, the assistant Secretary for Preparedness and Response at the Department of Health and Human Services, also expressed concern about facing unanticipated threats. If our detection systems prove to be inadequate to the task, we could find out about a biological attack too late to deal with it in the most efficacious manner, she warned. Globally, efforts to put in place an international detection system to recognize and respond to epidemics is also key to safeguarding the public.

For the most part the conference picked up on and expanded on the work of the 9/11 Commission, which identified biological threats as "the ultimate asymmetrical threat."

Former Senator Jim Talent, vice chairman of the WMD Center, said that the threat environment remains "dynamic and unpredictable," and that biological weapons were "the easiest to develop and deploy."

The final panel, "Transformative Science in Biosecurity," also emphasized Andrew Weber's point that "the march of technology, which is a wonderful thing in this area, also carries with it this very substantial risk. You cannot say who will pick up these weapons and use them."

Tara O'Toole, the Under-Secretary for Science and Technology at the Department of Homeland Security, worried that, "The accessibility of powerful technologies to people who aren't running an



army, who really are just a group of individuals, is a phenomenon that's going on... These powerful technologies are becoming more and more available and can be used even unintentionally to very detrimental effect on a large scale."

While Craig Venter of the Venter Institute held out the possibility of synthetic DNA leading to vaccines in hours instead of days, weeks or months, and George Poste, the chief scientist at Complex Adaptive Systems Initiative, saw promise in the fusion of molecular biology with computers as a way to speed vaccines and develop therapeutics, most shared the concern that the pace of biological sciences is far outpacing our capacity "to combat malignant uses."

Perhaps of greatest concern was Andrew Weber's fear that "the biggest difficulties associated with biological weapons is that when we talk about them, we're not just talking about terrorist using these weapons like terrorist who might get a nuclear weapon, we're talking about the ability to produce these weapons. And that then gives them the ability to repeatedly attack and reload. The question for our policing agencies is how do we thwart such an attack?"

While a host of responses were offered, including the need for research and budget constancy, enhanced capacity, more realistic planning exercises, the development of balanced portfolios and knocking down the silos that keep government agencies from greater levels of cooperation, the conference made clear that much work remains to be done ([Bio Prep Watch, 2011](#)).

**Title:** White House On Biological Weapons Convention Review Conference

**Date:** December 5, 2011

**Source:** [All Africa](#)

**Abstract:**

***FACT SHEET ON THE SEVENTH REVIEW CONFERENCE OF THE BIOLOGICAL AND TOXIN WEAPONS CONVENTION***

"We must come together to prevent, detect, and fight every kind of biological danger whether it is a pandemic like H1N1, a terrorist threat, or a treatable disease." President Obama, United Nations General Assembly, September 22, 2011

Today, the States Parties to the Biological and Toxin Weapons Convention (BWC) are meeting in Geneva for the start of the Seventh Review Conference (RevCon) of the Biological Weapons Convention to evaluate the implementation of the treaty and chart a course for the coming years.

To underscore the importance the United States places on the BWC as a critical tool to help counter biological threats, the President has asked Secretary of State Clinton to lead the United States delegation to the RevCon, where she will deliver the opening statement for the United States on December 7th.

**Part of a Broader National Strategy**

The BWC is a critical venue for advancing objectives set forth in the President's National Strategy for Countering Biological Threats, which emphasizes the need for multinational collaboration on concrete activities to help counter biological proliferation and bioterrorism.

The three-week BWC Review Conference presents an opportunity for countries to promote real action to improve global response capabilities, reinforce norms against the misuse of biological science, and to help identify and thwart those who would seek to cause harm.

**Revitalizing International Efforts to Reduce Biological Threats**

The United States believes the BWC should be the premier forum for bringing together the security, health, law enforcement, and science communities to raise awareness of evolving biological risks and



how to best manage them. The U.S. believes that revitalized international efforts and a coordinated series of actions can help reduce the threat of biological attacks.

At the RevCon, the United States will seek the endorsement of the BWC States Parties of a work program for the next five years in three broad areas of work that will greatly enhance international efforts to counter biological threats.

1. First, the United States is asking States Parties to establish an effort to develop constructive ways to strengthen implementation of the BWC and build confidence that all members are living up to their obligations. The dual-use nature of biological work simply makes it too easy to conceal prohibited activities - so the United States has proposed efforts to promulgate legislative and regulatory frameworks, safety and security measures, outreach to stakeholders, improved annual reporting, and options for addressing compliance concerns.

2. Second, the United States is proposing that the RevCon create a working group that will be tasked with taking concrete actions to make the BWC a more robust forum for building global capacities for preventing, detecting, and combating disease outbreaks, regardless of whether they are natural, deliberate or accidental. We need to be prepared, both nationally and internationally, to deal with a biological attack should one occur. The United States seeks to capitalize on synergies between security and public health communities and to do so through the sort of international cooperation called for in the BWC.

3. Third, the United States is asking States Parties to establish a mechanism for assessing developments in science and technology to better understand their potential benefits to the BWC as well as their potential misuse by terrorists or others. It is important for BWC States Parties to have a structured dialogue with the international scientific community on emerging technologies in order to better address the potential for their misuse.

In order to meet these goals, the United States will propose that the BWC RevCon establish a vigorous work program for the next five years that focuses on the common needs and interests of all States Parties in combating biological threats.

Pursuing this robust program will help the international community produce concrete results, thereby enabling successful annual Meetings of States Parties and a robust Eighth BWC Review Conference in 2016 ([All Africa, 2011](#)).

**Title:** Remarks at the 7th Biological and Toxin Weapons Convention Review Conference

**Date:** December 7, 2011

**Source:** [U.S. Department of State](#)

**Abstract:**

Hillary Rodham Clinton  
Secretary of State

Palais des Nations  
Geneva, Switzerland

December 7, 2011

Thank you, Mr. President. And I would also like to express my appreciation to all of the delegates and to my colleague, Minister Rosenthal, for his comments. I want to thank the Implementation Support Unit for all the efforts to advance the work here.

I want to start by acknowledging that our countries have accomplished a great deal together under the Biological and Toxin Weapons Convention. One hundred sixty-five states have now committed not to pursue these weapons, and I am delighted to welcome Burundi and Mozambique to the Convention, and I join in urging all states who have not yet done so to join.

President Obama has made it a top goal of his Administration to halt the spread of weapons of mass destruction, because we view the risk of a bioweapons attack as both a serious national security challenge and a foreign policy priority. In an age when people and diseases cross borders with growing ease, bioweapons are a transnational threat, and therefore we must protect against them with transnational action.

The nature of the problem is evolving. The advances in science and technology make it possible to both prevent and cure more diseases, but also easier for states and non-state actors to develop biological weapons. A crude, but effective, terrorist weapon can be made by using a small sample of any number of widely available pathogens, inexpensive equipment, and college-level chemistry and biology. Even as it becomes easier to develop these weapons, it remains extremely difficult – as you know – to detect them, because almost any biological research can serve dual purposes. The same equipment and technical knowledge used for legitimate research to save lives can also be used to manufacture deadly diseases.

So of course, we must continue our work to prevent states from acquiring biological weapons. And one of the unsung successes of the Convention is that it has engrained a norm among states against biological weapons. Even countries that have never joined the Convention no longer claim that acquiring such weapons is a legitimate goal. But unfortunately, the ability of terrorists and other non-state actors to develop and use these weapons is growing. And therefore, this must be a renewed focus of our efforts during the next 14 days, as well as the months and years ahead.

Now, I know there are some in the international community who have their doubts about the odds of a mass biological attack or major outbreak. They point out that we have not seen either so far, and conclude the risk must be low. But that is not the conclusion of the United States, because there are warning signs, and they are too serious to ignore.

Terrorist groups have made it known they would want to acquire and use these weapons. And in the 1990s, the apocalyptic cult, Aum Shinrikyo unleashed two attacks in Tokyo by spraying a liquid containing anthrax spores into the air and unleashing sarin gas into the subway. In 2001, we found evidence in Afghanistan that al-Qaida was seeking the ability to conduct bioweapons attacks. And less than a year ago, al-Qaida in the Arabian Peninsula made a call to arms for – and I quote – “brothers with degrees in microbiology or chemistry to develop a weapon of mass destruction.”

We all have an interest in ramping up our efforts to prevent outbreaks and attacks and then to be prepared to respond if they do occur. The 2001 anthrax attacks in the United States killed five people and sickened 17. More than 10,000 were required to go on to antibiotics. A mass outbreak could cripple an already fragile global economy by cutting off the movement of people, goods, and sparking food shortages. And of course, a victim of an attack could just as easily travel from one country to another.

So shoring up our domestic and international defenses will make it easier to detect and respond. We need public health systems that can quickly diagnose outbreaks, whatever their source, and mobilize the right medical resources and personnel. By making any one country more secure, we make the international community more secure at the same time.

Two years ago, the Obama Administration released our national strategy for countering biological threats, which is a whole-of-government approach designed to protect the American people and improve our global capacity. We support our partners' efforts to meet new international standards in disease preparedness, detection, and response. We are helping make laboratories safer and more secure, engaging 44 countries in these efforts this year. And since 2007, we've conducted more than a dozen workshops to help train public health and law enforcement officials.

But there is still more to do, and I want to briefly mention three areas. First, we need to bolster international confidence that all countries are living up to our obligations under the Convention. It is not possible, in our opinion, to create a verification regime that will achieve this goal. But we must take other steps. To begin with, we should revise the Convention's annual reporting systems to

ensure that each party is answering the right questions, such as what we are each all doing to guard against the misuse of biological materials.

Countries should also take their own measures to demonstrate transparency. Under our new Bio-Transparency and Openness Initiative, we will host an international forum on health and security to exchange views on biological threats and discuss the evolution of U.S. bioresearch programs. We will underscore that commitment by inviting a few state parties to the Convention to tour a U.S. biodefense facility next year, as Ambassador van den IJssel and the UN 1540 Committee did this past summer. And we will promote dialogue through exchanges among scientists from the United States and elsewhere. In short, we are intending and our meeting our obligation to the full letter and spirit of the treaty, and we wish to work with other nations to do so as well.

Second, we must strengthen each country's ability to detect and respond to outbreaks and improve international coordination. As President Obama said earlier this year at the UN, "We must come together to prevent and detect and fight every kind of biological danger, whether it's a pandemic like H1N1, or a terrorist threat, or a terrible disease." Five years ago, 194 countries came together at the World Health Organization and committed to build our core capacities by June 2012, and we should redouble our efforts to meet that goal. We will support the WHO in this area, and I urge others to join us.

Finally, we need thoughtful international dialogue about the ways to maximize the benefits of scientific research and minimize the risks. For example, the emerging gene synthesis industry is making genetic material widely available. This obviously has many benefits for research, but it could also potentially be used to assemble the components of a deadly organism. So how do we balance the need for scientific freedom and innovation with the necessity of guarding against such risks?

There is no easy answer, but it begins with open conversations among governments, the scientific community, and other stakeholders, in this forum and elsewhere. We have recently had our U.S. President's Commission on Bioethics develop ethical principles that could be helpful in this dialogue, and we urge a discussion about them. Ambassador Kennedy and the U.S. team look forward to working with all of you for a strong set of recommendations.

And let me conclude by saying we know the biological threats we face today are new, but our commitment to face threats together is not. More than 85 years ago, after the horrors of World War I, the international community took a stand against the use of poison gases and bacteriological weapons. And nearly a half-century later, that shared commitment brought us together to adopt the Biological Weapons Convention. So in that same spirit, let us move forward to address the challenges we face together in the 21<sup>st</sup> century.

Thank you very much ([U.S. Department of State, 2011](#)).

**Title:** Biological Weapons Convention Conference Issues Final Document

**Date:** December 23, 2011

**Source:** [Nuclear Threat Initiative](#)

**Abstract:** The seventh review conference for the Biological Weapons Convention ended on Thursday with a call for all member states to demonstrate their adherence to the accord's rules, the United Nations announced (see [GSN](#), Dec. 7).

Participating states agreed to a revised reporting document that nations would submit annually as a means of promoting confidence that their biological research and development activities have no warfare component.

"The conference recognizes the urgent need to increase the number of states parties participating in confidence-building measures and calls upon all states parties to participate annually," BWC nations said in the final declaration to the 14-day conference in Geneva, Switzerland. They also called on "those states parties, in a position to do so, to provide technical assistance and support, through

training for instance, to those states parties requesting it to assist them to complete their annual confidence-building measures submissions."

A U.N. press. release did not provide details of the updated reporting forms. In speaking to the conference earlier this month, U.S. Secretary of State Hillary Clinton said the revision should "ensure that each party is answering the right questions, such as what we are each all doing to guard against the misuse of biological materials."

The 1975 pact bans the development, production, stockpiling and use of biological materials for nonpeaceful purposes. It has been ratified by 165 nations, while another 12 states are signatories to the convention. Review conferences are scheduled every five years to consider the operation of the convention and possible threats to its strictures.

"In the final declaration, the conference reaffirms that under all circumstances the use of bacteriological (biological) and toxin weapons is effectively prohibited by the convention and affirms the determination of states parties to condemn any use of biological agents or toxins other than for peaceful purposes, by anyone at any time," the conference-ending document states.

Delegates agreed to maintain the "intersessional program" of annual meetings that are held between the five-year review conferences. A total of 10 days would be allowed each year for separate gatherings of experts and officials from member nations. "Standing agenda items" to be discussed annually from 2012 to 2015 are "cooperation and assistance, with a particular focus on strengthening cooperation and assistance under Article 10; review of developments in the field of science and technology related to the Convention; and strengthening national implementation," according to the final report.

Among the matters to be raised within those agenda items are advancements in science and technology that could lead to breaches of the convention, promoting responsible research by the scientific, academic and industry sectors; and augmenting states' implementation of the BWC rules.

"These are the three areas that the United States emphasized when Secretary Clinton spoke to the conference on Dec. 7," Thomas Countryman, assistant secretary of State for international security and nonproliferation, said on Friday. "They were adopted not because the United States pushed them, but because we selected the topics that it is clear the majority of states party agree are essential for future development."

Nations in Geneva also agreed upon the importance of achieving universal membership in the convention.

"The conference underlines that the objectives of the convention will not be fully realized as long as there remains even a single state not party that could possess or acquire biological weapons," they stated. "The conference urges states parties to take action to persuade non-parties to accede to the convention without delay, and welcomes regional initiatives that would lead to wider accession and adherence to the convention."

Participants also approved the creation of a database to "facilitate requests for and offers of exchange of assistance and cooperation among states parties." The BWC Implementation Support Unit was designated to produce and operate the system (United Nations Office at Geneva [release](#), Dec. 22).

"We are happy with the results," Countryman told reporters during a teleconference. "We think they are significant for not only the United States, as we move ahead on advancing the president's national strategy for countering biological threats, but that they have the same value for all of our partners around the world who share this concern about potential biological and toxic threats" ([Nuclear Threat Initiative, 2011](#)).

# Bio Terror Bible

## EXPOSING THE COMING BIO-TERROR PANDEMIC

**BIOTERRORBIBLE.COM:** Bio-terror and pandemic related conferences have occurred on a regular basis since 9/11, but have recently started occurring on a monthly basis since March of 2011.

**Title:** WHO Director-General Addresses Unprecedented Meeting On Neglected Tropical Diseases

**Date:** January 30, 2012

**Source:** [WHO](#) (World Health Organization)

### Abstract:

Dr Margaret Chan  
Director-General of the World Health Organization

Ladies and gentlemen,

Today's event sends a strong message of encouragement.

At a time of severe financial constraints, it is still possible to set ambitious targets for diseases, secure unprecedented commitments, and accelerate action to meet those targets.

This message is all the more heartening given the people who will benefit. The bottom billion. The poorest of the poor. People with little visibility and even less political voice.

For decades, WHO has been the champion of these people, steadily working to give them the vision of a better life. This leadership, supported by research, partners, and industry donations, has changed the face of NTDs.

Once considered inevitable companions of poverty, many NTDs are now being brought to their knees, with stunning speed.

Last week, WHO issued a roadmap for accelerating work to overcome these diseases. The targets for implementation are ambitious yet feasible, based on the best science available, but also on impressive results under some of the most challenging conditions in the world.

With the boost to this momentum being made today, I am confident almost all of these ancient diseases can be eliminated or controlled by the end of this decade.

The strategies set out in the WHO roadmap are tested and proven to be effective. Let me assure you: WHO knows how to deliver on these commitments in ways that bring results.

The roadmap follows two overarching approaches being covered today.

That is, using what exists while maximizing the impact through smart programme management. And innovation to improve or repurpose existing tools and develop better ones.

We know that programmes for disease elimination or eradication that stress innovation have the best chance of success. This is what we all want: success in relieving the misery of more than a billion people.

The payback will be enormous.

Thank you ([WHO, 2012](#)).

**Title:** Decision Time For Researchers Of Deadly Bird Flu

**Date:** February 14, 2012

**Source:** [MSNBC](#)

**Abstract:** When 22 bird flu experts meet at the World Health Organization (WHO) this week, they will be tasked with deciding just how far scientists should go in [creating lethal mutant viruses](#) in the name of research.

The hurriedly-assembled meeting is designed to try and settle an unprecedented row over a call to ban publication of two scientific studies which detail how to mutate H5N1 bird flu viruses into a form that could cause a deadly human pandemic.

But experts say whatever the outcome, no amount of censorship, global regulation or shutting down of research projects could stop rogue scientists getting the tools to create and release a pandemic H5N1 virus if they were intent on evil.

"It doesn't matter how much you restrict scientists from doing good, bad people can still do bad things," said Wendy Barclay, an expert in flu virology at Imperial College London.

The WHO called the meeting, for February 17 and 18 in Geneva, to work out how to break a deadlock between scientists who have studied the mutations needed to make H5N1 transmit between mammals and U.S. biosecurity chiefs who want their work censored or "redacted" before it goes into scientific journals.

Since the two research teams, one in the Netherlands and one in the United States, have found that just a small number of mutations would allow H5N1 to spread like ordinary flu between mammals - and remain just as deadly as it is now - the meeting is likely to be tense and highly secretive. WHO officials repeatedly stress it will be a "closed door" event.

The United Nations health body has said it is "deeply concerned about the potential negative consequences" of work by the two leading flu research teams who in December said they had found ways to make H5N1 into a easily transmissible form capable of causing lethal human pandemics.

Flu researchers from around the world - more than 30 teams in all - declared a 60-day moratorium starting on January 20 on "any research involving highly pathogenic avian influenza H5N1 viruses" that produce easily contagious forms of the virus.

The WHO has invited 22 people to this week's meeting, including the researchers who carried out the work, editors of the two journals, Science and Nature, who were asked to hold publication, and representatives from the U.S. National Science Advisory Board for Biosecurity (NSABB) which asked for the papers to be censored.

Keiji Fukuda, the WHO's Assistant Director-General for Health Security and Environment, who will chair the meeting, says he would like to secure agreement on whether the studies should be published, in full or part, and who should have access to them.

The scientific know-how is seen as vital for scientists to be able to develop vaccines, diagnostic tests and anti-viral drugs that could be deployed in the event of an H5N1 pandemic.

"It is important that research on these viruses should continue," Fukuda told Reuters. "They do pose a risk. There's a lot of things we don't know about them. The question is not really should we continue to do research ... but under what conditions can we do it so we don't unnecessarily create fears and risks."

The H5N1 virus, first detected in Hong Kong in 1997, remains entrenched among poultry in many countries, mainly in Asia, but so far remains hard for humans to catch. It is known to have infected nearly 700 people worldwide since 2003, killing half of them, a far higher fatality rate than the H1N1 swine flu which caused an influenza pandemic in 2009/2010.

Ron Fouchier, the scientist leading the Dutch team that gave H5N1 various genetic mutations and made it transmissible in mammals, argues the research must be published to help public health officials better prepare for a scenario where the virus could mutate and become more deadly, spreading from person to person via coughs and sneezes.

He has also said other research teams around the world are close to the same findings, some of them inadvertently, and should be warned in advance how the virus could become airborne.

In the short term, most scientists agree the moratorium is "a good gesture," as flu expert and former WHO health security adviser David Heymann describes it, one that offers the research community space to think.

But can it, or should it, go on forever?

Heymann, Barclay and many other scientists argue that stopping this type of research into flu viruses and other potentially lethal pathogens would set a dangerous precedent.

Although adding and deleting genes can create super-strains that put the entire world at risk, Heymann said, such work is also vital to developing tools such as effective vaccines and diagnostic tests which are needed quickly if a pandemic hits.

Preventing this research would also prevent legitimate and well-intentioned researchers from using all possible scientific options to prepare for naturally occurring, or deliberately caused, outbreaks.

John Edmunds, who heads the department of infectious disease epidemiology at the London School of Hygiene and Tropical Medicine, describes studies on genetic mutations of H5N1 as "very, very important work" that should not be stopped.

"This flu strain has the potential to cause such enormous damage, and it's important to know how far away we are from a horrible event like that," he said. "It appears we're not that far off it. That doesn't mean it's inevitably going to happen, but it makes it more important that we're vigilant."

Heymann, who now leads the Center on Global Health Security at the Chatham House think-tank in London, says the best possible outcome would be a globally-agreed "best practices framework on how you conduct this research and how you provide the information to others."

"It's also crucial to get understanding that even if you don't provide this research information, there are ways that rogue scientists can get it if they want to," he said ([MSNBC, 2012](#)).

**Title:** Asia Pacific CBRN Conference Kicks Off This Week

**Date:** February 21, 2012

**Source:** [Bio Prep Watch](#)

**Abstract:** The SMI Group has announced the details for its 2nd annual Chemical, Biological, Radioactive, Nuclear and Explosives Asia Pacific conference, which will be held from February 21 through February 24 in Singapore.



The conference, which will be located at the Grand Copthorne Waterfront Hotel, will include high level speakers from all over the world discussing CBRN-E issues. The conference will focus on initiatives to prepare for and prevent CBRN-E attacks in the Asia Pacific region of the world.

The four day event will discuss topics that range from medical countermeasures to regional programs. Attendees will see just how governments deal with such terrorist threats. The program will include presentations from various Asian countries, including South Korea, India, Japan, Singapore, Australia and Vietnam, as well as Emergent BioSolutions' Allen Shofe. There will also be a special pre-conference workshop focusing on the Fukushima Nuclear Power Plant incident one year later, including lessons learned from the disaster and regulations related to nuclear safety.

Speakers scheduled for the conference include

The event will also feature a post-conference workshop to discuss how to counteract a bioterrorism attack on a populated city in Asia. The workshop will have sessions on different bioterrorism agents, how they spread and how to contain a threat through first responder techniques. Emergent Biosolutions, a global biopharmaceutical company, will moderate the workshop.

"CBRN-E Asia Pacific is the leading CBRN-E event in Asia Pacific and is the largest gathering of high level government, military and industry CBRN-E experts," the SMi Group said. "CBRN-E Asia Pacific serves as a platform for decision makers, influencers and those at the forefront of current operations to come together to give attendees the crucial feedback and lessons learned. A vibrant exhibition runs parallel to the conference where vendors have the opportunity to showcase their latest products, technology and solutions for the CBRN-E community" ([Bio Prep Watch, 2012](#)).

**Title:** Discussion Of NSABB's Publication Recommendations For The NIH-Funded Research On The Transmissibility Of H5N1

**Date:** February 29, 2012

**Source:** [ASM Bio-Defense](#)

**Abstract:** Moderated by the Chair of the National Science Advisory Board for Biosecurity (NSABB), Paul Keim, Ph.D., this newly added session at the ASM Biodefense and Emerging Diseases Research Meeting will include discussions of the NSABB's recommendations for the publication of the controversial H5N1 research. This session will also provide an open forum for attendees to give their feedback on such policy issues as the appropriate mechanisms to allay public concerns about the safety of dual use research.

**Presentations will include:**



**NSABB Recommendations**

**Michael T. Osterholm, Ph.D., MPH**

University of Minnesota School of Public Health, Minneapolis, MN  
Director, Center for Infectious Disease Research and Policy (CIDRAP)



### **Government Response to the Recommendations**

**Anthony S. Fauci, M.D.**

Director, National Institute of Allergy and Infectious Diseases (NIAID)



### **Science's Response to the Situation**

**Bruce Alberts, Ph.D.**

Editor-in-Chief of *Science*



### **Perspective from an Investigator**

**Ron A.M. Fouchier, Ph.D.**

Erasmus MC, Rotterdam, Netherlands ([ASM Bio-Defense](#)).

**Title:** Thousands Of Scientists To Convene In Vancouver, B.C., For 2012 AAAS Annual Meeting

**Date:** January 23, 2012

**Source:** [AAAS](#)

**Abstract:** It is a question that frames the 21st century scientific enterprise: As the world population moves toward 9 billion, will it be possible to provide food, water, and energy for everyone without dangerously depleting natural resources and damaging the environment? These challenges will be the focus of the 178th AAAS Annual Meeting, which convenes from 16-20 February in Vancouver, British Columbia.

The meeting will feature thousands of top scientists, engineers, educators, policymakers, and science journalists from some 50 nations and a full spectrum of disciplines. More than 170 plenary addresses, lectures, seminars, and symposia—plus more than two dozen briefings and interview sessions for reporters—are scheduled under the theme “Flattening the World: Building a Global Knowledge Society.”

“The theme... is intended to focus the program on the complex, interconnected challenges of the 21st century and on pathways to global solutions through international, multidisciplinary efforts,” said AAAS President Nina V. Fedoroff in her [letter](#) of invitation.

The program will be rich and ambitious: Daily [plenary addresses and panels](#) featuring international science leaders such as climate expert **James Hansen**, director of NASA's Goddard Institute for Space Studies, and **Frans B. M. de Waal**, the Dutch behavioral biologist and author known for his work on the social intelligence of primates. [Lectures](#) by influential researchers in topics ranging from water security and volcanism to molecular motors and the genetic revolution. [Full-day seminars](#) featuring international panels of researchers focused on climate change in northern latitudes, understanding the universe, and the potential future impact of biology. [Symposia tracks](#) from a broad spectrum of disciplines, with special attention on energy, food security, communication, education, development, and international collaboration,

The AAAS Annual Meeting also will feature the traditional [Family Science Days](#), free and open to the public, on Saturday and Sunday, 18-19 February. Hands-on activities will focus on alien planets, sea creatures, rocketry, and other areas, and kids (along with their parents) will have the chance to meet and talk with scientists ([AAAS, 2012](#)).

**Title:** Sixty-Fifth World Health Assembly

**Date:** 2012

**Source:** [WHO](#)

**Abstract:** The Sixty-fifth session of the World Health Assembly will take place in Geneva during 21-26 May 2012. At this session, the Health Assembly will discuss a number of public health issues such as universal health coverage, Millennium Development Goals, noncommunicable diseases, mental disorders, nutrition and adolescent pregnancy. The Health Assembly will also discuss the programme budget, administration and management matters of WHO ([WHO, 2012](#)).

**Title:** Europe's Largest, General Science Meeting In Dublin This July

**Date:** February 4, 2012

**Source:** [Digital Hub](#)

**Abstract:** The Euroscience Open Forum (ESOF) - Europe's largest, general science meeting - will be hosted by Dublin this summer from the 11th to the 15th of July.

Held in a leading European city every two years the ESOF was last held in Turin in 2010 and Copenhagen will host then event in 2014. Dublin was awarded the honour of hosting ESOF in 2012, following an open competition.

The event is unique in the diversity of delegates who attend: it attracts top researchers from the natural sciences and the social sciences; business leaders; senior EU and government officials; and international scientific media. They come to discuss the best of European science and to address all of the current major global scientific challenges, including Energy, Climate Change, Food and Health.

The programme for this year's ESOF includes programmes on Science, Science 2 Business, Careers, a Social programme and a Science in the City Festival which will celebrate "where creativity and great science meet".

The Science 2 Business programme includes interactive workshops (which will debate the key issues facing nascent and existing entrepreneurs from a scientific background), advisory booths, business speed-dating opportunities, and a vibrant market place buzzing with the anticipation of potential collaborations.

The diverse range of speakers at the ESOF 2012 includes Rolf-Dieter Heuer, Director General of CERN, Jocelyn Bell Burnell, President of the Institute of Physics, Mary Robinson Former President of Ireland and Former UN High-Commissioner, Marcus du Sautoy, Professor for the Public Understanding of Science at Oxford University and five Nobel Laureates amongst others ([Digital Hub, 2012](#)).

# Bio Terror Bible

## EXPOSING THE COMING BIO-TERROR PANDEMIC

**BIOTERRORBIBLE.COM:** Based on recent news and events surrounding the NATO Summit in Chicago, Illinois, on May 20-21, 2012, it is possible that Chicago could be the staging ground of a massive bio-terror attack and/or an Obama assassination attempt. These attacks could occur simultaneously or one after the other and would definitely have Chicago Mayor Rahm Emanuel's signature all over it. There will likely be massive protests against the NATO summit in which a provocateur could attack Obama or attack the Occupy Wall St. crowd with a bio-terror device. Coincidentally, the script in the film entitled "The Death of a President" about a U.S. President getting assassinated in Chicago during major riots appears to be transpiring in reality.

**OBAMACSI.COM:** Filmed in 2006 but released in 2008, "[The Death of a President](#)" is an apparent script for the future assassination of Barack Obama. The assassination in the film takes place at 8:13pm on October 19 (date of the MLB World Series), in Chicago, Illinois, Obama's home town. The president depicted in the movie, George W. Bush, is shot twice at the Sheraton Hotel in downtown Chicago by an assassin with a sniper rifle. The top three suspects for the assassination are a full-time peace activist, a U.S. military veteran, and a Syrian man with alleged Al Qaeda ties. Although the Syrian man was charged, tried and convicted for the assassination, the true perpetrator of the crime was the U.S. military veteran's father, a Major in U.S. military and a Desert Storm veteran. If there was ever a blueprint for the assassination of Barack Obama, "The Death of a President" is definitely it.

**Title:** 2012 Chicago Summit

**Date:** April 16, 2012

**Source:** Wikipedia

**Abstract:** The 2012 Chicago summit is a meeting of the [heads of state](#) and [heads of government](#) of the [North Atlantic Treaty Organization](#), to be held in [Chicago, United States](#), on 20 and 21 May 2012. The event was originally scheduled to coincide with the [2012 G8 summit](#), but the G8 summit was later rescheduled to be held at Camp David. This is the first time ever that a NATO summit has been held in the United States outside of [Washington, DC](#).

### Agenda

The Chicago summit was originally planned as an "implementation summit" to follow up the [2010 summit in Lisbon](#). However, the group is now likely to discuss the impact of recent events, such as the [Arab Spring](#), [Libyan civil war](#), [global financial crisis](#), and transition for NATO forces in [Afghanistan](#).

NATO is planning to craft specific resolutions concerning [Middle East](#). Issues to address include the organization's continuing military support of active insurrections in the region, as well conflict with Iran. The group is going to make plans for defending certain areas, such as the [Strait of Hormuz](#).

The organization is also going to review its collective relationship to [Russia](#). Indeed, NATO has stated that Russia's attendance at the Chicago event will depend upon accession to a system of [European missile defense](#). Russia worries about its own nuclear deterrent in the region; the United States insists that a system is necessary to mitigate any threat from [Iran](#).

NATO will also discuss [missile defense](#) and [nuclear deterrence](#) more generally. The Lisbon summit ordered the creation of a "Deterrence and Defense Posture Review," (DDPR) a document expected to express and discuss conflicts some of the wide-ranging [conflicts on the topic within NATO](#). Reviewal of the DDPR will represent the first time since the end of the [Cold War](#) that NATO has explicitly conferred on the topic of nuclear deterrence. NATO members have a diversity of opinions on these topics, and Karl-Heinz Kamp, the Director of NATO Defense College's Research Division, cautions that few clear conclusions may be reached.

The Afghanistan issue in particular faces a public relations timeline due to a declaration by [Barack Obama](#) that NATO activities in Afghanistan would be concluded by 2014.

### **Protests**

Planners expect the NATO summit to draw protests from the [Occupy movement](#), as well as the [anti-globalization movement](#). Local fears about the impact of the protests have caused several local schools to reschedule their prom nights. Some schools are considering closing entirely.

### **Citizen Journalism**

A range of groups are expected to organize [citizen journalism](#) centers to provide independent media coverage of summit and the expected protests.

Alderman Rick Munoz has proposed legislation for the City Council that prohibits police from interfering with online media and cell phones during the event.

### **Policing**

The summit has been designated a [National Special Security Event](#) (NSSE) by the [Department of Homeland Security](#). Final authority over [law enforcement](#) thus belongs to the [Secret Service](#). The NSSE steering committee, which also includes representatives from the [Chicago Police Department](#) and has 24 subcommittees, began meeting in October 2011.

Local security forces are being trained by an Illinois company called Controlled F.O.R.C.E., which specializes in subduing crowds. Police are being trained in "Mechanical Advantage Control Holds," as well as the use of [tasers](#).

The city has signed a \$193,461 contract with [Super Seer Corp.](#) for the procurement of new face shields that fit over gas masks; the shields are intended to protect police officers from liquids. The Chicago Police Department will also prepare its mounted unit with riot gear: armor for horses along with "crowd control training."

### **New Regulation**

Chicago's mayor, [Rahm Emanuel](#), has proposed and passed new ordinances targeted at potential protestors. Contrary to Emanuel's initial statements, these ordinances will be permanent, remaining in effect after the summits are over.

### **The new measures include:**

1. Authorization for the Mayor to purchase and deploy surveillance cameras throughout the city, without any type of oversight.
2. Restrictions on public activity, including amplified sound and morning gatherings.
3. Restrictions on parades, including the requirement to purchase an insurance policy worth \$1 million and to register every sign or banner that will be held by more than one person.
4. The power to deputize many different types of law enforcement personnel other than the Chicago Police Department.

These new ordinances drew protests from the [ACLU](#), [Amnesty International](#), the [Occupy Movement](#) (particularly [Occupy Chicago](#)), and the [pro-life](#) movement. Some local business owners have complained about a lack of transparency in policing because those responsible for security are unwilling to release specific plans ([Wikipedia, 2012](#)).

**Title:** Protesters Urged To Occupy Chicago During G8 And Nato Summits

**Date:** January 26, 2012

**Source:** [Guardian](#)

**Abstract:** Adbusters, the group which helped spark the [Occupy movement](#), has put out a call for tens of thousands of protesters to occupy Chicago during the G8 and Nato summits in May.

Seeking out those it describes as "redeemers, rebels and radicals" all over the world, the Canadian activist group is calling on protesters to bring their tents and peaceful barricades to converge on the city and build a camp on public ground. By making the call international, [the group said it is hoping to pull off](#) the "biggest multinational occupation" ever.

It encourages peaceful civil disobedience and invokes the spirit of the "Chigago Seven", a group of high-profile civil rights leaders including Abbie Hoffman, who were charged with inciting riots in 1968, when the city was host to violent clashes between police and anti-Vietnam activists during the Democratic National Convention.

Protesters flocking on the city in May will face heightened security, when heads of state, Nato generals and other military leaders will be there. They will also face unique rules in the city against erecting tents, which forced Occupy Chicago to become unique in the Occupy movement for not ever setting up a permanent occupation.

Since a wave of evictions in cities and campuses across the US last November, the Occupy movement, which protested against income inequality and corporate greed, has become less visible, aside from a few rallies or demonstrations. But campaigners insist the movement continues to grow and will rise anew in the spring in time for the May offensive.

The month-long [protest](#) will focus on demands for "a Robin Hood Tax ... a ban on high frequency 'flash' trading ... a binding climate change accord ... a 'three strikes and you're out' law for corporate criminals ... an all-out initiative for a nuclear-free Middle East" and whatever it decides on general assemblies and global internet brainstorm, according to Adbusters.

Threatening civil disobedience, it added: "And this time around we're not going to put up with the kind of police repression that happened during the Democratic National Convention protests in Chicago, 1968 ... nor will we abide by any phony restrictions the city of Chicago may want to impose on our first amendment rights. We'll go there with our heads held high and assemble for a month-long people's summit ... we'll march and chant and sing and shout and exercise our right to tell our elected representatives what we want ... the constitution will be our guide."

A spokesman for Occupy Chicago welcomed the call, and said it would be publicising it as part of its #ChicagoSpring campaign, which would include protesting at Nato and G8.

Joshua Kaunert of Occupy Chicago said: "Occupy Chicago has a lot of work to do both prior to and after these summits: Mayor 1% has turned peaceful protest and passive resistance in Chicago into a criminal act, violating our First Amendment rights. We are still in the planning stages for all of our spring actions, but we welcome all who want to speak out against the famine and war forced on the world by the G8 and Nato to join us in the streets of Chicago."

Adbusters have said they hoped 50,000 people would converge on Chicago. However, none of the recent actions by Occupy have mustered the kind of numbers that it has managed in the past.

However, Sebastian, a spokesman for Occupy Wall Street – who was unwilling to give his surname – said the adbusters call was "inspiring" and could be the spark that lights up the movement in the Spring.

"The people base is probably growing faster than we had before, as we have spent a long time in network building and outreach work. A single march in Portland was 6,000 people and we had a union



march in New York of 30,000 people. The oppression of a movement makes it stronger. They are calling not just on Occupy, but on people internationally. The appeal is huge."

He said that Occupy was already planning actions in May, an important month in the civil rights calendar, such as a general strike on May 1, but the adbusters call to protest for the whole month was an "inspiration."

Sam Jewel of Occupy DC said: "Everyone I've spoken to from Occupy DC is pretty excited about it. It's going to be a pretty dramatic few weeks. It will be interesting to see that will happen and whether they will respect for dissent. The mayor of Chicago hasn't ever allowed tents at Occupy Chicago. There is the whole tradition of '68 with all the police brutality there. But we are in a different era of protests now.

"There is a global consensus that wealth is too accumulated by a small percentage, and that our country is not democratic any more" ([Guardian, 2012](#)).

**Title:** Security Fears? Chicago G8 Summit Canceled, Relocated To Camp David

**Date:** March 7, 2012

**Source:** [Russia Today](#)

**Abstract:** Amid concerns over thousands of protestors descending on Chicago, Illinois for the G-8 Summit this spring, the event has been moved to the presidential compound at Camp David, Maryland, around an hour outside of Washington.

Leaders from the United States, Russia, Canada, France, Germany, Italy, Japan, the UK and European Union were expected to arrive in Chicago this May for the annual meeting of the world's largest economies. Protesters also had plans for the Windy City, however, and demonstration groups including Occupy Wall Street offshoots had begun orchestrating events to coincide with the meeting. Now barely two months before the event is slated to occur, the G-8 Summit is being moved outside of Chicago to Camp David, a suburban city outside of the US capital that serves as a historic retreat locale for America's commander-in-chief.

*"In May, the United States looks forward to hosting the G-8 and NATO Summits. To facilitate a free-flowing discussion with our close G-8 partners, the president is inviting his fellow G-8 leaders to Camp David on May 18-19 for the G-8 Summit, which will address a broad range of economic, political and security issues,"* reads a statement released Monday by the White House.

After the G-8 Summit, the NATO meeting is expected to continue as planned in Chicago on May 20 through 21.

In the past, these high-profile meetings of the minds have attracted massive demonstrations, with the 2010 G-20 Summit in Toronto resulting in the largest mass arrest in the history of the entire country of Canada. In recent weeks, the Apartment Building Owners and Managers' Association of Chicago began a series of presentations in which it explained how building managers could effectively handle riots, protests, tear gas and bomb threats.

Camp David has served as a retreat for every president since Franklin Roosevelt went into office in the 1940s and has hosted foreign dignitaries such as Winston Churchill, Margaret Thatcher and Anwar al-Sadat. Come this spring, however, it will serve as a meeting place for more than just a few heads of state. Obama, Cameron, Merkel and Sarkozy are just a few of the names that are expected on this year's guest list — and don't expect there to be many more. Camp David is normally subjected to heightened security standards, and this spring's G8 Summit won't come as any exception. For protesters hoping to picket outside the grounds — a mass demonstration would be unlikely.

Coincidentally, a new bill drafted by Congress, [HR 347](#), will make it a federal offense to trespass on the grounds of any place granted Secret Service. If approved, the NATO Summit in Chicago will fall into this jurisdiction, as will the presidential retreat at Camp David. What does that mean for protesters?



Even if you're in the proximity of the premises, you could be considered a criminal for engaging in any activity that disrupts a governmental event ([Russia Today, 2012](#)).

**Title:** Secret Service Has Shopping List For Terror-Proofing NATO Summit

**Date:** April 16, 2012

**Source:** [Chicago Sun-Times](#)

**Abstract:** The Secret Service has an extensive shopping list to fortify the Chicago NATO summit, from barriers to withstand a vehicle going 50 mph to 8-foot-high fences that can't be climbed.

The specifics are contained in a bid request from the Secret Service, a document called "sensitive but unclassified." The proposals for equipment rental and project management are due April 24 for the May 20-21 summit.

Many world leaders are expected to arrive in Chicago on May 19 or a few days earlier — and so are protesters and an international press corps.

The Secret Service document sheds light on the massive security operation that is supporting the summit, which will draw up to 50 heads of state plus associated foreign and defense ministers, military attaches and other high-level personnel in national delegations.

The summit itself is at McCormick Place. Other events are taking place at Soldier Field, Navy Pier and the Field Museum. The official delegations will be staying mainly at downtown hotels. First lady Michelle Obama is taking spouses of world leaders to the Gary Comer Youth Center on the South Side.

The U.S. government — footing the security bill — is looking for a single vendor to deliver a variety of goods and services at a fixed price, starting on May 14, including:

- ◆ Portable high-security vehicle barriers to withstand the impact of a 15,000-pound vehicle hitting it at up to 50 mph. The barrier needs to be installed within one hour or less.

The Secret Service is looking for between 10,000 and 20,000 linear feet of standard road-side concrete barriers.

- ◆ Crowd control "barricade systems": 8-foot-high steel fences with 1/8-inch steel mesh "to mitigate/disperse thrown liquids." The barricade must be "environmentally sensitive" but strong enough to not be pulled or pushed down, "taken apart, set on fire and easily climbed on."

The "anti-scaling" fencing order is for between 20,000 and 25,000 linear feet.

The selected contractor can borrow up to 3,600 linear feet of anti-scale fencing from the government — but they have to pick it up and return it to a suburban Washington location.

- ◆ Between 10 and 20 portable light towers for Secret Service checkpoints.

- ◆ Sand bags, with no specific number.

- ◆ A variety of tents for various sites, porta-potties and mobile office trailers.

- ◆ Between five and 10 golf carts.

The Secret Service declined comment.

I understand that the equipment request is considered routine for an event of the magnitude of the NATO summit, with significant potential targets.

The Department of Homeland Security designated the NATO summit as a National Special Security Event; that puts the Secret Service in charge of the overall security plan.

The bid request was posted online April 10. The bid was first disclosed by Government Security News and Crain's Chicago Business.

The contractor needs experience in three other high-security events within the past 36 months. All employees must be U.S. citizens and anyone with warrants or felony arrests cannot be part of the work force. All workers will have to undergo a background check by the Secret Service — so the vendor must supply personnel who can “successfully pass the background investigation” ([Chicago Sun-Times, 2012](#)).

**Title:** Blackhawks Circle Low Through Chicago Skies As Secret Service Releases Security Details

**Date:** April 16, 2012

**Source:** [Fox Chicago](#)

**Abstract:** Chicago - Blackhawks and A/MH-6 Little Bird helicopters used by special forces circling low through downtown Chicago skies made for a scary scene along the Chicago River, as they rattled windows flying among the city's skyscrapers.

The training exercise comes as the city found out some of the details of what the Secret Service wants for security at next month's summit at McCormick Place.

**PHOTOS:** [Blackhawk Helicopters Circle Chicago](#)

FOX Chicago News has their terror prevention shopping list, [courtesy of the Chicago Sun-Times](#):

- Portable high security barriers
- Crowd control barriers
- 10-12 portable light towers
- Sandbags, port-a-potties
- Mobile offices
- 5-10 golf carts

[The Chicago Tribune reports](#) that the most traffic for NATO dignitaries will be between McCormick place and downtown hotels in the Loop, River North and the Gold Coast.

Fifty heads of state will attend, with delegates, and will be moving multiple times each day.

FOX Chicago News viewers called in, describing men with automatic weapons, hanging out of helicopters.

The city's Office of Emergency Management and Communications on Monday announced that Chicago is the site of a military training exercise this week involving personnel and at least three helicopters.

But the bland press release from City Hall did nothing to prepare folks for the jarring scene that unfolded Monday evening.

“It was frightening,” Jessica Hill said. “I was definitely alarmed.”

At least three Blackhawk helicopters flying at time in close order formation - at other times separating fairly widely - zoomed around office and residential towers for several hours.

“I was pretty amazed,” Felise Llano said, “because they were definitely military.”

Witnesses described three to four very heavily armed men in each chopper. Several said some of the men appeared to be tethered and were at times literally hanging out of the choppers, and looked ready to jump.

Calling it routine training, city officials said in a statement such exercises are conducted by military personnel in various cities around the country. They say the exercises are designed to improve the military's ability to operate in urban environments.

Emergency management officials said the training sites have been selected to minimize the impact on residents' daily routines.

The timing of the drills led some to wonder if they're in preparation for next month's NATO summit.

But officials said that the summit and the drills are unrelated ([Fox Chicago, 2012](#)).

**Title:** Residents Of State Street Condo Told To Leave Chicago During NATO Summit

**Date:** April 20, 2012

**Source:** [Fox Chicago](#)

**Abstract:** Chicago - Residents of a Chicago condo whose building will be in the eye of the NATO storm are being warned that they should move out for the weekend ... or risk being trapped inside by rioters.

FOX Chicago News was first to report Friday that the people living in the 17-floor Library Tower building at 520 South State Street were warned in a letter from condo management that "we are **STRONGLY** recommending that all residents find places to stay during the conference from May 18 through May 21."

[READ THE LETTER>>>](#)

NATO summits often attract crowds of thousands of protesters. Currently, a march is planned on Sunday, May 20, from the Petrillo Band Shell in Grant Park past Library Tower on State Street to McCormick Place.

The condo is hiring two off-duty police officers to provide security; those cops will be armed.

"In the event of a riot or the potential of one near the building, all access doors will be locked including the garage door," the letter continues. "For everyone's safety, we will be instructing anyone in the building to stay in his or her unit."

"I can't just leave my garage whenever I want. They'll be holding us hostage in here," said resident Sebrina Krieling.

The condo is in a busy area on State between Harrison and Congress, and residents are used to a lot.

"It's just pretty shocking to see and hear things are going to be scary in your own home," said resident Jeff Lunz. "I think they've got everyone's best interest in mind."

The letter also warns:

- "We are strongly recommending that you do not have any guests over during this time including dog walkers and cleaning companies."
- "There will be absolutely no deliveries or moves permitted between Friday, May 18 and Monday, May 21."
- "The revolving door will be locked on Friday morning."

"I'm inconvenienced by parades and a lot of other things. I can't get out on the day of the Thanksgiving Day parade. So that's just a part of city life," said Lunz ([Fox Chicago, 2012](#)).

# Bio Terror Bible

## EXPOSING THE COMING BIO-TERROR PANDEMIC

**BIOTERRORBIBLE.COM:** There is a host of evidence in the form of bio-terror propaganda, drills, war games, plots and patsies which suggests that the 2012 summer Olympics in London, England, may be the victim of a state-sponsored bio-terror attack. Starting in 2002, the Olympics has been front and center in the war against bio-terror, and may be used as the stage for international terrorism in the near future.

**Title:** An Olympian Bioterror Effort

**Date:** February 6, 2002

**Source:** [Pittsburgh Post-Gazette](#)

**Title:** U.S. Holds Pre-Olympics Bio-Planning Exercise

**Date:** January 22, 2010

**Source:** [Bio Prep Watch](#)

**Abstract:** U.S. federal, state and local authorities have finished a planning exercise to respond to a potential massive health disaster in British Columbia during the 2010 Winter Games.

“Nothing indicates to us at this time that we should be concerned about any significant disease outbreak, or anything of that nature,” an emergency-response specialist for Whatcom County, just south of British Columbia, told CTVOlympics.com “But the reality is, there will be a lot of people there. There will be a lot of food venues. Our responsibility is to prepare for the full spectrum of things that could occur, from a small outbreak of a day-to-day disease to anthrax.”

The exercise, called Infection Detection, centered on Americans that arrived at the border, informing agents that they had suddenly been hit by symptoms of an illness that they could not explain. All of the victims had the common characteristic that they had been at the Olympics.

As more and more mock patients arrived at the border, agents put on white masks and gloves to deal with citizens complaining of respiratory problems, diarrhea and nausea. A makeshift triage center was also erected in a nearby parking area.

At the triage center, staff questioning the citizens further before, theoretically, sending them to the appropriate professionals for further care.

The exercise revealed that border agents are in need of more resources, which would allow them to escort sick people to the triage screening center. Relying on those who are sick to remember directions and drive themselves, it was revealed, did not work.

Another lesson learned was that medical staff need to implement a better balance of treatment for symptoms with investigations into the origins of the problem, working to quickly identify those most in need of critical care and then figuring out what the source of the affliction is ([Bio Prep Watch, 2010](#)).

**Title:** Olympic Armageddon: How Terrorists Could Send Nuclear Bomb Up The Thames To Target

London 2012 Games  
Date: March 31, 2010  
Source: [Daily Mail](#)

**Abstract:** This week, Security Minister Lord West warned there was a real danger that Al Qaeda terrorists could use a boat to transport a 'dirty' nuclear bomb up the Thames and detonate it in the heart of London.

Here, top thriller writer TOM CAIN, whose most recent novel is about a terrifying Al Qaeda attack on London, imagines the unthinkable...

Queen Anne's Gate, Westminster, July 27, 2012. The group of men and women gathered in the Home Office meeting room were grey-skinned with exhaustion. They had been working together for years, sharing a steadily growing burden of responsibility that now threatened to crush them.

In less than an hour, the London Olympics of 2012 would get under way at a ceremony presided over by Her Majesty the Queen and attended by political leaders from around the world. More than a billion people would be watching live on TV.

The Olympic Stadium was now, officially, the top terrorist target on earth. The meeting room contained representatives from MI6 and MI5 the Special Forces, the Metropolitan Police's SO15 Counter-Terrorism Unit and a slew of Government departments. They were way past the point of making preparations. Every possible eventuality had been considered and its dangers analysed.

CCTV cameras, backed by facial recognition systems, were tracking the crowds travelling to the Olympic Stadium and gathering in its stands. Teams of sniffer dogs had gone over every square millimetre of the Olympic site, looking for explosives.

In the skies above London, police spotter drones were tracking any suspicious movements of traffic. Helicopters fitted with radiation sensors had swept the city from the air, seeking out the gamma rays that would signal the presence of a nuclear device.

Everything had been thought of. And yet there could still be nasty surprises. Such as the alert they had just received from GCHQ, the Government's surveillance centre in Cheltenham. It stated there had been a sudden spike in communications traffic between known activists in the Islamic fundamentalist movement.

One email in particular had caught the attention of a GCHQ supercomputer. Sent from an iPhone belonging to a regular worshipper at one of London's most radical mosques, it read: 'Have collected those old 90s records. Taking them to the party now.'

It seemed perfectly innocent, but for two digits and two letters, placed consecutively: 9-0-s-r. Together they formed the chemical symbol for a substance called strontium-90. And that was enough to silence the room.

'Wonderful,' sighed a senior MI6 officer with heavy irony. 'A dirty bomb. Just what we need.'

Though no one in Westminster knew it, about 50 kg of strontium-90 was sitting at that moment less than five miles from the Olympic Stadium.

It had come from the frozen wasteland of Russia's Arctic coast. There, it had been used to power one of a string of unmanned lighthouses erected by the former Soviet government, then forgotten in the chaos of the post-Communist years.

Retrieved by a Russian mafia gang, the strontium was sold on to Al Qaeda operatives fighting alongside Islamic rebels in Chechnya. They placed it in a lead casket, which rendered the strontium's radioactivity undetectable, and transported it to the UK in a container marked Agricultural Equipment.

Now the strontium had come to rest in an anonymous unit on an industrial estate in Walthamstow, East London. But it would not be at rest for much longer.

The Prime Minister had sent his deputy director of communications to the Home Office meeting, the director himself having bagged a Royal Box seat at the Olympics opening ceremony. 'Dirty bomb' was not a phrase the spin doctor wanted to see on tomorrow's front pages.

'What are we talking about here?' he asked. 'Is this some kind of nuke?'

An official from the Ministry of Defence, whose speciality was threat assessment, was the first to speak.

'Not exactly. A dirty bomb contains nuclear material, but it doesn't use it to generate the actual explosion. The blast comes from conventional explosives, like a regular bomb. So it's much, much less powerful than even the smallest atom bomb.'

'Well that's a relief.' 'Ah, not exactly. You see, the blast from the explosives smashes into the nuclear material, such as this strontium-90, and blasts it into highly toxic dust, which is spread by the force of the blast and then carried on the wind. Anyone breathing that air inhales the toxic dust.'

The spin doctor grimaced at the thought of talking away that disaster. 'How dangerous is this toxic dust? What kind of casualties are we talking?'

'It's a matter of quantity. People close to the blast, who are exposed to high doses of radioactive material will die. In less severe cases, exposure will cause serious, but survivable, sickness.'

'For most people, however, who breathe a very diluted amount of the material, a mile or two from the bomb site, it would be no better or worse than, say, smoking a few packets of cigarettes.'

'Well, that's good, isn't it?' asked the spinner, desperate for a positive angle.

'Not entirely,' the bureaucrat replied. 'For one thing, a large, high-explosive bomb in the Olympic Stadium, could easily cause thousands of casualties. And with 80,000 people crammed into a confined space, even those who escape the blast will inevitably breathe in a great deal of heavily radioactive air.'

'In total, I would expect many times the number of deaths the Americans suffered on 9/11. The same would apply, of course, if the bomb were to go off at any of the other Olympic celebrations tonight.'

Giant screens had been erected in Britain's major cities to broadcast the opening ceremony. Each would attract tens of thousands of revellers. Just down the road from the meeting, Trafalgar Square was already crammed with people.

'My God!' the spin-doctor gasped. 'And the whole thing'll be live on TV. The Olympics will be over before they'd begun. Britain's reputation in the world would be...'

'Devastated,' nodded the MI6 officer. 'This would give Al Qaeda the greatest propaganda triumph in its history. And it would be our greatest humiliation.'



'There's something else,' said the man from the Ministry of Defence. 'The dust eventually settles on the ground and on buildings as fallout, which, in strontium's case, would continue to emit radiation for around 30 years. So it has to be cleaned up, which is not an easy process.'

'In fact, it may be simpler to knock down any affected buildings, remove contaminated earth and rebuild from scratch.'

'So the Olympic site...' 'Would be a write-off, as would any city centre hit by a dirty bomb. A decade after 9/11, the Ground Zero site was still a gigantic hole in the ground. A dirty bomb in central London would be even more devastating. Politically, financially, psychologically, this would be a wound from which the country might never recover.'

'So where the hell is this strontium then?' the spin doctor demanded. And this time, no one had an answer.

Rafik Anwar was the son of a Pakistani industrialist and an upper-class Englishwoman. Educated at Harrow and Oxford, Anwar appeared to devote himself now to the playboy life that his money, charm and looks so well suited.

He bedded high society's prettiest girls. He gave witty quotes to delighted gossip columnists. And in his most private moments, with none but his God to observe him, Anwar waited for the day when he would tear their world apart. That day had now come.

In the drab, shed-like surroundings of the industrial unit, Anwar had watched as an Al Qaeda explosives expert wired the deadly strontium-90 to a 200 kg charge of C4 plastic explosive, packed on a wooden pallet.

When the job was done, the expert sent a coded message on his i-Phone via a series of apparently innocent contacts to the team's controllers in Pakistan, confirming that the operation was on schedule.

Had any of the bombers known that the message had been intercepted, they would have been untroubled. It was too late to stop them now. The completed bomb was loaded into a dusty white Transit van.

Anwar and two other men got on board, then drove away through the streets of East London, out past Walthamstow Marshes towards the Springfield marina on the River Lee Navigation.

The river flows to the Thames. And it passes right by the Olympic Stadium on the way.

Three months previously, Anwar had bought a berth at the marina and used it to moor his pride and joy, a £1.1m XSR48 superboat, capable of doing 100mph.

The pallet was loaded aboard. The van drove away. Then Rafik Anwar took the controls of his boat, left the mooring and set off for the Olympic Stadium and his own glorious martyrdom.

The security forces had not been idle. While telecoms experts worked on determining the location from which the 90sr message had been sent, military commanders had doubled the number of bomb-disposal teams on-site at the Olympic Stadium.

MI5 agents were hustling all their informants and sources of information, trying to find any scraps of data that might provide a clue as to who was planning what and when. Meanwhile, the dignitaries were starting to arrive at the Olympic Stadium.

Thirty-seven minutes before the ceremony was due to begin, the email was traced to the industrial estate where the bomb had been assembled. Within ten minutes, armed police had arrived there, closely followed by MI5 and Special Forces personnel.

It took a further three minutes to uncover the unit used to house the strontium. Footage from the nearest CCTV cameras was swiftly examined, the Transit was identified and its route to the marina tracked.

Rafik Anwar's face was caught on video footage and recognised by an MI5 officer, not because he was on any list of suspects, but because she recognised him from an article in Tatler magazine.

By chance, the article had described Anwar's magnificent speedboat. So now they knew how he planned to deliver his attack. Whether there was any time to do anything about it was another matter.

The 2012 Olympics were eight minutes away from starting and the Royal Box was all but full when security personnel reached the marina where Anwar's boat had been moored. But the berth was empty. The boat had gone.

The Olympic Stadium stands on an island surrounded by rivers and canals. One of them is the River Lee Navigation, which runs along one side of the stadium.

It is possible to go by river and canal all the way from the Olympic site to Birmingham. This would make the stadium extremely vulnerable to waterborne attack, were it not for the many locks that govern the flow of water and boats. Shut down the locks and you shut down the water traffic.

On the day of the opening ceremony, there wasn't a working lock within several miles of the stadium

That explained the choice of the Springfield marina. It was as far from the stadium as one could travel without passing through a lock.

Rafik Anwar was, therefore, able to shift at motorway speeds down open water towards the Olympic site in his XSR48. And with him was coming a radioactive dirty bomb.

Anwar's boat was rocketing past Hackney Marshes when a Metropolitan Police patrol helicopter picked it up. The pilot swooped towards the river, hovering 20ft above the water. He switched on the chopper's powerful searchlight, beaming it straight at Anwar's face, hoping to dazzle him.

Then the pilot spoke through a loudspeaker: 'This is the Metropolitan Police. Stop immediately or we will shoot. I repeat: stop or we will shoot.'

The boat kept coming. The helicopter swung through 90 degrees, so that it was side-on to the boat. The sliding door of the cabin opened and two police marksmen opened fire with Heckler and Koch MP-5 submachine guns. From the riverbank, a four-man SAS squad added to the hailstorm of hot lead.

The windscreen in front of Rafik Anwar disintegrated. The cockpit erupted around him as one bullet after another smashed into it. He rocked backwards in his seat as he was hit in the shoulder. Another round grazed the side of his body. But he ignored the pain and forced himself to grip the controls even tighter.

He was almost there. The stadium was just a couple of hundred metres ahead. In a matter of seconds he would be alongside it. The guns kept firing. A round smashed into Anwar's chest, ripping into his heart. Another struck him in the lungs. He slumped forward over the controls. But Rafik Anwar died with a smile on his face. It was too late to stop him now.

The quad bike carrying an ammunition technical officer, one of the Army's elite bomb disposal men, had been racing along the path that ran parallel to the water, following the boat, which had come to rest with its sleek, pointed nose resting against the riverbank. The ATO skidded to a halt, jumped off the bike, raced to the bank and leapt onto the boat.

He wore no protective suit. There was no point. When you're working next to a bomb, it doesn't matter how much armour you've got on. If it goes, you go.

There were two minutes to go till the ceremony began. There was no hope of evacuating the stadium and, anyway, the spectators would be safer in it than out in the open.

The ATO found the massive bomb in the passenger cabin in the bows of the boat, forward from the shattered cockpit where Rafik Anwar lay.

There was a timer atop the mass of C4 and strontium-90. It struck the ATO that even if the bomb did not go off, he was so close to the radioactive material that it might just kill him anyway. The clock showed 48 seconds till detonation.

From the stadium there came the sound of a massive roar as the lights over the athletics field dimmed. The show was about to begin. The ATO ignored everything as he examined the wires and circuit boards in front of him.

Thirty seconds. He couldn't fix it in time. Twenty seconds... 15... 10...

The hell with it, the ATO simply cut every wire he could see. He waited for the detonation of a booby trap. He watched the clock count down to zero. And nothing happened. The bomb remained silent and inert. The Olympic Stadium was safe.

In that room in Queen Anne's Gate, the people who had been following the drama on screens linked to video-phones slumped in exhausted relief and exchanged wan smiles of congratulation.

They had no idea that less than 200m away another Transit van, driven from a different industrial estate, was making its way towards Trafalgar Square and its celebrating crowds. And in the back of that van was another pallet loaded with C4 explosives. And a second consignment of strontium-90... ([Daily Mail, 2010](#)).

**Title:** China Prevented Several Bioattack During 2008 Olympics

**Date:** May 20, 2010

**Source:** [Bio Prep Watch](#)

**Abstract:** Reuters reports that thorough planning by Chinese officials led to a bioterrorism-free 2008 Beijing Olympic experience.

During the 2008 Games, security dealt with several threats of possible biological, chemical and explosive attacks, according to the report. Reuters reports that five unidentified embassies in Beijing received packages containing unidentified white powder. The powder was later tested and found to be harmless, according to a Beijing Health Bureau official, Reuters reports.

Other threats that were uncovered and never materialized during the games included plans to target Olympic venues, load a plane at the Beijing airport with explosives and set off an explosion on the metro train, Reuters reports.

Reuters further states that Chinese officials released a wanted list of eight people after the games who they said had threatened terror attacks on the Olympics. The report states that all eight wanted people

were of China's mostly Muslim minority group, Uighur, and were connected to the East Turkestan Islamic Movement, which the United Nations has said is tied to al Qaeda.

While Beijing went unharmed during the 2008 Summer Olympics, Xinjiang was hit by three attacks before and during the games, according to Reuters. The attacks – involving bombings and stabbings – resulted in 30 total deaths ([Bio Prep Watch, 2010](#)).

**Title:** U.K. Warns Of Bioattack Threat For 2010 Olympics

**Date:** June 14, 2010

**Source:** [Bio Prep Watch](#)

**Abstract:** U.K. government security chiefs recently warned that an attack with chemical or biological weapons on the British public transport system remains a major threat to the London Olympics in 2012.

Concerns were raised by reports that nearly 100 Islamic extremists currently serving jail time will be released in time for the games to begin next July. Among those set to be freed are several convicted of bomb plots and conspiracy to murder, according to TheSun.co.uk.

"We know some of them are still committed extremists likely to return to their terrorist activities," Jonathon Evans, head of MI5, the British intelligence service, said, TheSun.co.uk reports.

Two of the early releases include members of an Al-Qaeda-related group. Omar Abdur Rehman and Qaisar Shaffi were sent to prison for plotting to detonate a radioactive bomb. Their cell had also developed plots to bomb the Thames River in order to flood the London metro system and to destroy famous British landmarks, according to Mirror.co.uk.

Rehman and Shaffi will be freed after having served only half of their 15 year sentences as part of a government early-release program. The conditions of their release include a 9 p.m. curfew and the full disclosure of any personal relationships they develop. The pair will also be under 24 hour surveillance, which could cost taxpayers 10 times the amount of keeping them in prison ([Bio Prep Watch, 2010](#)).

**Title:** Hundreds Of Frontline Health Workers Vaccinated Against Smallpox

**Date:** January 1, 2012

**Source:** [The Telegraph](#)

**Abstract:** More than five hundred health workers have been vaccinated against smallpox enabling them to deal with a biological terror attack at this year's Olympics.

The move highlights the level of concern within Whitehall over the prospect of extremists turning to germ warfare. Elaborate measures are being taken to counter a range of threats at the summer's Games, with the bill for venue security and policing rising above £1 billion.

The Government has also stockpiled sufficient supplies of smallpox vaccines to "mount a UK-wide vaccination programme" in the event of a deliberate release of the disease, which was declared eradicated in 1980.

A Home Office report last January warned that Games venues or public transport would make an "appealing target" for terrorists to launch biological attacks, such as those involving smallpox. The deadly disease could be spread by aerosols and is highly contagious.

The immunised medical staff includes 147 doctors, 164 nurses, 100 paramedics, and 32 scientists, who have been divided up into a series of Smallpox Management and Response Teams (SMART). Each team is made up of five health professionals, including a specialist nurse and a paediatrician. All are specially trained in smallpox diagnosis and management.

Although the teams were not specifically established for the Olympics, the Government has drawn up contingency plans to ensure that they will be available during the period of the Games in July and August ([The Telegraph, 2012](#)).

**Title:** Global Terror: Potential Flashpoints In 2012

**Date:** January 4, 2012

**Source:** [BBC](#)

**Abstract:** With much of the Middle East in flux, suspicions intensifying over Iran's nuclear ambitions, a deepening political crisis in Pakistan, and the escalation of jihadist violence in Nigeria there are plenty of potential flashpoints in the year ahead.

There is a distinction between localised conflicts that are largely contained within borders and the kind of global, transnational terrorism that produced events such as 9/11, the Madrid bombings and, in the eyes of many, destructive military ventures like the US-led invasion of Iraq.

### **The Olympics**

Britain's hosting of the Olympics this summer will, we are told, see "the biggest security operation in this country since the Second World War". Some 13,500 military personnel will be on duty, a Royal Navy helicopter-carrying warship will be docked near the venue, ground-to-air missiles will be deployed and RAF Typhoon fighters will be on standby to provide air defence. None of which should be needed, if all goes to plan. But the Olympics are classed as a "trophy target" for anyone looking to damage Britain and security preparations are being made on the basis of the national terrorist threat being at "severe", the second highest level in a table of five ([BBC, 2012](#)).

**Title:** Former Commander Warns Of London 2012 Chemical Attack

**Date:** February 3, 2011

**Source:** [Bio Prep Watch](#)

**Abstract:** A former Commandant of the Olympic Hospital CBRN Response Unit from the 2004 Athens games has said that the planners of the London 2012 games have not effectively reached out internationally to assess the risk of a chemical attack.

Retired Brigadier General Galatas Ioannis said in an interview that U.K. CBRN response leaders and agencies had been inclined to poor planning.

"If somebody is deeply involved in planning for this specific area, it is difficult for that person to identify any gaps or deficiencies [than] if you allow an outsider to have a fresh look at the plan," Ioannis said. "That was the reality with the international advisory security team at Athens.

"Whenever I am in a conference in which British officials are presenting, they distribute a feeling that everything is perfect and ready so that they can do the Olympics tomorrow. Then when someone from the audience starts to ask specific questions, you can see long faces, and they get offended because they think we are trying to embarrass them in public. This is not the purpose."

Other specialists in the industry also shared similar feelings and believe that the British government agencies were relying simply on inadequately trained emergency services.

Ioannis and the other specialists were speaking prior the 2011 CBRN Resilience conference, which will take place in London from March 29 through March 30 and will bring together various responders, specialists and military to talk about training and improved operability ([Bio Prep Watch, 2011](#)).

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**Source:** [The Telegraph](#)

**Abstract:** More than five hundred health workers have been vaccinated against smallpox enabling them to deal with a biological terror attack at this year's Olympics.

The move highlights the level of concern within Whitehall over the prospect of extremists turning to germ warfare. Elaborate measures are being taken to counter a range of threats at the summer's Games, with the bill for venue security and policing rising above £1 billion.

The Government has also stockpiled sufficient supplies of smallpox vaccines to "mount a UK-wide vaccination programme" in the event of a deliberate release of the disease, which was declared eradicated in 1980.

A Home Office report last January warned that Games venues or public transport would make an "appealing target" for terrorists to launch biological attacks, such as those involving smallpox. The deadly disease could be spread by aerosols and is highly contagious.

The immunised medical staff includes 147 doctors, 164 nurses, 100 paramedics, and 32 scientists, who have been divided up into a series of Smallpox Management and Response Teams (SMART). Each team is made up of five health professionals, including a specialist nurse and a paediatrician. All are specially trained in smallpox diagnosis and management.

Although the teams were not specifically established for the Olympics, the Government has drawn up contingency plans to ensure that they will be available during the period of the Games in July and August ([The Telegraph, 2012](#)).

**Title:** U.S. Travelers To Olympics May Bring Home Measles, CDC Warns

**Date:** March 19, 2012

**Source:** [USA Today](#)

**Abstract:** Health officials are bracing for the possibility of a measles outbreak in the [USA](#), fueled by unvaccinated American tourists returning home from this summer's [Olympic Games](#).

The Centers for Disease Control and Prevention warns that the Olympics in London, as well as the Euro 2012 soccer cup in Poland and Ukraine, will be huge draws for American travelers and will increase the risk for measles infection. The virus is much more prevalent in Europe, leading to eight deaths and 26,000 illnesses last year.

"Disease knows no borders," said Rebecca Martin, director of the [CDC](#)'s Global Immunization Division. "We are concerned about Americans coming back from the Olympics this summer and unknowingly infecting others."

The Olympics in London starts July 27 and the Euro 2012 soccer cup on June 8 in Poland and Ukraine.

Martin urges Americans who plan to travel this summer to be up-to-date on measles vaccinations. Measles infections have been on the rise in the [U.S.](#) even though vaccinations eliminated the routine spread of the disease here in 2000.

Most U.S. cases of the measles are imported by U.S. travelers who have not been vaccinated. Before routine vaccinations, the virus killed between 3,000 and 5,000 Americans each year.

"We usually have about 50 cases a year, but last year we had a record number of importations" — at least 214 cases — says Greg Wallace, a measles specialist with the CDC's division of viral diseases. About 30% of those cases required hospitalization.

## **Vaccine breakdown**

### **Who should get the measles vaccine?**

- Children should get two doses of the Measles, Mumps and Rubella (MMR) vaccine. The first at 12-15 months, the second at 4-6 years.
- Any adult who hasn't been vaccinated for measles.
- People who have been exposed to measles but weren't vaccinated may benefit from getting the MMR vaccine prophylactically. Consult your health care professional.

### **Who shouldn't get the measles vaccine?**

- People who have had a life-threatening allergic reaction to gelatin, the antibiotic neomycin or a previous dose of MMR vaccine.
- Women should avoid getting pregnant for four weeks after getting the MMR vaccine.
- Pregnant women should wait until after they have given birth before getting the MMR vaccine.

### **Some people should check with their doctor about whether they should get the MMR vaccine, including:**

- Those with HIV/AIDS or another disease that affects the immune system.
- People being treated with drugs that affect the immune system, such as steroids, for two weeks or longer.
- People with cancer.
- People who have had a low platelet count (a blood disorder).

*Source: Centers for Disease Control and Prevention*

Last year, England and Wales had 1,086 cases of measles, according to the U.K. Health Protection Agency. "Ukraine is experiencing a large measles outbreak right now," Martin says.

Measles strikes worldwide but is of special concern in [Western Europe](#), Wallace says. The disease had been under control there until a 1998 paper in the British medical journal *The Lancet* purported a link between autism and the measles, mumps and rubella vaccine. It also said the vaccine caused gastrointestinal disorders in children.

Vaccination rates fell after the paper gained widespread publicity. It was later revealed that Andrew Wakefield, the main author, had faked his research. The paper was retracted in 2010, and Wakefield was banned from practicing medicine. Vaccination rates are again rising in Europe, but in England and France they remain too low to fully control the disease.

The CDC, which is part of a global effort called the [Measles Initiative](#) to fight the disease, maintains a Web page for Americans going overseas at [cdc.gov/travel](http://cdc.gov/travel).

Many U.S. parents who chose not to vaccinate rely on "herd immunity," the protection against infection offered by vaccination rates of 95% or higher. But with so many Americans traveling overseas, you can be exposed anywhere.

In California, three children under a year old, too young to be vaccinated, were infected in a doctor's waiting room when a 7-year-old who had caught measles in Switzerland came in to be seen, says Kathleen Harriman, an epidemiologist with the state Department of Public Health.



In 2011, 214 people in the [United States](#) got the measles and 68 were hospitalized.

All travelers' packing lists should include "passports and immunization records," says Erika Jenssen, the director of communicable disease outbreaks in [Contra Costa County](#), a suburban county east of [San Francisco](#). You can be vaccinated at any age. "It's the most serious and critical thing you can do, both to make sure you're protected while you're there and so that you don't bring it back home" ([USA Today, 2012](#)).

**Title:** Call Of Duty Modern Warfare Chemical Attacks In London

**Date:** March 24, 2012

**Source:** [YouTube](#)

**Title:** London Warns Of Hand Cream Olympics Terror Plot

**Date:** March 29, 2012

**Source:** [Bio Prep Watch](#)

**Abstract:** Islamic extremists recently posted a series of detailed instructions online for how to launch a terrorist attack during the 2012 Olympic Games in London.

One member of the group, called Abu Hija Ansari, called for cyanide to be mixed into hand cream so victims can absorb it through their skin. Ansari warned those attempting the recipe to wear gloves for their own protection, according to the [Telegraph](#).

"Through skin: 1 – cyanide, 2 – skin cream," Ansari wrote in Arabic, the [Telegraph](#) reports. "Mix the ingredients. The skin cream will open the pores in the skin and speed up the absorption and effectiveness of the poison."

A British newspaper, the Sun, said the website, which it reportedly accessed using a false identity, has approximately 17,000 members and known links to several terrorists working with the group Al-Qaeda.

A second terrorist wrote her missive under the logo of the 2012 games.

"It's time to prepare for the event, as once again they are interfering with innocent Muslims," she said, the [Telegraph](#) reports.

U.K. security services remain on high alert, looking for any potential threat to the games, which begin on July 27 in east London. Jonathan Evans, the director-general of MI5, recently briefed the British Cabinet on terrorist threats the U.K. might face in the run-up to the opening ceremony ([Bio Prep Watch, 2012](#)).

**Title:** Britain Faces Olympic Threat From 'Lone Wolves'

**Date:** April 16, 2012

**Source:** [France 24](#)

**Abstract:** Britain will mount its biggest peacetime security operation for the London Olympics, with "lone wolf" attacks causing most concern but a range of other threats also under surveillance.

A security force of more than 40,000, backed by a huge intelligence operation, will guard venues, athletes and the millions of visitors expected to throng the British capital.

The halting of the Oxford and Cambridge University Boat Race by a protester swimming in the River Thames this month highlighted the difficulty of ruling out a disturbance at the Games.

Cyber-attacks, crowd trouble, riots, civil emergencies and even extreme weather are among the scenarios that British authorities are planning for, officials and analysts say.

"It's impossible to totally guarantee that you can get rid of all risk. You can't," security analyst Margaret Gilmore of the Royal United Services Institute in London told AFP.

"But you can go a long way to deterring anyone who wants to disrupt or attack the Games, and mitigating any impact if, for example, a terrorist attack gets through."

The shadow of a terror attack has hung over the London Games since the start.

The day after London was named host city, four homegrown suicide bombers attacked three underground trains and a bus on July 7, 2005, killing 52 people.

It is also 40 years since Palestinian militants massacred Israeli athletes at the 1972 Munich Olympics, and 16 years after a bombing at the Atlanta games.

British Prime Minister David Cameron said during a visit by International Olympic Committee Chief Jacques Rogge last month that the security operation would be sensitive to the spirit of the Games.

"I am determined that this will feel like a sporting event with a very serious security operation rather than a security operation with a really serious sporting event," Cameron said.

Sebastian Coe, the former British athletics star who heads the London 2012 organising committee, added: "These are an Olympic Games -- they are taking place in London, not siege-town. There is a balance to be struck."

That may be, but the numbers are huge: 13,500 Ministry of Defence personnel, 12,000 police and more than 16,000 private security guards and unpaid volunteers will make up the Olympics security force.

The operation involves warplanes, two navy ships including a helicopter carrier stationed in the River Thames and batteries of surface-to-air missiles.

Britain has also ramped up its original security blueprint for the games, boosting the budget in December from £282 million to £553 million (\$877 million, 662 million euros).

While the Games themselves start on July 27, the security operation will in fact get underway as early as next month when a special Scotland Yard unit shadows the Olympic Torch on its tour of the country.

But no amount of security can rule out attacks by "lone wolf" attackers with no attachment to wider terror organisations such as Al-Qaeda, who have slipped under the radar of the intelligence agencies.

Europe has been shocked by a series of such attacks, from the shootings by Islamist gunman Mohamed Merah in France in March to the bomb and gun attacks in Norway by rightwing extremist Anders Behring Breivik last year.

"I really know that the one thing that will be causing them (security forces) not to sleep at night is the 'lone wolf'," said Gilmore.

A more traditional threat from the Al-Qaeda network remains a possibility despite Osama bin Laden's death in 2011, while Irish republican militants also present a risk.

A cyber attack by hackers or foreign states is a further threat, and one that could cause mass disruption if it targets Olympic or transport infrastructure.

Meanwhile as protest swimmer Trenton Oldfield proved at the Boat Race, demonstrations are a possibility.

"It just takes, and is likely to be, one idiot... That is why all the security measures need to be put in place to minimise the chance of that happening," British Olympic Association chairman Colin Moynihan said.

In a major world city like London there are wider issues.

Riots are a possibility, with memories fresh of the mass unrest in London and several English cities in August 2011 which left five people dead.

London's transport system also presents its own problems, not just because of its reputation for unreliability but also the fact that it has previously been the target of a terror attack.

In February thousands of London emergency personnel held a two-day exercise simulating a terror attack on the Underground during the Olympics.

Strange as it may sound in rainy Britain, authorities are also having to make contingency plans for the summer weather.

"It may be the case that a heat wave or traffic jams prove the biggest nightmare," Gilmore said ([France 24, 2012](#)).

**Title:** London 2012 Olympics Conspiracy

**Date:** March 24, 2012

**Source:** [Aria TV](#)

**Title:** London Siege Reveals Armed-To-The-Teeth Team Preparing For The Olympic Games

**Date:** April 27, 2012

**Source:** [Daily Mail](#)

**Abstract:** Bristling with guns, his face masked, a police officer moves in on a suspected suicide bomber.

Just 91 days away from the start of the Olympics, the dramatic scene gave a foretaste of what can be expected this summer after a man threatened to blow himself up in a busy office block.

Thousands were evacuated, Tube stations were closed and streets locked down over a wide area of London's West End.

Snipers, bomb disposal squads, nuclear biological and chemical warfare specialists and dozens of armed police were scrambled to the building on Tottenham scrambled to an office block on Tottenham Court Road, one of the city's busiest shopping streets.

As marksmen took up positions on rooftops, office workers were banished from their buildings while others were trapped as the man with canisters strapped to his body yelled that he would 'blow everybody up'.

For three hours, as negotiators spoke with the man, named last night as 49-year-old Michael Green from Hemel Hempstead, terrified office workers and children were held back behind police cordons.

Last night one of the workers inside the building, Abby Baafi, 27, told how a man had arrived at the headquarters of an HGV training company shouting threats.

'He said he doesn't care about his life, he doesn't care about anything he is going to blow up everybody,' she said. Amazingly, Miss Baafi said she recognised him as a former customer of the firm, AdvantageHGV, which arranges training for lorry drivers across the country.

'He was not quite stable – mentally stable. He turned up, strapped up with gasoline cylinders, and threatened to blow up the office. He was specifically looking for me,' she added.

The quick-thinking training director gave him the slip by denying she was the woman he was hunting and she was allowed to leave the building.

She said the man had wanted his money back after repeatedly failing one of the company's HGV courses. Miss Baafi was speaking while police negotiators painstakingly persuaded him to give himself up without detonating his canisters. The hostages were seen hurling computer printers, filing cabinets and televisions out of office windows before the man finally let them go.

Members of the Metropolitan Police's CO19 firearms unit – several of them former soldiers – covered the windows and entrances with their weapons while others covertly entered the block.

As marksmen covered his every move, the man stripped to the waist, hands in the air emerged tentatively on to the pavement where two uniformed policemen walked forward and searched him.

Special forces soldiers based in London including the SAS had been put on alert while members of the RAF's nuclear, biological and chemical warfare group was dispatched to the scene.

'You need the specialist chemical people on the ground to make sure you can identify what is there in case it is seriously dangerous. In the case of the canisters it was unclear at the outset,' a senior security official said last night. 'Remember the Tokyo subway incident, there's always a fear in the back of the mind you are dealing with something potentially catastrophic.'

Sarah O'Meara, who also works for website the Huffington Post, said they evacuated their offices in nearby Capper Street after being alerted by a woman who ran into the building.

Medical courier Gentian Mancjan was parking his van opposite the building when he heard the suspect shouting.

He said: 'He shouted "I'll blow myself up! I'll blow myself up!" and then ran in the door. I thought it was a joke at first because no one was panicking but then I saw people coming out. I saw a woman shaking and saying "My friends are in there".'

Ahmad Salim, 31, an account director for advertising agency TBWA, saw captives being forced to throw office equipment onto the street. 'They were throwing out printers, monitors, filing cabinets, it was smash, smash, smash,' he said.

He said he saw the man on his mobile phone locked in negotiations with police. 'He was pacing up and down, on the phone. He was drinking out of a cycling water bottle.

'It was dark liquid, something other than water, it could have been juice or alcohol.'

Actress Frances Barber, 53, was among those who were affected by the incident, ordered to stay within a building as events unfolded. Barber, who appeared in the last series of Doctor Who, kept her followers

updated on Twitter. '\*\*\*\* a duck am in middle of hostage sitch in Tott Ct Road. Can't get out. We are all hostage inside,' she wrote.

'Police won't let us out. Tott Ct Rd deserted. All shops, cafes, etc evacuated. Police everywhere. We are not allowed out.' Last night police confirmed Green did not have explosives on him.

Police commander Mak Chishty said: 'Specialist negotiators were called to the scene along with colleagues from the London Ambulance Service, the London Fire Brigade and the Specialist Firearms Unit.

'During the course of the incident a number of people inside the building left peacefully.

'After contact with specialist police negotiators the man came out of the building and was arrested at 3pm. He is now in police custody' ([Daily Mail, 2012](#)).

**Title:** Olympic Ring Of Steel: SIX Missile Sites Protect Games...And Cameron Has His Finger On The Trigger

**Date:** April 28, 2012

**Source:** [Daily Mail](#)

**Abstract:** David Cameron will have the grim task of ordering the Armed Forces to shoot down a passenger airliner over Britain to prevent a suicide attack on the Olympic Games.

The Prime Minister will have his finger on the trigger as an unprecedented defensive 'ring of steel' is thrown up to protect London 2012.

The public will witness a show of military strength not seen at home since the Second World War.

The security in place to prevent a September 11-style atrocity or Mumbai-style terror attack as the eyes of the world are on London includes:

- State-of-the-art RAF Typhoon fighter jets loaded with fearsome weapons patrolling the skies over the Home Counties;
- A ring of six surface-to-air missile sites around London, each with the power to bring down rogue aircraft;
- The aircraft carrier HMS Ocean will be moored in the Thames with 800 Royal Marines;
- Seven Royal Navy Lynx and RAF Puma helicopters carrying crack snipers to target terrorists;
- HMS Bulwark, the Royal Navy's 21,000-tonne flagship, and other vessels deployed off Weymouth, Dorset, to protect sailing events;
- And 13,500 servicemen and women - more than are deployed in Afghanistan - on duty to keep the £9billion Olympics safe and secure.

Yesterday it was made clear that Mr Cameron would be ultimately responsible for a decision to fire missiles to blast a suicide jet, possibly carrying terrified innocent civilians, out of the skies.

General Sir Nick Parker, in charge of military operations during London 2012, revealed the unenviable task would rest at the 'highest political level'.

Mr Cameron possesses emergency powers to authorise the military to bring down planes or helicopters to stop an atrocity during this summer's sporting showcase.

News of Mr Cameron's role came as it was revealed that surface-to-air missiles could be deployed at six different sites across London during the Olympics.

The Lexington Building in Tower Hamlets and the Fred Wigg Tower in Waltham Forest, both in east London, have been identified as potential sites.

Blackheath Common and Oxleas Wood, both in south east London, plus William Girling Reservoir in the Lea Valley Reservoir Chain in Enfield and Barn Hill at Netherhouse Farm in Epping Forest are other possible sites.

The surface-to-air missiles will be deployed as the third tier of defence aimed at slower or smaller aircraft, and the final decision as to whether they will be fired will rest with Mr Cameron.

The six sites are all potential locations for ground-based air defence systems, should the Government decide to deploy them during the Games.

Residents in the private, gated flats next to the Lexington Building Water Tower in Bow have received a leaflet warning them that a team of ten soldiers and police will be placed at the building – home to 700 people – for the duration of this summer's Games.

Security point: The Lexington Building Water Tower in East London is one of the proposed missile sites closest to the Olympic stadium

It follows an announcement by Defence Secretary Philip Hammond in November that missiles might be used to safeguard the Olympic site.

No final decision has been made about this potential deployment but it does form part of Olympic Guardian, a major exercise in which security preparations are being tested this week.

Last night, the Ministry of Defence (MoD) confirmed the missiles would be deployed within the next few days. They describe them as 'a useful deterrent'.

Defence Secretary Philip Hammond said: 'Support for the Olympic Games will be an important task for defence in 2012 and this exercise is about pushing our people and our systems to the limit to ensure that we are ready for the challenge.

'The majority of this exercise will be played out in full view of the public and I hope that it will have a secondary effect of reassuring the British people that everything possible is being done to ensure this will be a safe and secure Olympic and Paralympic Games.'

Resident Brian Whelan, a journalist, said the MoD leaflet says the missiles will be fired only as a last resort.

He said: 'They are going to have a test run next week, putting high-velocity missiles on the roof just above our apartment. They're stationing police and military in the tower of the building for two months.

'It's a private, gated community with an old watch tower which is now a lift shaft.

'We have an MoD leaflet saying the building is the only suitable place in the area. It says there will be ten officers plus police present 24/7. I'm not sure if they are going to live in the building. We have a gym and a pool and people have seen them there so it makes you think it will be some sort of Army base – it's not ideal.

'The property management company which runs the place put up posters and gave out the leaflets today.

'The general tone was, "Great news, aren't we lucky", but that's not normal, it's not something people should have put on them.

'I've looked these up [the missiles] and I don't think they're the kind of thing you can fire over a highly populated area like Tower Hamlets, think of the debris.'

Mr Whelan said the leaflet poses a series of questions residents might ask, such as: 'Will this make me a target for terrorists?'

The 28-year-old said: 'But the answer on it is that we will be safer with it here

'From the few people I've spoken to, and the security we have here, they're not happy about it. I don't think it needs to be here at all.'

There are no plans to have soldiers patrolling the streets during the Games but marines will be working as part of the operation on the Thames and in Dorset.

The overall 23,700-strong security force for the Games includes a mix of military, private security guards and at least 3,000 unpaid London 2012 volunteers who will be used at the start of the security process.

It includes a 13,500-strong military force, which is more than the 10,000 that were deployed to Afghanistan, who will guard the Games.

There will be 7,500 military who are set to be deployed inside venues to do screening and search tasks, largely in the vehicle search areas ([Daily Mail, 2012](#)).

**Title:** Apartment Blocks May Host Missiles For Olympics

**Date:** April 29, 2012

**Source:** [Fox News](#)

**Abstract:** Surface-to-air missiles could be stationed on the rooftops of an apartment block in east London as part of Britain's air defenses for the Olympics, the country's military confirmed Sunday.

Around 700 people living at the building in Bow — about 2 miles (3.2km) from London's Olympic Stadium — have been contacted and warned that the weapons and about 10 troops are likely to be based at the site for around two months.

In a leaflet sent to residents, the ministry said the venue offered an uncluttered "view of the surrounding areas and the entire sky above the Olympic park."

Troops plan to conduct tests next week at the building, an upmarket gated apartment complex, to determine if the high velocity surface-to-air missiles will be stationed on a water tower attached to the site's roof.

Britain has previously confirmed that up to 13,500 troops are being deployed on land, at sea and in the air to help protect the Olympics alongside police and security guards. Defense Secretary Philip Hammond has said Typhoon fighter jets, helicopters, two warships and bomb disposal experts will also be on duty as part of the security operation.

"As announced before Christmas, ground-based air defense systems could be deployed as part of a multilayered air security plan for the Olympics, including fast jets and helicopters, which will protect the skies over London during the games," the defense ministry said in a statement.



"Based on military advice we have identified a number of sites and, alongside colleagues from the Metropolitan Police, are talking to local authorities and relevant landowners to help minimize the impact of any temporary deployments."

However, the ministry insisted that "no final decision on whether or not to deploy ground-based air defense systems for the games has been taken."

Resident Brian Whelan said those who live at the site were wary over the plan.

"From the few people I've spoken to, and the security we have here, they're not happy about it," he said. "I don't think it needs to be here at all."

The leaflet sent to residents insisted there would be no hazard to those living in the building.

It said the missile system would be "only authorized for active use following specific orders from the highest levels of government in response to a confirmed and extreme security threat" ([Fox News, 2012](#)).

**Title:** Defending The Olympics From Terror Attack: Fighter Planes At Northolt For First Time Since WWII As Elite RAF Say They Will Shoot Down Passenger Jets To Protect London

**Date:** May 2, 2012

**Source:** [Daily Mail](#)

**Abstract:** Elite fighter pilots say they are 'trained and prepared' to shoot down a hijacked passenger plane to prevent a 9/11-style suicide attack on the Olympics.

Four Typhoon jets will be on standby to intercept 'rogue' aircraft intent on causing carnage at London 2012.

Normally the RAF's Quick Reaction Alert jets are based at RAF Coningsby in Lincolnshire and RAF Leuchars in Fife to defend UK airspace. But the 1,370mph planes will also be stationed at RAF Northolt, in west London, during the Olympics.

It is the first time fighters have been based at the airfield since the Second World War.

The £125million jets – which fought in battle for the first time in Libya last year – landed in London yesterday ahead of a major military exercise to test Games security.

They will provide a first line of defence against attack from the air and are capable of intercepting any aircraft that strays without permission into a 'restricted' zone 30 miles around the capital.

If a rogue aircraft refuses to turn back, Prime Minister David Cameron could give the order for the fighters to shoot it down – even if it was carrying civilians.

A smaller 'no-fly zone' will be in place over the Olympic Park, Heathrow Airport and London City Airport, into which only scheduled flights will be allowed.

Squadron Leader Gordon Lovett, 37, said: 'We would go out and identify the aircraft and try to establish contact with it.

'Any decision to employ force is going to be taken at the highest political level, and we will carry out that task. If we are told to deploy ultimate force, we are trained and prepared for it.'

The Typhoons will take part in Exercise Olympic Guardian, a nine-day training operation running until May 10.

A ring of six Starstreak and Rapier missile sites around London could also be in place to protect the Games, each with the power to bring down a light aircraft.

But the Stop the War Coalition said such a heavy military presence in London was 'unacceptable' and warned it would create a 'climate of fear'.

The group's Lindsey German said: 'Far from safeguarding Londoners as they go about their daily lives, they will bring a real fear of explosions and the prospect of these places becoming a target for terrorist attack.'

'If the Olympic Park needs security, this should be within the confines of the park and not forced on ordinary people in east and south London who have no say in the matter.'

Air Vice-Marshal Stuart Atha, air component commander for Olympics air security, said: 'What we will have is a plan that has many levels to it which will allow us to deal at one end - which is that 9/11-type attack - perhaps down to the lower and the slower type of threat that we may face.'

'There is no specific threat and all we are doing is having in place what we would describe as prudent and appropriate measures in place, in order that we could react if required in a timely and appropriate fashion.'

Air Vice-Marshal Atha said he hoped the exercise would have 'an effect on the mind' of any potential attackers.

'I would hope when they see how we are preparing they might be deterred from making any threats to the Games,' he added.

The RAF warned that people in south-east England will notice an increase in air activity at certain times, in particular this weekend.

Other aircraft involved in the exercise include Royal Navy Sea King helicopters temporarily based at RAF Northolt, RAF Puma helicopters based at a Territorial Army centre in Ilford, east London, and Army and Royal Navy Lynx helicopters on HMS Ocean in the Thames.

Last month a sonic boom caused by two Typhoon aircraft responding to an emergency signal was reportedly heard as far afield as Bath, Coventry and Oxford.

Group Captain Tim O'Brien, station commander of RAF Northolt, said he hoped people living nearby would understand the need for the Typhoon jets, which can travel at up to 1,370mph.

Discussions have taken place with residents, and signs have been placed by roads to warn motorists of loud noises.

'There's very much a sense of cohesion with the local populace that they are in this with us, and they are going to reap the benefits of the mutual pride that we will gain from it as well,' Group Capt O'Brien said.

Defence Secretary Phillip Hammond said: 'Whilst there is no specific threat to the Games, we have to be ready to assist in delivering a safe and secure Olympics for all to enjoy.'

'The fact that our state-of-the-art Typhoons will be stationed at RAF Northolt underlines the commitment of the Ministry of Defence and our armed forces to keeping the public safe at a time when the world will be watching us' ([Daily Mail, 2012](#)).

**Title:** U.K. Army Base Evacuated After Servicemen Fall Ill

**Date:** May 2, 2012

**Source:** [Bio Prep Watch](#)

**Abstract:** It was recently revealed that the headquarters of the British Army Land Forces in Andover, United Kingdom, were evacuated in late March over fears of a biological attack after four staff members collapsed from a mysterious illness.

Commanding officers thought that a package, possibly containing the bioterror agent anthrax, might have infiltrated the \$71 million complex when the staff simultaneously fell ill with flu-like symptoms. A portion of the base was sealed off while Ministry of Defense Police investigated the possible security breach, according to [DailyStar.co.uk](#).

"It was panic stations," an anonymous source at the base said, [DailyStar.co.uk](#) reports. "Their symptoms were so bad there were immediate fears that they had been exposed to an outside biochemical agent. Rumors spread like wildfire that there had been an anthrax attack in the building.

"People rushed outside and then the place was evacuated. There was a genuine belief that something was terribly wrong."

The U.K. Ministry of Defense recently confirmed that base was evacuated on March 30. A thorough investigation revealed no evidence of foul play.

British Army Land Forces headquarters is the service's main intelligence station and is considered a prime target for a terrorist attack. The incident highlights the risk posed to security forces by biochemical agents.

There are more than 2,000 civilian and military personnel working at the site, which coordinates all of the Army's activities in the United Kingdom.

The affected servicemen have since recovered from the illness, but its cause has yet to be diagnosed, according to [DailyStar.co.uk](#) ([Bio Prep Watch, 2012](#)).

**Title:** Poison Drones Carrying Biological Weapon Are New Olympic Threat, Warns Colonel In Charge Of Keeping London Calm

**Date:** May 5, 2012

**Source:** [Daily Mail](#)

**Abstract:** A senior Army officer has warned that unmanned drones carrying deadly poison could be used in a devastating terrorist attack during the Olympic Games.

Lieutenant Colonel Brian Fahy delivered the grim warning at a meeting intended to allay the fears of residents worried about the Army's plans to place missiles on the rooftops of flats.

He said it was 'feasible' that remote-controlled aircraft filled with poison and small enough to fit into a backpack could be used as a biological weapon in the capital.

He told The Mail on Sunday: 'An Unmanned Aerial Vehicle (UAV) can be put in a backpack. They come in all sorts of sizes and it's feasible they could be filled with something noxious and flown by remote-

control.'

Lieut Col Fahy – the officer responsible for community relations during the Games – made his remarks on Friday in Leytonstone, East London, near one of six sites which could see the deployment of surface-to-air missile batteries in order to shoot down aircraft attempting to infiltrate an Olympic 'no fly' zone.

During the meeting at Buxton School, his team showed locals a 'dummy' missile battery and allowed children to play on the unarmed weapon.

Lieut Col Fahy declined to elaborate on what type of poison might be used during an aerial attack.

He said: 'For the duration of the Olympics anyone flying into controlled airspace is to file their flight plan with the Civil Aviation Authority.

'The range of threats varies in size and capability. It could be a commercial airliner hijacked by somebody with malicious intentions or a protest group using a microlight to get their name in the papers.'

His poison warning came as it was revealed that SAS troops have had anthrax emergency training at the Government's top-secret military research establishment at Porton Down, Wiltshire.

Sources say the elite soldiers wore biochemical protection suits, gloves and masks during exercises over the past few months to prepare for any attack using the deadly bacteria.

Such an incident could threaten the lives of thousands of people attending the Games this summer.

Lieut Col Fahy told The Mail on Sunday: 'We have worked up a comprehensive plan to protect against the potential hijacking of a commercial airliner down to slow-moving microlights or radio-controlled planes.'

Asked if they would fire a missile at a protester flying a microlight near the Olympic site, Lieut Col Fahy said: 'We would not take it out. For something like that we would scramble helicopters to go and look at it.

'There will be an RAF sniper on board if there was serious evidence to suggest something like that represented a threat. That information gets passed on and it's a political decision to engage.

'It's the same politicians who will decide whether we fire surface-to-air missiles at a potential threat. It's a decision that I'm quite happy not to make. It will weigh very heavily.'

Defence Secretary Philip Hammond has made it clear he is ready to give the order to shoot down any aircraft threatening the Olympics with a 9/11-style attack.

Lieut Col Fahy also revealed that armed police would guard any missile sites being used in case any attempts were made to steal them or protest against their deployment.

He added: 'What we are doing is unusual. Londoners are not used to seeing a lot of soldiers around. Some people feel uncomfortable about the missiles but the vast majority, I think, appreciate we are doing this.'

HMS Ocean, one of the UK's biggest warships, is based in the Thames, with the capability to fire a hail of missiles at a terrorist aircraft.

The awesome array of military hardware ready to thwart an attack includes four RAF Typhoon jets, three Royal Navy Sea King and two RAF Puma helicopters.

A Ministry of Defence spokesman said last night: 'We are prepared for any eventuality' ([Daily Mail, 2012](#)).

**Title:** Worker Smuggles Fake Bomb Into London's Olympic Park

**Date:** May 6, 2012

**Source:** [Fox News](#)

**Abstract:** A worker smuggled a fake bomb past two checkpoints inside London's Olympic Park just hours before Olympic Stadium officially opened, The Sun reports.

The worker called the newspaper worried about gaping security loopholes at the East London site, so The Sun had passed the worker the package he ultimately smuggled to the site just 82 days before the opening ceremony for the Summer Games.

According to the Sun, guards failed to spot anything as the worker drove with the package containing a dummy Semtex device; once inside, the worker openly took photographs of the package next to several sites, including the athletes' village, which is expected to house 17,000 of the world's elite competitors.

"I came forward because things need to be tightened up fast," the worker said.

An already-vetted construction worker could bring in materials for a deadly suicide bomb mission, the paper reports. The loophole exposed by The Sun shows just how easily that could happen.

"I've worked for several years on the Olympic Park and keep hearing how the security is water-tight,." said the worker.

"But after a thorough check every morning, I can come and go from the Park all the day with my digger without being searched at all" ([Fox News, 2012](#)).

# Bio Terror Bible

## EXPOSING THE COMING BIO-TERROR PANDEMIC

**BIOTERRORBIBLE.COM:** On August 27, 2012, U.S. Presidential candidate Ron Paul will attend the [2012 Republican Convention \(RNC\) in Tampa, Florida](#). Allegedly, there is a chance for Ron Paul to win the 2012 Republican nomination via delegates, so if there is a bio-terror attack or Ron Paul assassination on live television at the 2012 RNC, there is a real possibility that Paul will attempt to lead a failed coup in the aftermath of a major terror attack. Coincidentally, there have been a number of different [bio-terror patsies](#) arrested in the southern part of the United States and there has been talk about bringing guns to the 2012 RNC (see below), so anything is possible.

**Title:** Scott won't ban guns around Republican National Convention

**Date:** May 2, 2012

**Source:** Orlando Sentinel

**Abstract:** Gov. Rick Scott has stuck to his guns on, well, guns as he declined a request from Tampa's mayor to ban firearms from the city's downtown for the Republican National Convention in August.

Responding to a May 1 request by Mayor Bob Buckhorn to temporarily suspend Florida statutes prohibiting local gun laws stricter than the state's, Scott said conventions and firearms go way back and he found no reason to change that now.

"You note that the city's temporary (security) ordinance regulates 'sticks, poles, and water guns,' but that firearms are a 'noticeable item missing from the city's temporary, ordinance,'" Scott said in a letter. "Firearms are noticeably included, however, in the Second Amendment."

The Tampa convention is a national security event. Guns are prohibited within the convention center itself and in a safe zone immediately surrounding the facility. Security for that venue is the responsibility of the U.S. Secret Service.

In 2011, Florida lawmakers approved a measure prohibiting local governments from enacting and enforcing gun ordinances that were stricter than state law. Scott signed the measure, which sent local governments scurrying to remove local restrictions that ran afoul of the new law.

Tampa city officials have been urging the governor to temporarily suspend the state law so that a wider no-gun perimeter could be established in downtown Tampa, including areas that will be used by protestors during the four-day event that begins Aug. 27.

The request comes as Florida finds itself in the spotlight following the death in February of Trayvon Martin, a 17-year-old black teenager who was shot to death by a neighborhood watch volunteer in a gated community in Sanford. The shooting has sparked a national debate of the state's 'stand your ground' law, but the debate has spilled over into other issues regarding gun ownership. More than 800,000 Floridians have permits to carry concealed weapons. Buckhorn, a gun owner who has a concealed weapons permit, said he's not worried about law abiding citizens with concealed weapons permits but those who may choose to bring guns into the venue who have not been vetted, or may be carrying their weapons illegally.

Buckhorn said the governor would be within his rights to temporarily rescind the state law, adding that the safety of citizens and visitors during the four-day event would be enhanced. Scott, however, said political conventions through the ages have been opportunities for citizens to exercise their First Amendment rights. He saw no reason to curtail the protections offered by the Second Amendment to ensure the rights bestowed under the First.

"Our fundamental right to keep and bear arms has coexisted with those freedoms for as long, and I see no reason to depart from that tradition this year," Scott concluded ([Orlando Sentinel, 2012](#)).

# Bio Terror Bible

## EXPOSING THE COMING BIO-TERROR PANDEMIC

**BIOTERRORBIBLE.COM:** On September 6, 2012, U.S. President Barack [Obama will attend the 2012 Democratic National Convention \(DNC\)](#) in Charlotte, North Carolina. There have been a number of different [bio-terror patsies](#) arrested in the southern part of the United States, and a bio-terror attack and/or [Obama assassination attempt](#) could occur at the 2012 DNC on Live TV.

Interestingly, Obama's head just happens to be in the center of the bull's-eye within the 2012 DNC logo (see below) and U.S. Secretary of State [Hillary Clinton has announced that she will not attend the 2012 DNC](#), despite being the top Democratic spokesperson aside from President Obama and her husband former President Bill Clinton.

**Title:** Hillary Clinton To Skip DNC In Charlotte

**Date:** April 9, 2012

**Source:** [CBS News](#)

**Abstract:** Secretary of State Hillary Clinton will not be attending the Democratic National Convention this year, citing her job – and its requirement that she stay away from partisan politics – as the reason for her planned absence.

According to The Charlotte Observer, Clinton told media outlets last week of the decision.

“Given her current position, she will not be attending, consistent with her not engaging in any political activity whatsoever,” Secretary of State spokesman Philippe Reines said via e-mail to the Observer last Friday.

Federal statutes, as well as ethical guidelines set for the State Department, have been noted as reasons for the decision.

Reines added that Clinton has been a faithful attendee at the DNC for several decades, her participation dating back “possibly all the way ... to [19]68 in Chicago.”

Four years ago, Clinton's “No Way, No How, No McCain” speech given at the 2008 DNC served as a rallying point for liberals around then-presidential hopeful Barack Obama.

Former President Bill Clinton, the Secretary's husband, will reportedly be in attendance ([CBS News, 2012](#)).



# Bio Terror Bible

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**BIOTERRORBIBLE.COM:** 9/11 is without a doubt the darkest day in American history. A major bio-terror attack on this date would obviously make it even darker and shake the very core of America. Around the 10 year anniversary of 9/11 (2011), there were claims that the handwritten journal of Osama bin Laden was found in Pakistan and it included significant dates for attacking American targets, including the anniversary of 9/11. Whether or not "Al Qaeda" will spring a revenge bio-terror attack on America is still unknown, but the set-up of [Al Qaeda as a bio-terror scapegoat](#) has been happening since 9/11.

**Title:** Kill Obama: Bin Laden Plotted To Assassinate President Before 2012 Election

**Date:** May 13, 2011

**Source:** [Daily Mail](#)

**Abstract:** Osama Bin Laden wanted to assassinate President Obama as in the run up to the 2012 presidential elections, the terror leader's journal seized by U.S. forces reveals. The mastermind behind the 9/11 attacks wanted to kill the President in a follow up mission, 10 years after the devastating 2001 attack.

U.S. intelligence officials are currently analysing over one million pages of data taken from the terror leader's compound, including his handwritten journal. Former intelligence officials said that Bin Laden was focussed on killing the President. 'I would say this is probably very personal on Bin Laden's part, to kill [Obama] that he believes has violated the Muslim faith,' Brad Garrett, a former FBI profiler, told ABC News.

'He is incensed, inflamed, obsessed about killing the President.' The handwritten journal included significant dates bin Laden noted as preferred for attacking American targets, including the Fourth of July and the 10th anniversary of 9/11, a U.S. official said ([Daily Mail, 2011](#)).

**Title:** Obama Frets Over 'Lone Wolf' Attack As Sept 11 Looms

**Date:** August 16, 2011

**Source:** [Raw Story](#)

**Abstract:** US President Barack Obama on Tuesday played down prospects for a spectacular Al-Qaeda attack 10 years after the September 11th strikes, saying he worried more now about solitary extremists.

"The most likely scenario that we have to guard against right now ends up being more of a lone wolf operation than a large, well coordinated terrorist attack," he told CNN television during a campaign-style swing through Iowa.

"We still have to stay on top of it, though. We're never letting our guard now, that's part of our job," said Obama, who vowed "heightened" security measures and "extra vigilance" ahead of the grim anniversary.

He had been asked about the prospects of a terrorist attack either to mark 10 years since the strikes on the Pentagon and the World Trade Center or in retaliation for the May raid in which US commandos killed Osama bin Laden.

Obama said US officials were "constantly monitoring potential risks" but said a punishing US campaign had left Al-Qaeda "a much weaker organization with much less capability than they had just two or three years ago."

"The risk is always there, and obviously on a seminal event like the tenth anniversary of 9/11, that makes us more concerned -- it means we've got heightened awareness," he said.

But "the biggest concern we have right now is not the launching of a major terrorist operation -- although that risk is always there."

"The risk that we're especially concerned over right now is the lone wolf terrorist, somebody with a single weapon being able to carry out wide-scale massacres of the sort we saw in Norway recently," said Obama.

He was referring to Anders Behring Breivik, who shot dead 69 people, many of them teenagers, in a July 22 rampage on the island of Utoeya after killing eight others in a bombing of government offices in Oslo.

"When you've got one person who is deranged or driven by a hateful ideology they can do a lot of damage and it's a lot harder to trace those lone wolf operators," he added ([Raw Story, 2011](#)).

# Bio Terror Bible

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**BIOTERRORBIBLE.COM:** The date of April 19th is notorious in American history for violence, bloodshed, and gore. Aside from being the date of the first battle of the Revolutionary War, April 19th has long been a date when the U.S. government attacks its own people. On three distinct occasions in the last 25 years, the date of April 19th has resulted in innocent American citizens being slaughtered at the hands of the ATF and FBI. Should a bio-terror attack transpire, there is a distinct possibility that the perpetrators will choose April 19th in an attempt to tie the attack to a "rightwing" group of American citizens.

### **Battles of Lexington & Concord (1775)**

The American Revolutionary War started with American victories against the British at the [battles of Lexington and Concord](#) on April 19, 1775.

### **"The Covenant, The Sword, and the Arm of the Lord" (1985)**

[The FBI siege](#) on "The Covenant, The Sword, and the Arm of the Lord", was initiated on the morning of April 19, 1985, and is routinely linked by the U.S. government to the Oklahoma City Bombing.

### **Branch Davidian Massacre (1993)**

The [50-day siege of the Branch Davidian compound](#) in Waco, Texas, ended on April 19, 1993, with the ATF attacking the Branch Davidians, killing 74 people. This attack on innocent Americans is conveniently linked to the Oklahoma City Bombing by the U.S. government. Evidence surrounding the massacre clearly shows that the attack was a false-flag terror attack committed by criminal elements within ATF.

### **Oklahoma City Bombing (1995)**

The Alfred P. Murrah [Federal Building in Oklahoma City, Oklahoma, was bombed](#) on April 19, 1995, by alleged Christian and militia member Timothy McVeigh. Evidence surrounding the bombing clearly shows that the attack was a false-flag terror attack committed by criminal elements within the FBI and the ATF.