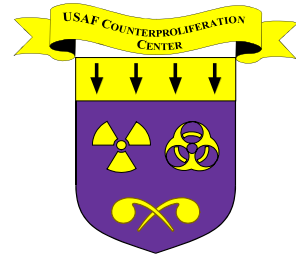


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*USAF COUNTERPROLIFERATION CENTER*

# *CPC OUTREACH JOURNAL*



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Los Angeles Times  
October 19, 2001  
Pg. 1

## **Reward Set As Anthrax Cases Increase To Six**

***New Jersey postal worker and CBS News employee contract disease. The offer of \$1 million is prompted by inability to identify senders of bacteria.***

By Josh Meyer, P.J. Huffstutter and Eric Lichtblau, Times Staff Writers

WASHINGTON -- The tally of confirmed anthrax victims grew to six Thursday, including a postal worker who may have handled contaminated letters, as authorities offered a \$1-million reward for information about the bioterrorists who have sent bacteria-laden envelopes to three cities.

The two new infections were confirmed in an assistant to CBS News anchor Dan Rather in New York and an unidentified postal worker near Trenton, N.J. The reported number of people exposed to the bacteria increased slightly, from 40 to 43. Health officials also said they were investigating at least three additional anthrax cases they declined to identify.

In Atlanta, the Centers for Disease Control and Prevention issued a rare warning: Doctors nationwide should watch for cases of smallpox, food poisoning and deadly viruses like Ebola. Federal health officials also confirmed that they are considering calling for a mass vaccination for smallpox, a highly contagious virus that can spread rapidly from person to person.

In the Trenton area, where at least two of the anthrax letters were mailed, health officials were trying to determine whether the infection of a postal worker indicated that others who handle the mail may have been exposed to the bacteria. Another postal employee may also be infected and is under a doctor's care, officials said.

FBI investigators in the region were questioning pharmacists about any unusual requests for the antibiotic Cipro before Sept. 18, the postmark date on the anthrax letter sent to NBC TV news anchor Tom Brokaw.

Dr. Julie Gerberding said that the CDC had sent three dozen epidemiologists to Washington, New York and Florida to investigate and manage the response to the anthrax attacks and that more than 50 scientists in Atlanta were working around the clock to process specimens.

She said it was too early to tell if the strain of anthrax found on Capitol Hill was the same as that found in Florida and New York, or if it was a different or more virulent kind.

"There are degrees of similarity, and the more time we have to . . . characterize the strains, the more we can work to refine our understanding of how similar two strains really are," she said.

Law enforcement authorities conceded that they were not close to arresting anyone who may have sent anthrax-contaminated letters to Senate Majority Leader Tom Daschle (D-S.D.) and journalists in Florida and New York. Atty. Gen. John Ashcroft and FBI Director Robert Mueller said the \$1-million bounty was prompted, in part, by their inability to quickly identify where the anthrax came from, who had mailed it and why, and whether the mailings were linked in any way to the Sept. 11 attacks on the World Trade Center and Pentagon.

The Bush administration sought to begin the day on a reassuring note, assembling its new director of homeland security, Thomas J. Ridge, and top health and law enforcement officials on one stage for the first time since anthrax contaminations wrested the public's attention away from the terrorist attacks.

For more than an hour, the nine top-ranking officials summed up what is known to date, particularly about the anthrax contamination on Capitol Hill.

Through Wednesday, they said, four people had contracted anthrax; two with cutaneous, or skin, anthrax, and two others with the more serious inhalation anthrax. One of those men, American Media Inc. employee Robert Stevens in Florida, died Oct. 5; the other remains hospitalized. Only 31 people had been exposed to anthrax in Washington, they said, and thousands more had been tested and found to have not been exposed to the virus.

Surgeon General David Satcher said all of those exposed and infected were being treated with antibiotics and were expected to fully recover.

Ridge, who had been criticized for keeping a low profile during his first nine days on the job, promised to continue to provide updates on the anthrax scare and terrorist threats.

"The greatest fear," Ridge told reporters and a live TV audience, "is the fear of the unknown."

Bush administration officials later said that they ordered the marathon briefing because politicians, health officials and law enforcement authorities had done little a day earlier to ease anxieties, and in fact may have heightened concerns by providing false and conflicting information about anthrax contamination on Capitol Hill.

"You didn't have a central voice," Ridge acknowledged at a second news conference Thursday. "The decision was made to try and encapsulate the information, get it out and have regular conferences."

On Capitol Hill, the House of Representatives remained shut down and many offices were closed for anthrax testing. Health officials reported no new cases of exposure to anthrax there, and said there was no conclusive evidence of contamination in the ventilation system of the Hart Senate Office Building, which houses Daschle's office several blocks from the Capitol.

Still, the FBI retrieved a letter sent to House Speaker J. Dennis Hastert (R-Ill.) after an aide there said the handwriting resembled that on letters sent to Daschle and Brokaw that were found to contain the potentially deadly bacteria.

The letter, which had not been opened, had been placed in a "burn bag" used to dispose of mail, Hastert aides said. As the day progressed, little could be determined about the source of the two new cases of anthrax infection.

New York health officials said the CBS employee had developed what was thought to be an infected bug bite, or perhaps a "slight outbreak" on her cheek, about Oct. 1. After a series of doctor visits, tests, consultations with health officials and, finally, a biopsy, she was found Thursday to have cutaneous anthrax, the form of the disease that is transmitted through broken skin.

CBS News President Andrew Heyward said the FBI and health officials had been to the building "to see if anyone else needs to be tested" and that the employee was one of several people who opened Rather's mail. He said CBS had no specific knowledge of any suspicious letter or suspicious materials coming into the building.

Rather said his assistant was successfully being treated with antibiotics.

"She has not missed a day of work," he said in a televised interview. "She is working today."

### **Postal Worker Falls Ill With Anthrax**

In New Jersey, the newest anthrax case marked the first time a postal worker has been infected with the disease, heightening concerns about how easily the bacteria can be transmitted through an envelope.

The disclosure came after days of uncertainty and fear in the small town of Hamilton, and its neighboring city, the state capital of Trenton, where the letters to Brokaw and Daschle were postmarked.

Microbiologist Barry Bloom, dean of the Harvard School of Public Health, suggested that the postal worker could have been infected when microscopic anthrax particles were "blown out of the side" of an envelope that wasn't well sealed. "So it's almost expected if you handle enough letters, and some of them are contaminated, you'll get this through an abrasion," Bloom said.

At a news conference Thursday, Acting New Jersey Gov. Donald T. DiFrancesco said that two employees had been exposed to anthrax--a female mail handler and a male employee who works in the post office's equipment maintenance area.

The employees visited their personal doctors in late September, about nine days after the NBC letter had passed through the facility but before the Daschle letter was postmarked. Both workers complained of feeling feverish and lethargic, and of having skin lesions on their arms, local health and government officials said.

Officials would not say which of the two exposed employees had contracted anthrax. Test results for the other employee, as well as nearly a dozen other workers in the mail distribution center, were still pending, Hamilton Mayor Glen D. Gilmore said.

There are 950 employees at that station, and they handle 250,000 pieces of mail a day, Gilmore said.

"Both are now home and we have every indication that they will recover," said New Jersey Health Commissioner George DiFerdinando.

The Trenton postal facility is scheduled to be closed today and possibly longer as investigators search for clues, and federal health authorities examine and clean the building.

While health officials continued their investigation, so did the FBI and other law enforcement agencies.

Agents were following several productive leads in Florida, New York and Washington, said one official, but Ashcroft said there appeared to be little indication that arrests are imminent. Investigators could not pinpoint the source of the anthrax, although scientists now believe the anthrax in the Daschle letter was "professionally" manufactured, Ashcroft told reporters. "We have ruled out neither international terrorism nor domestic terrorism," he said.

Ashcroft said the anthrax exposure in New Jersey could provide valuable leads in identifying who sent the mailings. Authorities said that with test results on the anthrax still coming in from government labs, they are letting scientists take the lead in the investigation.

"Everyone wants instant results," said one FBI official, "but the way we're working this is very methodical." One avenue of inquiry appeared closed as authorities concluded a suspicious letter sent from Malaysia to Nevada had tested negative for anthrax.

Late in the day, Ashcroft suggested in an MSNBC interview that the spate of anthrax infections "might be . . . a part of a unified organized effort, an effort either by a single individual or else an effort conducted in concert with someone else."

But he said authorities could not say that the anthrax outbreak was related in any way to the suicide hijackings. He conceded, however, that the stream of thousands of false reports and anthrax hoaxes had slowed, but not impeded, the FBI's massive investigation into the hijackings. Indeed, the number of people detained in the investigation has risen to 803.

In other developments Thursday:

- \* In Florida, powder in a threatening letter sent to an abortion clinic tested negative for anthrax.

- \* Dozens of passengers on a Northwest Airlines flight from Detroit to Vermont earlier in the week were told to undergo antibiotic treatment after a powdery substance showed evidence of similar bacteria.

- \* There were other reports of anthrax letters, including one mailed from Atlanta to Africa that senior health officials in Kenya said has tested positive for anthrax. In France, Greece and China, discoveries of suspicious substances forced the shutdown of government and commercial facilities.

The tally of hoaxes grew as well.

By day's end, authorities had indicted at least seven people in connection with suspicious mailings.

An employee of the Queen Mary in Long Beach was charged with threatening to use a weapon of mass destruction at the floating tourist attraction. Authorities said he scrawled "DANGER. DO NOT OPEN. ANTRAX" on a bucket of rotten beans and chili.

No matter their alleged motives, Ashcroft again promised to seek the longest prison terms possible for anyone convicted of sending an anthrax hoax.

*Times staff writers Josh Getlin and Elizabeth Jensen in New York, Davan Maharaj in Kenya, Louis Sahagun in Long Beach, and Janet Hook, Elizabeth Shogren, Aaron Zitner in Washington contributed to this report.*

InsideDefense.com

October 18, 2001

## **Rumsfeld: DOD, HHS Will Try To Save Anthrax Vaccine Program**

Pentagon and Health and Human Services Department officials are fashioning a plan to save the Defense Department's anthrax vaccine program and give the sole vaccine producer, Lansing, MI-based Bioport, another crack at overcoming problems that have prevented the company from getting Food and Drug Administration approval to begin distributing new batches of the vaccine, Defense Secretary Donald Rumsfeld said today. During a press briefing on Operation Enduring Freedom, Rumsfeld said he met today to discuss the vaccine program with Under Secretary of Defense for Acquisition, Technology and Logistics Pete Aldridge and Under Secretary of Defense for Personnel and Readiness David Chu.

"They will meet with HHS officials and fashion a plan to give [Bioport] another crack at it," Rumsfeld said. "It may not be savable."

In June, DOD announced that only small special operations units and selected researchers would continue to receive the vaccine because the department was running low on its supply. Troops traveling to the Persian Gulf region also get the vaccine.

In December 1997, Bioport renovated its Lansing facility because of numerous problems FDA uncovered during yearly inspections and to handle the quantities needed for an expanded DOD vaccination program. The company has yet to receive FDA approval for those renovations.

Rumsfeld noted, "things have not been going swimmingly" for Bioport. "We will try to come up with options to help them," he added.

The House Armed Services Committee included a provision in its fiscal year 2002 authorization bill that calls on the defense secretary to review all contracts with Bioport if the company fails to submit a "completed biologics license application supplement" to FDA for making the vaccine at its Michigan plant. The committee gives the secretary the option of finding another vaccine supplier if problems cannot be resolved.

--*Thomas Duffy*

Washington Times

October 19, 2001

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## **Inside The Ring**

By Bill Gertz and Rowan Scarborough

### **Pakistan rejects help**

The government of Pakistan last week rejected a U.S. government proposal to provide security for Islamabad's nuclear arsenal, we are told.

The offer to protect the weapons, believed to number around 20, was turned down because of fears that U.S. security personnel could be used to block the Pakistani military's deployment of the arms.

Tensions have mounted in the past several days between Pakistan and India as fighting flared anew in the disputed region of Kashmir. The tensions are dangerous because both India and Pakistan possess nuclear weapons and the missiles to deliver them, quickly.

U.S. intelligence agencies fear that instability in Pakistan could lead to the seizure of power in Islamabad of Islamic extremists who might use nuclear weapons. Instability in Pakistan also could lead to attacks on the Pakistani military's nuclear arsenal and the theft of nuclear weapons.

Nuclear weapons security was said to be on the agenda of Secretary of State Colin L. Powell during his visit to Islamabad this week.

Wall Street Journal

October 19, 2001

## **Bush Plans How To Exit ABM Treaty**

### ***Mulls Steeper Cuts to Assuage Russia***

By Carla Anne Robbins and Andrew Higgins, Staff Reporters of The Wall Street Journal

In a test of their warming relationship, President Bush is expected to tell Russian President Vladimir Putin that the U.S. plans deep, unilateral cuts in offensive nuclear weapons, but will give notice by year end that it will withdraw from the ABM treaty banning missile defenses.

The president's top aides were debating last night how many nuclear weapons the U.S. will retain, though officials say they expect Mr. Bush to present a firm number to the Russian leader at their Sunday meeting in Shanghai.

Mr. Putin, whose own arsenal is decaying, has called for both countries to cut back to 1,500 long-range weapons, while U.S. nuclear planners had been resisting cuts much below 2,500.

The U.S. has 7,000 long-range weapons deployed, while Russia has 6,000.

Mr. Bush's expected move would be an important step toward his goal of building an ambitious, and costly, national missile-defense system. While considerably sweetened by a pledge of steep reductions of weapons, Mr. Bush's proposal still is high-risk, especially as he tries to keep together an international coalition for military action in Afghanistan and a broader war on terrorism.

Both Russia and China, the host for this weekend's Asian economic summit, have fiercely opposed Mr. Bush's plans to jettison the 1972 Anti-Ballistic Missile treaty, which bars construction of national missile-defense systems. The Russians, who have neither the technological nor economic might to match the U.S. in missile defenses, fear that abandoning the treaty will undermine what is left of Moscow's strategic parity with the U.S.

The relationship between the two countries has warmed since the Sept. 11 terrorist attacks in the U.S. Mr. Putin has aligned his country firmly with the U.S.-led campaign against terrorism, sharing intelligence, offering fly-over rights and accepting the basing of U.S. troops and planes in two former Soviet republics in Central Asia. In a further sign of Mr. Putin's new thinking, Russia announced this week that it would close a listening post in Lourdes, Cuba, built during the Cold War.

U.S. officials say they expect Mr. Putin eventually to go along with Mr. Bush's missile-defense plans -- almost certainly not this weekend, but perhaps by mid-November, when the two men are expected to meet again at Mr. Bush's ranch in Texas.

"The Russians get that this is a new relationship, and it's a lot broader than strategic arms," a senior U.S. official said.

Mr. Bush also is expected to sweeten the pot with pledges of new cooperation on economic and trade issues, as well as in the military sphere. Mr. Putin is eager to have the U.S. endorse his efforts to join the World Trade Organization -- Commerce Secretary Don Evans, in Moscow last week, pointedly encouraged those efforts.

It still may be politically difficult for the Russian leader to accept the U.S. withdrawal from the ABM treaty without serious protest. "They may be reading Putin right, but they're misreading the domestic politics there," says Michael McFaul, a Russia specialist at Stanford University in California.

Russia clearly is eager to have the U.S. reduce its stockpile of offensive weapons, at a time when its own arsenal is slipping into disrepair. At the same time, negotiated arms-control treaties are one of the last vestiges of Russia's superpower status, and many members of Russia's defense establishment fear that without a formal treaty, the U.S. could decide to build up its weapons at some point.

Another U.S. official said that, depending on the strength of Mr. Putin's opposition, the White House may have to reconsider its aversion to formal treaties and agree to codify "parallel" nuclear cuts in some written format.

Many analysts -- both in Moscow and Washington -- predicted that the Sept. 11 terrorist attacks would cool Mr. Bush's enthusiasm for missile defenses and focus U.S. attention on other threats. It hasn't.

In a news conference last week, the president said the terrorist attacks were an example of "the new threat" the U.S. faces. He said he planned in Shanghai to "ask my friend" Mr. Putin "to envision a world in which a terrorist thug, and/or a host nation, might have the ability ... to deliver a weapon of mass destruction via a rocket."

Wall Street Journal  
October 19, 2001

## **Lawmakers Seek Billions To Increase Nation's Readiness For Bioterrorism**

By Laurie McGinley, Staff Reporter of The Wall Street Journal

WASHINGTON -- In another sign of increased worry over bioterrorism, lawmakers are developing a \$5 billion to \$10 billion package that would accelerate vaccine production, improve local emergency-response efforts and ease some antitrust rules for drug companies.

The effort, led by Sen. Edward Kennedy (D., Mass.), is being negotiated with key Republicans and may be brought to the Senate floor soon. Some of the specific details of the legislation were discussed in a meeting convened by Sen. Kennedy this week with several pharmaceutical executives.

The proposal, which isn't in final form, would give the drug industry some liability protection for possible adverse reactions of some patients caused by vaccines. It would authorize funds for increased security for facilities in Russia and the U.S. that have dangerous pathogens.

It would also change antitrust rules so that drug companies and the government could jointly discuss and coordinate ways to increase the supply of needed pharmaceuticals. While one drug company might focus on producing a needed vaccine, for example, another might concentrate on increasing stocks of antibiotics and developing new ones to fight antibiotic-resistant biological agents.

Senate Democrats said they hoped that Sen. Bill Frist (R., Tenn.) would join Sen. Kennedy in championing the package. The two have worked extensively together on bioterrorism issues and in recently weeks proposed a \$1.4 billion package of bioterrorism initiatives.

But an aide to Sen. Frist said the senator hadn't agreed to the much-larger package now being drafted by Senate Democrats.

"These are extraordinary times that demand an extraordinary response," said Sen. Kennedy. "The legislation will provide a comprehensive response to the threat of bioterrorism." The effort comes as the Bush administration also is taking steps to increase the nation's stockpile of pharmaceuticals and medical supplies and to improve the nation's emergency preparations.

The legislation would include provisions to lower barriers to getting new drugs and vaccines approved, congressional officials said. It also would provide funding to increase Food and Drug Administration staff to speed up approvals.

Democratic aides said about \$2 billion of the proposal would probably come from the \$40 billion antiterrorism bill that has already passed Congress. The rest would come from other sources and would have to be approved by congressional appropriators.

The Frist aide said the senator was interested in developing a more comprehensive antibioterrorism package but hadn't settled on a final proposal. Among other things, the aide said, he is interested in taking steps to improve food safety and security.

New York Times

October 19, 2001

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## **Ridge Makes Effort To Calm Public's Anthrax Fears**

By Todd S. Purdum and Elizabeth Becker

WASHINGTON, Oct. 18 — After more than a week of sometimes conflicting information from federal authorities about the threat of bioterrorism, Tom Ridge, the Bush administration's new domestic security chief, and other senior health and law enforcement officials stepped forward today to try to calm public fears about anthrax.

Mr. Ridge's first public appearance in his new position was meant to send a more focused and authoritative message to the public after two days of intense concern about highly dangerous anthrax found in a Senate office.

The briefing this morning — with Mr. Ridge joined by the attorney general, the F.B.I. director, the postmaster general, the surgeon general and officials from the military and the Centers for Disease Control and Prevention — also seemed to be a response to criticism that the Bush administration had been slow to give the public clear information.

"Thousands and thousands and thousands of people have been tested for anthrax exposure, and thousands of environmental samples have been taken as well," Mr. Ridge said, emphasizing that only six actual cases of infection had been detected so far.

At the briefing, Robert S. Mueller III, the F.B.I. director, said the government would offer a \$1 million reward for information leading to the conviction of anyone responsible for anthrax attacks. John Potter, the postmaster general, said his office would send a postcard "to everyone in America" within a week outlining how to handle suspicious mail.

Projecting an air of confidence and looming physically over his Bush administration colleagues, Mr. Ridge said, "Instead of speculating, we'd like to focus on the facts."

With that, Mr. Ridge, the former governor of Pennsylvania and a combat veteran of Vietnam who was sworn into his new job on Oct. 8, became a brisk, self-assured moderator of a live televised update on the anthrax scares, featuring some of the powerful officials whose heads it may well become his job to knock.

Senator John McCain of Arizona, a frequent critic of the Bush White House, said he considered Mr. Ridge's appearance "very important, because it's the first time we're getting an authoritative source rather than a chorus."

In a round table with reporters later, Mr. Ridge himself took note of questions about his previously low profile. "My kids used to read the book, 'Where's Waldo?' " he said, by way of explaining his debut. "Where's the Gov? I thought it was the appropriate time to come out."

Since Monday, when finely grained anthrax spread from a letter opened in the office of Senator Tom Daschle, the majority leader, critics in Congress and second-guessers in the news media had asked why Mr. Ridge failed to take charge publicly of the government's response.

President Bush was traveling to China for an economic conference, and Congressional leaders argued among themselves about the severity of the anthrax threat — but shut their offices for environmental testing. So the White House was under pressure to arrange a more coordinated public relations response.

But administration officials said today that Mr. Ridge had been getting up to speed behind the scenes, and had always planned to make his public debut today or Friday.

On Wednesday, they said, he told White House aides that he was ready. Other planned announcements were consolidated into a single news conference under his command.

"From a communications standpoint, we have to do everything we can to provide the facts to the American people, but in a factual way," said the White House communications director, Dan Bartlett. "The worst thing that can happen to the federal government is to lose credibility with the American people, and that's why we will continue to be very careful with the information we have and make sure it will be accurate."

Once the decision was made to go forward, Mr. Ridge apparently wasted little time. A member of the staff of the surgeon general, Dr. David Satcher, said Department of Health and Human Services officials told him and his deputy, Dr. Kenneth Moritsugu, that they were expected at the White House at 10 a.m.

"We just got told to go, and so we went," the aide said.

In his afternoon talk with about 20 reporters, Mr. Ridge acknowledged that "there has been some concern that there are mixed messages."

He added, "The decision was made to get out and try to encapsulate all the information and tell you from this day forward, we're going to do regular conferences."

From his first day on the job, Mr. Ridge said, he met daily with Mr. Mueller, Attorney General John Ashcroft and Tommy G. Thompson, the secretary of health and human services. Mr. Bush spoke to Mr. Ridge from Air Force One this morning, and the two planned to talk again before Mr. Ridge went to bed tonight.

Mr. Ridge said he was calling agencies with requests to take on new missions or to provide him with more information. "I have the authority from the president," he said. "I have the access."

Repeatedly, Mr. Ridge said his goal was to transform the 46 federal agencies charged with duties that come under the heading of homeland defense so they could respond to threats like bioterrorism and "other man-made disasters." But he played down discussion of whether he would call for drastic changes at those agencies.

"My job is to step back from all of these different agencies, take a look at all their moving parts," he said. "Then I can see where there can be some refining, some strengthening and some improvements."

In the days after the Sept. 11 terrorist attacks, Mr. Bush created the homeland defense office by executive order, and some members of Congress have said that they thought Mr. Ridge would need statutory power to coordinate the work of some famously proud bureaucracies. But Mr. Ridge said he told Congressional leaders this week that he declined their offers to strengthen the office, at least for the moment.

"I may need some statutory authority down the line if I'm going to rearrange some of the responsibilities and give cleaner lines of responsibility to the agencies," he said.

Mr. Ridge said, for example, that he would not be the official to decide whether the military should shoot down a commercial airliner that behaved suspiciously. "My role, if there is time, would be more as an adviser," he said.

But, asked in the morning if he was "the boss here or are you a coordinator," Mr. Ridge replied, "The coordinator, it's like the conductor of an orchestra. The music doesn't start playing until he taps the baton."

In any emergency, he said, "you've got several agencies that spring into action immediately, simultaneously, and my role would be to participate in that effort to make sure that the response — agency- wide, cross-government-wide — is coordinated so that it is quick and as aggressive and as complete as possible."

Washington Post  
October 19, 2001  
Pg. 1

## **FBI Agents Focus On N.J. Mail Route** ***Carrier's Anthrax Seen as a Lead to Sender of Spores***

By Susan Schmidt and Dale Russakoff, Washington Post Staff Writers



FBI agents yesterday swarmed over the west Trenton, N.J., route of a mail carrier who has developed cutaneous anthrax, tracking an important new lead in their search for the source of anthrax-laced letters that were mailed to NBC News and the U.S. Senate.

The discovery of the mail carrier's illness was considered a significant break by federal investigators, who suggested that the suspect or suspects responsible for the letter she touched may have mailed it from somewhere along her route.

"It certainly narrows it down a lot," one official said.

Authorities revealed yesterday that the woman came down with the illness on Sept. 27. The timing indicates that she may have handled the letter to NBC News anchor Tom Brokaw, postmarked in Trenton Sept. 18, that contained anthrax spores. A second letter, to Senate Majority Leader Thomas A. Daschle (D-S.D.), bears similar handwriting and was postmarked in Trenton Oct. 8.

Officials also announced yesterday that an assistant to CBS News anchor Dan Rather has contracted the skin form of anthrax -- bringing to six the number of people infected in the bioterror attacks. They said a maintenance worker at the Trenton postal distribution center was also showing signs of the disease.

In Washington, meanwhile, a worker at a facility that delivers mail to Congress has tested positive for anthrax exposure, the first case outside the grounds of the Capitol that appears associated with the letter to Daschle, officials said. Epidemiologists were testing that facility -- at Half and P streets SE -- as well as the main postal distribution center on Brentwood Avenue NE for anthrax.

The bioterror attacks have left one person dead -- a photo editor at a Florida-based tabloid newspaper -- and have sickened five others, all of whom are expected to recover. Thirty-one people were exposed to anthrax microbes when a worker in Daschle's office opened a letter on Monday containing a white powder laced with an easily inhalable form of the spores.

Joined by Food and Drug Administration investigators and postal inspectors, scores of FBI agents in the Trenton area have spent at least two days quizzing postal employees and questioning pharmacists about anyone who may have made major purchases of the antibiotic Cipro.

Top FBI and U.S. Postal Service officials in Washington asked the public yesterday to phone the television show "America's Most Wanted" with any leads, offering a \$1 million reward for information leading to the arrest of those who sent the letters.

The effort to find whoever has been sending what authorities believe are linked letters is bearing fruit, Attorney General John D. Ashcroft indicated yesterday. "We have significantly more information than we started with. That's how I would characterize it," he said.

But Postal Inspector Dan Mihalko said the primary physical evidence -- the envelopes and letters that arrived with anthrax spores -- are contaminated and require special processing at Fort Detrick in Maryland.

The decontamination process has interrupted the Postal Service's normal forensic examinations that typically involve careful analysis of ink, paper and handwriting for potential clues. "We are delayed in this case," Mihalko said. Fingerprint and laboratory analysis "is not being done" while the evidence remains contaminated, he said. Officials are also reviewing post office videotape from 46 branches that feed mail into the Trenton facility and trying to trace the origins of the letters through the bar codes that were applied when they reached Trenton from mailboxes and branch offices.

The infected Trenton postal employees -- one man, one woman -- are being treated with antibiotics and are recovering at home, according to authorities. Cultures taken from both tested negative for anthrax, but blood samples sent to the Centers for Disease Control and Prevention tested positive early Thursday, according to Health Department spokesman Dave Jamieson. A biopsy of the mail carrier's lesion was positive, but a biopsy of the other worker's lesion was negative.

The post office was closed to the public yesterday, and Health Department and hazardous materials workers were conducting extensive environmental testing, Jamieson said. Acting Gov. Donald DiFrancesco said CDC investigators were en route to New Jersey to determine if more employees need to be tested.

New Jersey Health Commissioner George DiFerdinando said at a news conference that the worker who has contracted anthrax saw her doctor on Sept. 27 for a lesion on her arm and was prescribed an antibiotic. She saw a second doctor on Oct. 2 after she began to feel feverish and lethargic. She was hospitalized on Oct. 3 but is now recovering.

FBI agents and investigators from the Food and Drug Administration's criminal investigation unit made a steady stream of calls and visits to pharmacies in the Trenton area in search of customers who may have obtained large supplies of Cipro in recent months.

Pharmacists said that FBI and FDA agents questioned them about any customers who tried to purchase 30- and 60-day supplies of Cipro -- which kills the potentially deadly anthrax bacterium -- before the letters were mailed. "Their

theory is someone who obtained some anthrax and who was going to distribute it would need it," said Joseph Schoen, owner of the West Trenton Pharmacy.

Most of the pharmacists said their records showed no prescriptions filled in quantities that are typically needed to treat anthrax. Investigators "were interested principally in Cipro, but they checked out other stuff, too, such as penicillin," said Schoen. Penicillin can also be used to treat anthrax.

The reward of up to \$1 million for information leading to the arrest and conviction of those responsible for anthrax-contaminated letters will be administered by "America's Most Wanted" and its host, John Walsh, who has had success in flushing out leads that led to the capture of 14 people who have been on the FBI's most-wanted list. The show's phone number is 1-800 CRIMETV.

"We know there is someone out there who saw something or who knows something about the letters," said Chief Postal Inspector Kenneth Weaver, asking for the public's cooperation.

Clint Van Zandt, a 25-year veteran special agent with the FBI who now does threat assessments for Fortune 500 companies, said there are two aspects to generating a profile from the anthrax letters: forensic and behavioral.

In the forensic investigation, authorities would look for latent or identifiable fingerprints, saliva DNA, indented writing -- or impressions left on the paper from another piece of writing and what type of ink.

BIC ink has a unique chemical composition, different from ink in a Mont Blanc pen, for instance. "If the writing comes from a \$500 pen of which only two have been sold in Florida or New Jersey in the past few months, we might call that a clue," he said.

DNA can suggest whether the sender was male or female, and statistically, Asian, Caucasian or African, for example.

FBI and postal officials have noted that the sender was sophisticated enough to concoct a seemingly benign return address on one of the letters -- the Greendale School in Franklin Park, N.J. -- which turns out not to exist.

In the Unabomber case, which Van Zandt worked on for a private investigator, Ted Kaczynski "gave himself up in his letters", because there were so many similarities between letters sent to his brother, David Kaczynski, and the Unabomber's "Manifesto," a lengthy treatise he sent to several newspapers.

"We found multiple points of linguistic and psychological comparison," he said. So much so that Van Zandt advised the investigator to tell her client to go to the FBI, he said.

*Staff writers Dan Eggen, David A. Fahrenthold, Andrew DeMillo, Christine Haughney, Jim McGee, Ellen Nakashima, Lena Sun, George Lardner and Amy Goldstein contributed to this report.*

New York Times

October 19, 2001

## **Link Now Seen In Anthrax And Hijackings**

By David Johnston with William J. Broad

WASHINGTON, Oct. 18 — Investigators pursuing the anthrax exposure cases in New York, Washington and Florida say they suspect that the rash of contaminated letters is related to the Sept. 11 attacks and are investigating the possibility that Al Qaeda confederates of the hijackers are behind the incidents.

Law enforcement and intelligence officials said they lacked concrete evidence or intelligence to explain who sent the anthrax-contaminated letters to news organizations in New York and to the Senate majority leader, Tom Daschle, in Washington, and whether they all contained the same type of anthrax.

The letter sent to Senator Daschle and another to NBC were postmarked from Trenton, and officials have said the letters were written by the same person. Several hijackers lived in New Jersey before taking over the United Airlines flight from Newark that slammed into a field in rural Pennsylvania.

Federal investigators said last night that they believed that the letter sent to Tom Brokaw was mailed from West Trenton, a neighborhood in the Trenton suburb of Ewing, and they have narrowed their search for the specific mailbox to a one-square-mile section of that neighborhood.

A letter carrier who officials said yesterday was infected with anthrax was assigned to deliver and collect mail on a route in West Trenton that covered 250 to 500 homes and businesses, and it is that route that investigators now believe was the source of the letter. That belief was deepened because the bar coding on the letter to Mr. Brokaw showed that the letter was taken to the main post office at a time that matched the carrier's shift.

Last night, investigators were testing for anthrax at several mail collection spots in the neighborhood.

Senior government officials said investigators were focusing on the ability of the hijackers or their accomplices to obtain highly refined anthrax from a foreign or domestic supplier. While they have not ruled out the possibility that another criminal could be behind the anthrax attacks, investigators are looking intensely at evidentiary threads linking the letters to the hijackers.

Investigators are focusing on Mohamed Atta, a hijacking ringleader, who was interested in crop-dusting aircraft and once lived near the offices in Boca Raton, Fla., of American Media Inc., where the first victims worked. Crop-dusting airplanes could be used to spread anthrax or other toxins.

Today, F.B.I. agents also searched the Jersey City home of three men who have been in custody since last month because of a possible connection to the hijackings, after learning that they kept an assortment of magazines and news articles about biological warfare in their apartment. Investigators may have overlooked them in an earlier search.

Two of the men who lived there, Ayub Ali Khan and Mohammed Azmath, boarded a flight from Newark Airport to San Antonio the morning of Sept. 11, but the plane was forced to land in St. Louis after hijackings of four other flights forced all air traffic in the country to a halt. They were arrested the next day on an Amtrak train in Texas, carrying \$5,000 in cash and box-cutting knives similar to those used by the terrorists who hijacked the four flights. Federal scientists examining the anthrax used in the Florida and New York attacks have tentatively concluded that the type is a domestic strain similar to a highly virulent type known as the Ames strain, which was discovered in Iowa in 1980. Reputedly, it is even more dangerous than the anthrax the American military used for anthrax weapons before President Richard M. Nixon renounced them in 1969. The Ames strain is now used in labs around the world.

In Boca Raton, investigators have not determined how anthrax was delivered to the building occupied by American Media, a tabloid newspaper publisher. But some hijackers lived nearby in the months before the attacks, among them Mr. Atta.

An additional line of inquiry undercuts a competing theory, that a disgruntled employee of a domestic laboratory that uses anthrax carried out the attacks. F.B.I. agents checked every American laboratory that uses anthrax and found that none were missing inventory. In addition, none reported suspicious activity.

The investigation has linked F.B.I. agents and scientists in a race to find who sent the letters. Federal scientists examining the anthrax used in the Florida and New York attacks have tentatively concluded that it is a domestic strain that bears no resemblance to the strains Russia and Iraq turned into biological weapons.

The scientists said the emerging evidence decreased the likelihood that those countries were connected to the anthrax letters. But they emphasized that the clues in no way ruled out foreign sponsorship because the identified strain was available overseas.

They said it was conceivable that a foreign government or terrorist organization deliberately chose a domestic strain to throw off federal investigators. The clues are merely suggestive, they said.

"There's no indication that it came from the Russian or Iraqi programs, but you can't rule that out," said a federal scientist familiar with the investigation.

Complicating things, all Ames strains, the type of anthrax scientists believe was used in the NBC letter, are not identical because random mutations in the genetic codes of anthrax bacteria can cause individual cultures to become increasingly different in character from their original seed stock.

Even so, federal and private experts said that, to the best of their knowledge, Baghdad was unable to obtain the Ames strain.

"The Iraqis tried to get it but didn't succeed," Richard Spertzel, a microbiologist and former head of biological inspection teams in Iraq for the United Nations, said in an interview. "It's a nasty bug."

A federal scientist familiar with the investigation agreed but said the emerging evidence, including detailed genetic analyses of the strains to tease out even deeper clues, was helping narrow the possibilities of who launched the anthrax attacks.

One senior government official said that some investigators were skeptical of a connection between Al Qaeda and the anthrax. The official said the evidence amassed so far, like records of credit card transactions, e-mail messages or cellphone calls, did not tie the hijackers to any activity clearly related to anthrax.

# Safety Of Russian Smallpox Stocks Turns Worrisome As Bioweapon Fears Spread

By Jeanne Whalen and Gautam Naik, Staff Reporters of The Wall Street Journal

MOSCOW -- How secure is the Russian facility that holds some of the last surviving supplies of the deadly smallpox virus?

Smallpox was eradicated globally by 1980. But samples of the smallpox virus officially remain for research purposes in two places: a lab in Atlanta run by the U.S. Centers for Disease Control and Prevention, and a top-notch research institute called Vektor, in the Siberian city of Novosibirsk, 4,000 miles from Moscow. Lisa Swenarski, a spokeswoman for the CDC in Atlanta, wouldn't say where the U.S. lab is located. She said security has been beefed up at CDC labs since Sept. 11, but declined to elaborate.

In Siberia, Vektor is ringed by three concentric walls, each crowned by barbed wire, alarm bells and shards of razor. The earth between the walls is plowed to detect footprints. Inside, only a handful of scientists have access to the vault where smallpox samples are stored. The armed guards know every scientist by face, and they must arrive in twos or threes -- no one is allowed in alone.

"We don't have just any old security measures; we work closely with the World Health Organization and follow all of the WHO's recommendations," says Sergei Netesov, deputy general director of the institute, in a telephone interview. "There definitely haven't ever been attempts to steal smallpox," Mr. Netesov said.

Vektor is widely seen as a secure facility, but some are worried about the rest of Russia. Moscow declared it was ending its offensive biological-weapons program in 1992, but not all laboratories have been opened to foreign inspection. Four important military biological institutes remain closed, according to a 1999 report by Amy Smithson, a weapons expert with the Stimson Center in Washington. A former Soviet weaponeer, meanwhile, claims Russia's biological-weapons program continues.

"Since the Soviet Union and Russia had the most sophisticated and powerful biological-weapons program on Earth, Russia presented and presents a great proliferation threat," said Ken Alibek, the former deputy head of Biopreparat, the former Soviet agency that made anthrax and other agents for biological weapons, while testifying to the U.S. Congress in 1999.

Dr. Alibek, who moved to the U.S. just after the Soviet collapse, said Russia stockpiled "dozens of tons of smallpox." In his testimony, Dr. Alibek said he didn't believe that either the Soviet Union or present-day Russia had exported smallpox or other weapons strains. But dozens of people who worked for the Soviet biological-weapons program are living overseas, and could have been tapped by terrorist groups or even nations for their expertise, he said.

No one really knows whether Russia and the U.S. are alone in holding smallpox. The WHO asked all countries to voluntarily destroy all virus samples after the disease was eradicated in 1980, but it is unclear whether every lab around the world did so.

During the past year, the CDC decided the potential use of smallpox in germ warfare was real enough to take precautions. It signed a 20-year contract under which Britain's Acambis PLC will supply an initial 40 million doses of the vaccine. During recent days, that program has been accelerated significantly.

Other countries also are worried. Thursday, the French government asked vaccine maker Aventis SA to produce three million doses of smallpox vaccine. Aventis said it had discussed with U.S. government officials the development of vaccines to protect people against biological attacks. France has about five million doses of smallpox vaccine.

Mr. Netesov of Vektor says it is crucial to store smallpox stocks to develop vaccines -- in the event of an outbreak -- and to understand new strains of the disease.

Others say keeping smallpox on hand carries risks -- of human error. David Heymann, head of communicable-diseases programs at the World Health Organization, says the last human case of smallpox was a lab accident: In October 1979, the smallpox virus escaped from a lab in Birmingham, England, and infected a person.

-- *Martha Brannigan in Atlanta contributed to this article.*

## **BMDO Likely To Undergo More Changes In The Near Future, Gen. Kadish Says**

The Ballistic Missile Defense Organization will likely undergo more organizational changes in the not-too-distant future, even though the agency has just undergone a major restructuring, BMDO director Lt. Gen. Ronald Kadish said Oct. 18.

Just as the U.S. will have to keep refining its missile defense system to respond to evolving threats, BMDO will have to keep fine-tuning its organizational structure to fit changing program activities, Kadish told a Capitol Hill seminar. As a result, the BMDO organization may never be a finished product.

"I tell this to my people and they just cringe," Kadish joked.

BMDO recently revised its structure so that it has three main program elements focusing on the boost, midcourse and terminal phases of an enemy missile's flight (DAILY, July 13).

The reorganization also transfers developing technologies, such as the Airborne Laser, Space Based Laser and Space Based Infrared System (SBIRS) Low, from the services to BMDO. More mature programs, such as the Patriot Advanced Capability-3 (PAC-3), Medium Extended Air Defense System (MEADS) and Navy Area Theater Ballistic Missile Defense, are moving from BMDO to the services (DAILY, June 29).

Kadish said the Defense Department is trying to figure out how BMDO can refine mature missile defense systems after turning them over to the military services for procurement and operations.

A new name for BMDO is also being contemplated.

"Names are important," Kadish said. "Expect a change."

Kadish said BMDO is "still struggling" to come up with a sea-based component to its testing program but hopes to establish one within six to eight months. He predicted such technology could be developed by "mid-decade."

BMDO is doing only "tangential" work on cruise missile defenses because it has not been directed to focus on that area, according to Kadish. But he said the cruise missile threat deserves more attention and that much of BMDO's know-how could be useful against such missiles.

Although some members of Congress have argued that missile defense should become a lower priority in light of the Sept. 11 terrorist attacks on the Pentagon and World Trade Center, Kadish insisted that the threat of a ballistic missile attack remains "very compelling" and continues to grow. Kadish expressed confidence that Congress will approve a fiscal 2002 spending level for missile defense that is close to the Administration's request for a \$3 billion, or 57 percent, increase.

Kadish said he sees significant potential for U.S.-Russian cooperation on missile defense but believes the two countries still need to overcome a lingering "Cold War mentality."

Although the Administration wants to negotiate changes in the 1972 Anti-Ballistic Missile Treaty with Russia to free the U.S. from constraints on missile defense, the executive branch remains committed to adhering to the pact as long as it remains in effect, he added.

- Marc Selinger

Washington Post

October 18, 2001

Pg. B2

Federal Diary

## **Employee Education Is Deployed Against Threat Of Anthrax**

By Stephen Barr

The discovery of bacteria that can cause anthrax on Capitol Hill has sent federal officials and some unions scrambling to educate government employees about the disease and its power to disrupt their workplaces.

The executive committee of the Human Resources Management Council, an interagency group, sponsored a briefing Tuesday for agencies on potential anthrax threats and how to handle emergencies.

Included in the session were experts from the Centers for Disease Control and Prevention, the U.S. Postal Service and the General Services Administration. They discussed coordinated government-wide efforts to combat the anthrax threat.

By late today, the GSA expects to offer on its Internet site ([www.gsa.gov](http://www.gsa.gov)) information from one of its online courses, "How to Respond to an Anthrax Threat in a Mail Center." The GSA is also preparing a briefing for employees who sort, deliver and open mail for federal agencies. The briefing will be posted on the Web site late Friday and presented in person later at various locations.

"We have the very important responsibility to keep the government running smoothly and soundly, and the only way we'll be able to do this is by making sure that every federal employee is safe and secure," said Kay Coles James, the director of Office of Personnel Management.

At the interagency meeting, which James convened, officials urged agencies to make sure that damaged or suspicious packages are isolated and to designate officials who will be responsible for notifying local, county and state health departments, as well as the CDC, of any incidents.

One official who attended the meeting said: "Employees should do what the president said, and that's stay alert to anything that looks remotely unusual. Get your senses a little bit more on alert."

The Postal Service has launched a mail security task force and postal unions have posted health alerts on their Internet sites and bulletin boards.

To address postal employee concerns, Postmaster General John E. Potter taped a video for postal unions and management groups. He mandated "safety talks" for postal employees on anthrax, biological substances and the use of gloves and filtering face masks. In a bid to ease employee worries, the Postal Service promised to make gloves and masks available to employees concerned about possible anthrax bacteria. At large postal facilities, doctors are available to respond to employee concerns.

Because the nation's mail system has been used to deliver the anthrax germ in New York and on Capitol Hill, GSA officials yesterday began setting up a tutorial for people who handle mail in federal buildings. The material was developed last year by GSA and VCampus Corp. for an online course, which cost \$24.95. To help agencies deal with the anthrax threat, GSA and the company agreed to make information from the course available free on the GSA Web site.

The GSA Web site also will list a range of electronic links to help federal employees learn about the anthrax threat. Material also is available at the CDC Web site ([www.bt.cdc.gov](http://www.bt.cdc.gov)) and at the government's Internet portal ([www.firstgov.gov](http://www.firstgov.gov)).

### **Checkbook's Guide Online**

A longtime favorite of federal employees, "Checkbook's Guide to Health Insurance Plans for Federal Employees," will be available on the Internet this year.

The new version allows Internet users to enter data on family size, salary, age and Zip code and responds with tables comparing health plans, likely costs and quality ratings. The online version also lets employees go to lists of doctors and prescription drugs covered under various plans.

The electronic guide seems off to a good start. The Health and Human Services Department has signed up to provide the Internet version to its 55,000 employees. Robert Krughoff, founder of the nonprofit Consumers' Checkbook magazine, said he hopes other departments will also buy a group subscription for employees.

Individuals can subscribe to the online guide for \$8.95 at [www.GuideToHealthPlans.org](http://www.GuideToHealthPlans.org). Employees and retirees who feel more comfortable with the traditional paperback version (\$10.45, including shipping costs) can place an order at 1-800-213-7283.

Last month, the Bush administration announced that premiums will rise by an average 13 percent in the Federal Employees Health Benefits Program. The "open season," which allows employees to compare and switch plans, begins Nov. 12 and runs through Dec. 10.

Washington Post

October 19, 2001

Pg. E1

## **A Growth Spurt For Biotechnology**

By Terence Chea, Washington Post Staff Writer

Tetracore Inc. wasn't much different from hundreds of other biotechnology start-ups with modest funding and business prospects. All that changed this month, as the once theoretical threat of bioterrorism became a jittery reality.

In the new post-Sept. 11 world, the 35-employee Gaithersburg firm is rushing to fill orders for its signature product: the Bio-Threat Alert test strip. The small plastic device is designed to quickly detect anthrax, botulism, plague and other toxins at suspected contamination sites. A box of 25 strips sells for \$495.

Test orders have quadrupled over the past month as local governments have boosted spending in response to the threat of terrorism, according to William M. Nelson, Tetracore's president. The company is fielding a surge in calls from emergency response teams placing orders, venture capitalists interested in investing and companies pitching collaborations.

"Before it was always a possibility," said Nelson, who founded the firm three years ago with three colleagues from the Naval Medical Research Institute in Bethesda. "Now it's much more urgent. People are very serious about being prepared."

A string of anthrax exposures across the nation is not only stoking public worries over bioterrorism, it is also fueling demand for medicine, equipment and technology that could prevent or respond to biological or chemical attacks.

"There's the sense that the biotechnology industry may play a more central role in the nation's security," said Carl Feldbaum, president of the Washington-based Biotechnology Industry Organization, or BIO. "There's some rethinking in the biotechnology and defense communities about a closer interaction in the future."

With confirmed cases of exposure to anthrax in Florida, New York and Washington and thousands of hoaxes elsewhere, the crisis has strained public health systems. Doctors need antibiotics, antiviral drugs and other medicines to treat people who are exposed or infected. Emergency response teams want rapid but reliable tests that can quickly detect toxins on site and defuse panic. Authorities could use biological and chemical sensors to monitor subway stations, office buildings and other crowded places. And health officials need better tests to quickly diagnose infections.

In addition, vaccines are needed to inoculate people against an assortment of deadly viruses and bacteria. There is already an approved vaccine for smallpox and an anthrax vaccine may soon win clearance, but vaccines have not been developed for botulism, plague and other possible bioterror agents.

"Vaccines have not had the priority that therapies have had," Feldbaum said. He said BIO plans to ask Congress to help encourage vaccine development by increasing funding, speeding up the regulatory review process and limiting liability to vaccine makers.

Much of any new federal spending is likely to flow to the private sector, including companies with products on the market and firms engaged in research that could lead to better preparedness.

"I think homeland security will result in an explosion of companies," said James H. Miller, president and chief executive of Meridian Medical Technologies Inc. "There will be interest in products that there wasn't a market for before."

The Department of Health and Human Services this week asked Congress for an extra \$1.5 billion for biological defense, including \$643 million to expand the nation's stockpile of antibiotics and vaccines. The total \$1.9 billion budget request is more than six times the \$297 million the agency spent on such efforts last year.

Other government agencies, such as the departments of Energy and Defense, may also boost funding for research-and-development projects linked to biological defense, industry experts say. Last year, the Defense Advanced Research Projects Agency, the military group that funded development of the Internet, spent \$167 million on such projects, compared with nothing five years ago, according to BIO.

But while demand for such products is growing, some industry watchers warn that too many companies and entrepreneurs may try to jump into a limited market that could get crowded fast. They say many technologies will not live up to lofty claims, and investors may not reap the returns they expect.

"Now there's blood in the water," said Calvin Chue, a researcher at the Center for Civilian Biodefense at Johns Hopkins University in Baltimore. "All the sharks will be out searching for a piece of the pie."

The war on terrorism is already generating business for some drug companies. The administration this month asked British drugmaker Acambis PLC to expand and accelerate production of a civilian stockpile of smallpox vaccine. That could bring greater revenue to Acambis and its main subcontractor, BioReliance Corp. of Rockville, whose stocks have soared on the news.

Recent anthrax scares are boosting sales of ciprofloxacin, or Cipro, the most publicized antibiotic approved to treat infection with the deadly bacteria. Demand among consumers and government agencies has been so high that German drugmaker Bayer AG said this week it would triple production of the drug.

Since Sept. 11, shares of companies that market or develop products linked to biological defense have climbed sharply. Stocks of companies such as Cepheid of Sunnyvale, Calif., and Avant Immunotherapeutics Inc. of Needham, Mass., have jumped in recent weeks, as investors speculate that the drive toward terrorism preparedness will generate higher sales.

Consider Meridian Medical Technologies, a Columbia company with government contracts to supply drug-injection devices called auto-injectors that deliver antidotes to nerve gas. Since Sept. 10, its shares have almost doubled to close at \$19.46 yesterday, even though the company has not announced additional orders for its products. "I believe we will have additional orders, but I couldn't speculate now how much," Miller said.

Meridian's experience also shows how the threat of bioterrorism is making some companies rethink their business strategies. Miller said his company, which also develops heart-monitoring devices, plans to investigate new markets and products for its auto-injectors. "This will be a larger growth area than we had anticipated," he said.

Increased government funding is likely to help small research firms raise money for projects that may not be funded otherwise. Biotech start-ups working on technology linked to biological defense can apply for grants from government agencies such as the Defense Department.

"I think you'll see a lot of money thrown at this problem, and rightly so," said Brent Erickson, BIO's director of industrial and environmental biotechnology. "It's going to make a difference to the guys having trouble finding capital."

Several local companies have already raised government funding for such initiatives. For example, an Alexandria start-up called Advanced Biosystems Inc. announced this month it won a three-year, \$800,000 grant to study medical defenses against anthrax. And Igen International Inc. of Gaithersburg is working with the Army to develop a test to detect toxins in food, water and the environment.

There's also evidence that venture capitalists are expressing more interest in companies working on counterterrorism technology. Investors who previously didn't pay much attention to such ventures say they will look more closely now.

James Barrett, who specializes in biotechnology investments at Baltimore venture firm New Enterprise Associates, said he expects to see more investments in detection technologies over next five or six quarters.

"Technologies that offer a way to rapidly detect the presence of biological toxins or chemical poisons will become a more attractive investment," Barrett said. "It may do a lot of good, and it may also make a lot of money."

The increased spending may also attract opportunists trying to take advantage of a lucrative new market.

In recent years, large sums of money have been invested in technologies that didn't deliver what they promised, said Johns Hopkins's Chue. Since Sept. 11, Chue said, he has received many calls from companies that want him to evaluate their technology.

"Some of the claims have been outrageous," Chue said. "What we need are firm, proven technologies from companies with a reliable history, or innovative companies that truly have something unique."

International Herald Tribune

October 19, 2001

Pg. 1

## **Nations Rush To Meet Germ War Threat**

By Barry James and Thomas Crampton, International Herald Tribune

The rash of anthrax scares and hoaxes that has swept around the world has driven governments into an intense review of public health planning.

Several governments have issued general statements assuring the public that they have adequate supplies of medicines to deal with major outbreaks of infectious disease, and urging people not to take antibiotics without a prescription. This is a measure that is fully supported by the World Health Organization in Geneva.

In Europe, Italy has set up a task force specifically trained to deal with anthrax attacks. It will have helicopters at its disposal. And employees at the Italian postal service are being issued with surgical gloves and masks.

France has adopted a program called Biotox to protect water supplies, chemical plants and other sensitive sites, and it is working on legislation that will give the police greater powers to search persons, buildings and automobiles.

In Germany, the government has set up a satellite-based early-warning system linking the Interior Ministry with civil protection headquarters in the federal states and with broadcasting centers. Deutsche Post said it would examine letters with X-ray machines.

The British home secretary, David Blunkett, has asked Parliament for emergency powers, including detention or deportation for those suspected of being a terrorist risk, and a ban on paramilitary training.



In most countries, national health institutes have sent detailed instructions on how to diagnose and treat anthrax to doctors, most of whom would rarely have come across the disease other than in textbooks.

"Go to your doctor," said the Spanish health minister, Celia Villalobos, appealing to citizens not to flock to hospital emergency departments, even if they suspect a risk of bacteriological attack.

"Stay calm and trust the health system and your doctors, whom you can trust fully," she said. "They know this disease perfectly."

Iain Simpson, a spokesman for the World Health Organization, said that officials were "deeply alarmed" at reports that people in the United States were buying up stocks of Cipro, an antibiotic used to treat anthrax. "Our advice to them is: Please don't," he said.

Cipro is one of a family of antibiotics that could be used to treat a range of diseases other than anthrax, he said, and to use it too readily will compromise its effectiveness by developing drug-resistant pathogens. Diseases that were once easily treatable, such as malaria, tuberculosis and gonorrhoea, are again becoming killers because they have developed resistance to most common antibiotics.

At the same time, Mr. Simpson said, anthrax is treatable with antibiotics other than Cipro, including penicillin, which "has sadly become useless against many other diseases."

The World Health Organization would be the first line of defense through its global monitoring system for infectious diseases, which picks up reports and rumors of disease around the globe.

Diseases most likely to be used in a terrorist attack, including anthrax, would emerge with flu-like symptoms in the early stages when the authorities most vitally need to react quickly to limit secondary infections. The WHO has made available a working draft of its technical guide, "Health Aspects of Biological and Chemical Weapons," on its Internet site, [www.who.org](http://www.who.org).

A spokesman for the Food and Agriculture Organization in Rome said it, too, was setting up a rapid-alert system to warn of potential threats.

The British Medical Journal said last week that Europe was poorly prepared for outbreaks of infectious disease, and many reports have spoken of gross gaps in planning. But experts said governments were working to improve preparedness and were exchanging information through European Union channels. EU sources said that further anti-terrorism measures were certain to be discussed at a summit meeting of Union leaders in Ghent, Belgium, on Friday. Brian Spratt, a member of a working group on biological weapons at the Royal Society in London, accused the government a few days ago of complacency for failing to brief workers at hospitals adequately about possible bacteriological threats. Since then, he acknowledged, public health officials had been given detailed documents about anthrax, but not about other possible threats.

EU ministers have already cleared the way for the Ghent summit meeting to focus on terrorism by approving a series of measures in Luxembourg this week on air traffic security, strengthening cooperation between police forces and the judiciary, and raising barriers against money laundering.

Prime Minister Jose Aznar of Spain, battling the problem of Basque terrorism at home, says he intends to make European security and defense the top priority when his government takes over the presidency of the European Union in January.

Apart from providing detailed clinical advice for doctors, Britain's Public Health Laboratory also has issued general guidance on handling mail because of threats of anthrax contamination through letters and packages.

"Examine unopened envelopes for foreign bodies or powder," it said. "Do not open letters with your hands; use a letter opener. Open letters and packages with a minimum of movement to avoid spilling any contents."

Governments also are having to look beyond the threat of anthrax, of course.

"We can't rule anything out at this stage," said the Irish health minister, Michael Martin. "We are looking at all possible agents and not just anthrax. We have to assess the threat from potential agents such as the plague, hemorrhagic fevers such as Ebola as well as botulism and even smallpox."

Across Asia, the authorities say they are preparing for the worst.

The Japanese Health Ministry said that sufficient supplies of antibiotics for anthrax were on hand.

The Singapore post office distributed guidelines for handling items containing anthrax, including a nine-point checklist of characteristics sufficient to raise concern. It warned that people should be suspicious not only of packages of white powder but also items with excess postage, those with poorly handwritten or badly typed addresses, incorrect titles, and no return addresses or return addresses that do not match the postmark.

Hong Kong's hospital authority announced an expansion of pharmacy hours to include around-the-clock service.

The authority also said that all hospitals were required to keep a two-month supply of drugs to meet clinical demands.

After a series of anthrax hoaxes in Australia, with evacuations taking place in Sydney, Melbourne, Brisbane, Canberra and Townsville, the chief Australian medical officer, John Mathews, sought to reassure the public that there was enough testing equipment in place to confirm suspected infections.

In South Korea, postal workers handling international mail have begun using gas masks and gloves as a precaution against possible biochemical terrorism, officials said, adding that they would check all incoming mail with metal detectors and X-ray machines.

"The government is making all efforts to protect the lives and properties of our people," said the South Korean government spokesman, Park Joon Young.

South Korea has also allocated 70 billion won (\$53.7 million) toward creating an anti-bioterrorism task force. China said Thursday that bioterrorism security would be stepped up at border checkpoints and in mailrooms. State television said checks would be particularly severe for items coming from "countries with higher anthrax dangers." Courier companies in Shanghai, like DHL and EMS, have halted delivery of medicine to China from abroad. Despite the precautions, Asia remains unprepared to combat anthrax terrorism, according to Seto Wing-Hong, president of the Asia Pacific Society of Infection Control.

"Is Asia ready for a full-scale bio-attack?" Dr. Seto said. "No, not at all. But people forget how hard it actually is to spread anthrax. Even now the bio-attacks in the United States have mostly been successful in creating panic, not disease."

Fears over a shortage of Cipro in Asia may be overblown, Dr. Seto said, since the drug is manufactured in India and other antibiotics may be nearly as effective.

Miami Herald  
October 18, 2001

## **`Weapons-Grade' Bacteria Takes Know-How To Make**

By Jay Weaver

Fears multiplied when authorities initially said the anthrax that arrived in the office mail of Senate Majority Leader Thomas A. Daschle was ``weapons grade."

Such highly potent anthrax powder also could have been delivered through the mail to the NBC Nightly News offices in New York and to the American Media tabloid headquarters in Boca Raton, medical and terrorist experts said.

Making ``weapons-grade" anthrax requires scientific smarts, but could be made by terrorists with exact instructions. It requires growing a virulent strain of anthrax in a liquid vat with nutrients for converting the cells into spores. To weaponize them, the spores are purified, separated and freeze-dried into microscopic particles. They are combined with fine dust particles to keep them separate and to increase their suspension in the air.

``If your desire is to get them into the bottom of somebody's lungs, they have to be very small, finely ground powder, between one and five microns each," said Dr. Alvin Fox, professor of microbiology at the University of South Carolina School of Medicine.

``For weapons grade you have to have pure spores in a particle size that will stay in the air and that will penetrate deep into the lungs," said Dr. Gregory Plano, a microbiologist at the University of Miami School of Medicine. Experts say that people who inhale between 8,000 and 10,000 spores each have a 50 percent chance of developing the deadly anthrax disease.

Both Fox and Plano said the anthrax strains do not appear to be genetically altered to resist antibiotics because almost all the employees exposed so far to the spores have responded well to medication.

``I don't think whoever is doing this has genetically manipulated these strains," Plano said. ``If you were going to do that, you would make them resistant to antibiotics."

Dr. Scott Lillibridge of the Centers for Disease Control and Prevention said the anthrax harvested from Daschle's office appeared to be particularly concentrated.

He said some time might be required to determine if the spores had been ``weaponized."

But Dr. Frederick Southwick, chief of infectious diseases at the University of Florida School of Medicine, said ``the MO is pretty much the same" in all three exposure cases in Washington, New York and Boca Raton.

He said the number of cases varied because of the way the envelopes were opened in each office and because of the number of employees in the vicinity. He also noted that in the American Media outbreak that killed photo editor

Robert Stevens, the envelope was later burned with other junk mail because no one realized its significance. "We will never know how many spores were in it," Southwick said.

P.W. Singer, a military analyst at the Brookings Institution in Washington, said weapons-grade anthrax was made by the Soviets and Americans during the 1960s and 1970s. He said Iraq developed such powerful anthrax after the Gulf War.

"If it's found that this is a finely milled form [in the recent cases], we're talking about a weaponized version, someone who knows what they're doing with anthrax," Singer said.

Wall Street Journal

October 18, 2001

## **Anthrax's Deadly Persistence Can Be Seen In Bomb Experiment From World War II**

By Gautam Naik, Staff Reporter Of The Wall Street Journal

Gazing at Gruinard Island across a stretch of blue water, Bill Richardson says dreamily: "It's bathed in sunshine and is quite lovely. It's not at all foreboding or evil."

Just a decade ago, though, the tiny Scottish isle was probably the most dangerous place in Britain. During World War II, British scientists secretly detonated several anthrax-laden bombs on Gruinard to study their potential for biological warfare against the Germans. Scores of sheep died after inhaling the bacteria.

Amid an expanding number of cases of anthrax exposure in the U.S., the Gruinard experiment may hold valuable lessons. It showed that a carefully calibrated explosion could turn liquid anthrax into a deadly inhalable form, the same type that killed a man in Florida and has been found in the U.S. Senate's offices. The British test also demonstrated that once anthrax is unleashed, it has amazing staying power: Gruinard was off-limits to people for more than 40 years because its soil continued to harbor vast amounts of highly infective anthrax spores.

It took an unprecedented four-year effort -- and vast quantities of formaldehyde mixed in seawater -- before the island was rid of the deadly bacteria. "It was possible to decontaminate an area of limited size," says Richard Manchee, the British microbiologist who led the cleanup, "but a large area would be very expensive and difficult."

Today, Gruinard is a lot like it was before the war -- an idyllic and remote 500-acre island, home to rabbits, birds and seals but no people. There probably is still some anthrax lying around, but not enough to cause harm, say scientists. Sheep were recently allowed to graze there, and none contracted the disease. Signs that once warned people to "Keep Off" have been pulled down.

Still, few locals venture there. "There's very little reason to go," says Mr. Richardson, who runs a post office on the mainland a mile away and has never set foot on Gruinard.

Britain began its tests on the island in October 1940 in response to rumors that Germany had launched a bioweapons program. British scientists had already tested anthrax in sheep and guinea pigs at a military lab called Porton Down, but to test the bacteria's effectiveness in the open air, they needed a remote location.

Gruinard Island, in the northwest of Scotland, was perfect. Owned by a local family, it sat in the middle of a blue bay and was surrounded by craggy mountains. For security reasons, it was given a new name: X Base.

The anthrax project was led by Dr. Paul Fildes, a microbiologist who had also been a naval surgeon in World War I. In July 1942, Dr. Fildes and his team placed a "wet culture" of anthrax in a bomb and used a gantry to suspend the device six feet above the ground. Several sheep were placed in open wooden crates downwind, and the bomb was exploded electrically. Within three days, the sheep began to die from inhaling the anthrax spores. Even animals placed 250 feet away succumbed.

"The reality of bioterror warfare had been proven," says an official at Porton Down familiar with the tests.

Emboldened by the results, the British team tried alternative methods. They fired anthrax bombs from mortar guns into the ground. One was dropped from an airplane, but it was badly aimed and fell harmlessly into a marsh. In October 1942, a similar device dropped from a Blenheim bomber on a seashore in South Wales did detonate; several sheep died of anthrax.

The data collected from such experiments were clear-cut. "On a weight for weight basis, [anthrax] was 100 to 1,000 times more potent than any then known chemical agent," writes Graden Carter, a historian at the Porton Down lab, in a book about the lab's various activities. "It was deduced that death in personnel were certain to follow an exposure."

By this time British scientists had also successfully carried out experiments with "cluster bombs," devices that carried 100 four-pound individual bombs. Gruinard was too small to test such devices, but other countries were willing to help. Under a project known as N bomb, the U.S. agreed to produce anthrax at a plant in Terre Haute, Ind., while Canada agreed to test cluster bombs loaded with the deadly bacteria.

But the war ended, and the N bomb plan was abandoned. The Porton Down scientists now faced a problem. To preserve the secrecy of their project, and because the island was heavily contaminated with anthrax, they couldn't return Gruinard to its original owners. So in 1946 Britain acquired it for 500 pounds (about \$725 at today's rate of exchange), with the promise that the owners could eventually reacquire it for the same amount.

The scientists were in for a surprise. While many expected that the anthrax spores would die away or disappear in the wind, they didn't. Scientists measuring the contamination each year between 1947 and 1979 found that the infestation levels stayed the same. Puzzled members of Parliament began to ask why Britain continued to own the island -- and why it remained off limits. There were few answers.

Finally, in 1986, the British government decided to undertake a large-scale cleanup of Gruinard. After testing various chemical agents, the scientists hit upon the best one -- formaldehyde. They built an entire irrigation system on the island, an intricate network of spray tubes, and soaked the ground in 280 tons of formaldehyde, diluted in 2,000 tons of seawater, for about one year. Soil samples were tested at various distances away from the center of the anthrax bomb explosions. "When we got three samples that weren't contaminated, we stopped," says Mr. Manchee, the cleanup leader.

In April 1990, a junior defense minister was taken by boat to the island, where he declared Gruinard safe and removed the warning signs. The next month, "Anthrax Island," as it had come to be called, was returned to its original owners.

These days, few people visit this remote bit of Scotland. Occasionally, bird-watchers show up to seek a pair of white-tailed eagles that make their nest on Gruinard. But they don't row across.

Says Mr. Richardson, the local postmaster: "They prefer to see the birds from the shore."

USA Today  
October 18, 2001  
Pg. 10

## **Could Anthrax Scare Be Al-Qa'eda's Doing?**

By Peter Eisler, USA Today

As reports of more anthrax letters and exposure to the deadly bacteria mount, investigators are scrambling to determine whether Osama bin Laden has shifted tactics once again, from car bombs to suicide hijackings to bioterrorism.

Investigators have no hard evidence that the anthrax scares are linked to the terrorist strikes of Sept. 11. But the poisoned letters share hallmarks of bin Laden's terrorism: symbolism, unpredictability and striking at weak seams in America's security blanket.

Bin Laden has built his success on finding new vulnerabilities. Many experts believe that any anthrax attack by al-Qa'eda would be engineered to expose far more people than the seemingly haphazard mailings seen so far. But exploiting the freedom, ease and anonymity of the U.S. mail system to spark widespread anthrax scares would fit with al-Qa'eda's modus operandi.

"Their goal is fear," says Sen. Bob Graham, D-Fla., who chairs the Senate Intelligence Committee. "The way you create fear is you make people feel that every aspect of their life, whether it's riding on the Metro to work, whether it's sitting in their office, whether it's their children's school, that every aspect of their life is at risk. So they're not likely to come back and repeat what they did in the past."

Bin Laden's promise of more strikes on America in retaliation for the U.S. bombings in Afghanistan has authorities studying his past attacks for clues to what might come.

Despite warnings from his al-Qa'eda lieutenants that "the storm of the (hijacked) planes will not stop," bin Laden's pattern suggests otherwise.

His incendiary religious dogma provides a rationale for targeting almost anything, from the pope to airliners. His adherents' eagerness to sacrifice their lives creates unlimited options for attacks.

Lewis Schiliro, former assistant director of the FBI's New York office, says the attacks have become very difficult to predict. Schiliro, a key player in the investigation of the 1998 bombings of U.S. embassies in East Africa, says,

"We've seen a real progression in the coordination and planning and the amount of life that's been lost in these attacks. They're very difficult to guard against."

The use of hijacked passenger jets to strike the World Trade Center and the Pentagon is a testament to al-Qa'eda's unpredictability. The World Trade Center was a known target of bin Laden, who was implicated in the truck bombing in 1993 that killed six people in the towers. In the aftermath of that attack, the Trade Center strengthened security dramatically. Garage and building access were restricted, and guards checked virtually every package entering the complex. Nevertheless, Bin Laden's organization made all of that security pointless by turning airliners loaded with jet fuel into guided missiles — a possibility security planners never envisioned.

"He's very clever in coming up with a new attack every time," says L. Paul Bremer, former U.S. ambassador-at-large for counterterrorism and chairman of the National Commission on Terrorism. "He attacked embassies that were considered third- or even fourth-level security threats in Africa, so everyone scrambles to boost embassy security. Then he attacked a Navy frigate (the USS Cole). Now, there's this attack on the Trade Center. We sort of slam the barn door after the horse is gone."

The potential for bin Laden to use biological or chemical weapons in attacks on U.S. soil can't be discounted, but many officials say the more pressing risk is another conventional strike.

Transportation systems remain a key concern. Scenarios range from terrorists derailing a train carrying hazardous material to blowing up a large passenger ship.

Adm. James Underwood, intelligence and security director for the Department of Transportation, testified to Congress this month that officials are working with private companies to tighten rail, port and highway security. Railways have increased inspections at tunnels and bridges, hazardous materials drivers are being scrutinized and routed around major cities, and the Coast Guard has called up 2,700 reservists to check ships arriving at U.S. seaports. Even pipeline safety is under review.

The unpredictability and inventiveness that mark bin Laden's attacks make it virtually impossible to guard all potential targets.

Christopher Whitcomb, former FBI counterterrorism investigator, says, "Unless we're going to put somebody in every bedroom in America, in every car in America, in every conference room in America, unless we're going to give up every civil liberty we have, it's going to be impossible to stop every one of these attacks."

And the potential for bin Laden to use anthrax as a weapon is no big stretch.

Until fairly recently, anthrax was relatively easy to obtain, especially in small quantities. Many security experts are concerned that lethal forms of the bacteria made it to the black market after the collapse of the Soviet Union, which had huge anthrax stocks and a bevy of scientists who knew how to make and use it.

Bin Laden has said that he has a religious duty to obtain and use weapons of mass destruction against the USA. And intelligence gleaned from satellite photos and former al-Qa'eda operatives suggests his organization has spent considerable time and money trying to obtain them.

Terrorism experts and intelligence officials caution that development of chemical or biological agents is only the first — and often the easiest — step in developing weapons. The greater challenge is the technically daunting job of "weaponizing" such agents for distribution. There's great debate among terrorism experts over bin Laden's ability to deliver such a weapon.

But if terrorists have anthrax spores, mounting mini-attacks through the mail would be as easy as closing an envelope and putting on a stamp.

*Contributing: Kevin Johnson, Mimi Hall and Vivienne Walt.*

New York Times  
October 18, 2001

## **Anthrax Itself May Point To Origin Of Letter Sent To Daschle**

By William J. Broad And Judith Miller

As they begin the hunt for whoever sent highly concentrated anthrax to Congress, the government's science detectives are focusing on whether it came from a foreign scientist or nation experienced in making biological weapons, officials say.

The best evidence may come from the anthrax itself. Experts said the process that produces the sort of high-quality spores that government officials said were found in a letter to the Senate majority leader leaves clues that might point to its origin.

"The more sophisticated the preparation, the more fingerprints there are from a forensic standpoint," said David R. Franz, former commander of the Army's germ defense laboratory at Fort Detrick, Md.

Officials acknowledged that they faced daunting challenges in investigating a crime that appeared to have left a minimal paper or money trail, and they said it could be days before much was known.

The list of possible suspects is long: thousands of scientists who worked on biological weapons for the Soviet Union, South Africa and Iraq have the requisite knowledge and skills needed to mill anthrax into its most dangerous form: tiny particles that can float through the air in a smokelike cloud.

And experts said it was possible that someone experienced at making pharmaceuticals or vaccines could also have mastered the technical tricks needed to turn anthrax spores into such a powder.

Investigators are aware of the possibility that a homegrown terrorist, a Unabomber of biology, might be behind one or more of the attacks. Also, the material is undergoing a range of tests that might challenge the preliminary analysis.

Officials said yesterday that tests done so far had ruled out the most disturbing possibility, that the strain sent to the Senate was manipulated to make it resistant to antibiotics. The anthrax, they said, was susceptible to the full range of antibiotics.

Investigators are now looking closely at the size and composition of the particles. Different countries that made anthrax weapons had different techniques for achieving the small size needed to penetrate deeply into human lungs. For example, Iraq did not use the traditional method for making small particles. Instead of grinding down clusters of anthrax into a fine powder, the Iraqis used a dryer and chemical additives. The particles made through this method would have a distinctive crystalline shape when viewed through a microscope, said Richard Spertzel, a microbiologist and former head of biological inspection teams in Iraq for the United Nations.

Officials said the Pentagon was already pushing the theory that Iraq was involved in the attacks, arguing that Baghdad had both the means and motive to wage bioterrorism against the United States. But officials said federal investigators, as well as the Central Intelligence Agency, believed there was little evidence linking Iraq to the Sept. 11 attacks or to anthrax bioterrorism.

Another focus of federal scrutiny is an Al Qaeda cell in Milan. Members of the cell were overheard discussing plans to contact the Russian mafia, which government officials suspect has access to deadly germs or chemicals.

Investigators have also not ruled out the possibility that homegrown terrorists may be responsible for some or all of the anthrax assaults.

The purity of the anthrax found in the Senate office offers some clues about the proficiency of those who made it, experts said.

Maj. Gen. John S. Parker, head of the Army's Medical Research and Matériel Command at Fort Detrick, said yesterday that the sample was "pure spores," suggesting that it was highly concentrated.

Dr. Franz, now vice president for chemical and biological defense at the Southern Research Institute, a nonprofit arm of the University of Alabama, said this was a worrisome sign.

"It suggests it wasn't a kitchen or garage operation, or if it was, someone who knew how to purify spores," Dr. Franz said. "The cleaner the preparation, the more likely it is that it was someone who knew what they were doing."

A federal scientist who is studying the evidence and who spoke on condition of anonymity said the purity of the sample, if confirmed, raised the possibility that the attackers had a relatively ample supply of anthrax. A person who had only a tiny amount, he said, would dilute the germs with filler to increase the number of letters that could be sent. The scientist said federal officials at Fort Detrick were "very, very exercised about the quality of the powder."

Another key question is whether the particles are uniformly of the one- to five-micron size prized by germ warriors because it forms a fine powdery mist and lodges in the lungs. A human hair is as wide as 100 microns.

The report today that 31 Senate staff members were exposed to anthrax, including several in an office adjacent to Senator Daschle's, suggests that at least some of the material in the letter was tiny enough to form a potentially lethal cloud.

"How uniform?" Senator Bill Frist, a Republican from Tennessee who is a physician and the ranking Republican on the Senate public health subcommittee, asked at a news conference. "We can't answer that."

Another question investigators are examining is whether the particles were processed to diminish their natural affinity to stick together and float less freely. Electrostatic charges like those that occur when a person rubs a plastic balloon against a sweater can cause particles of anthrax to clump together. Both the Soviet Union and United States developed sophisticated techniques to overcome this.

Dr. Spertzel said the removal of electrostatic charges — making them "slippery" — was as important as particle size in creating an effective anthrax weapon. "If you don't have small particles, you can't get them into the lungs," he said in an interview, "If they're not slippery, it's hard to get them airborne."

Perhaps the crucial unanswered question, experts agreed, was whether the terrorists had produced a small quantity of high-quality material or had stockpiles. Large-scale production, the federal scientist said, would require much equipment, suggesting state sponsorship.

"You can't just hand over the drying, milling and extraction at some hotel room," he said. Even so, he added, a small production facility might just "fill up a couple of offices" with an array of fermenters, dryers and the other apparatus of making killer anthrax.

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October 18, 2001  
Pg. 24

## Countering Biological Weapons

### *Smallpox threat outlined in chilling exercise*

By John Donnelly, Globe Staff and Bryan Bender, Globe Correspondent

WASHINGTON - In late June, inside a room at Andrews Air Force Base, a team of former senior US government officials played out a bioterrorism exercise called Dark Winter. A mock National Security Council had just received word of a dozen possible cases of smallpox spread by terrorists in Oklahoma City.

By the 12th day of the war game, the simulated disease had spread to 25 states and 10 foreign countries, civil disorder was erupting around the United States, and the government had used all its vaccine and was isolating patients as the primary means of disease control.

The exercise suggested how unprepared the nation is to defend itself against biological weapons, and the results have been outlined in several recent briefings for members of Congress.

Dark Winter also puts the current anthrax scare in perspective. Stacked up against the kind of smallpox attack modeled in Dark Winter, the anthrax crisis is a comparatively small threat, because, unlike smallpox, anthrax cannot be passed from person to person and the methods of delivery so far are crude.

"To be frank, we are very lucky this anthrax is very hard strain to aerosolize," said Frank H. Top Jr., chairman of a panel of independent scientists that studied the Pentagon's acquisition of vaccines against biological agents. "What you are seeing is that after you open a letter, you are getting some anthrax spores in the air, but relatively few, limiting its spread."

Several scientists also said that the government's handling of the anthrax crisis has unjustly spread fear among the general population. They cited reports quoting anonymous officials as saying that some of the anthrax samples were "military grade."

"If there are government officials willing to say that anonymously, are they experts or not?" said Matthew Messelson, a professor of biology at Harvard University. "What kind of government official? Somebody ought to be spanked."

"The United States government will have to get its act together," Messelson said. "It's not good at communicating science. But they have to be this time."

The anthrax scare, along with scenarios such as Dark Winter, has also given officials reason to consider how to bolster defense against biological weapons.

Asked about Dark Winter in a Senate hearing yesterday, Tommy G. Thompson, the secretary of health and human services, said the administration plans to expand purchases of the smallpox vaccine from 40 million doses to 300 million doses by the end of next year.

In the Dark Winter exercise, conducted at Andrews Air Force Base about 10 weeks before the Sept. 11 attacks, the players sat around a table, ready to respond to the mock threat. The exercise was planned by ANSER Institute for Homeland Defense, the Center for Strategic and International Studies, and the Johns Hopkins Center for Civilian Biodefense Studies.

Sam Nunn, the former US senator from Georgia, portrayed the president. John White, former deputy defense secretary, played secretary of defense. Frank Wisner, a former ambassador to India, was secretary of state. R. James Woolsey, former CIA director, assumed his old job. And Governor Frank Keating of Oklahoma played himself. More than two-dozen others also participated.

In the scenario, the role players learned that a dozen patients had reported to the Oklahoma City Hospital with a strange illness, which was quickly confirmed to be smallpox. Later, they heard that three sites had been attacked simultaneously, in shopping centers in Oklahoma, Georgia, and Pennsylvania. In the initial phase of the scenario, the infections spread quickly to five states and 3,000 victims.

Smallpox, a highly contagious virus with a 30 percent fatality rate, killed 300 million people in the 20th century before it was eradicated in the early 1970s as a naturally occurring disease. Vaccinations stopped.

"The end of vaccination against it has paradoxically left the world more vulnerable to disease," Margaret A.

Hamburg testified before lawmakers yesterday. "That fact would be of little consequence if we did not know that smallpox was made into a weapon by the Soviet Union, and that other nations or groups may have successfully acquired stocks of the virus."

Hamburg, former commissioner of health in New York City, played secretary of health and human services in the smallpox exercise.

The group involved in the simulation learned that the nation had fewer than 15 million doses of smallpox vaccine, enough for one out of every 23 Americans.

In the exercise, the defense secretary demanded that all 2.3 million US military personnel receive vaccines. The president decided against that, administering vaccine only to military, medical, and security personnel on the front lines locally. The secretary of state was asked to search for surplus stock of vaccine around the world.

But by day six in the simulation, very little vaccine was left. By day 12, when the war game ended, epidemiological models predicted that without effective intervention, the number of cases would increase ten-fold every two to three weeks.

"We all left the room humbled by what we did not know and could not do and convinced of the urgent need to better prepare our nation against this gruesome threat," Hamburg testified yesterday.

The Pentagon plans to inoculate troops against eight biological agents: anthrax and its drug-resistant form, smallpox, plague, tularemia, botulinum, ricin, and encephalitis. A Pentagon panel estimated that it would take up to \$3.2 billion and seven to 12 years to vaccinate the military against all of those threats.

Federal funding for research on bioterrorism is projected to double, from \$43 million in 2000 to an estimated \$92.7 million in 2002. To meet the smallpox threat, the government is about to begin tests of whether the current vaccine supply can be diluted so it can provide more widespread coverage.

New York Times

October 22, 2001

## **Defense Dept. Aids A Busy City Health Agency With Tests**

By Sarah Kershaw

With New York City's ability to test for anthrax stretched to its limit in the wake of four confirmed cases and testing of thousands of human and environmental samples, the Department of Defense has dispatched specialists to assist city health officials, Mayor Rudolph W. Giuliani said yesterday.

On Saturday, 12 laboratory technicians from the Department of Defense began working at the city's health laboratories. The mayor said that would allow the city to conduct more tests for anthrax spores locally rather than sending many samples elsewhere and waiting up to several days for results.

The team of specialists sent from Washington, called the Rapid Response Team, has "equipment and people that can expedite analysis," Mr. Giuliani said at a City Hall news conference yesterday.

The mayor also announced that tests on more than 1,300 NBC employees, as well as environmental samples taken from CBS and ABC, were negative for the anthrax bacteria. Investigators were still unable to pinpoint how the infant child of an ABC employee had contracted anthrax, finding nothing — like a letter — that could have contained the bacteria, Mr. Giuliani said.

Testing was still under way yesterday at The New York Post, where a contaminated letter was discovered late Friday, the same day the authorities reported that a worker there was infected with anthrax. It was still unclear yesterday whether the letter, which was unopened, had exposed the employee to anthrax.

Testing at The Post over the weekend marked the second time health officials took environmental samples from the building to test for anthrax. The first tests were negative, according to results the mayor reported yesterday.



Those tests were conducted before the letter containing anthrax spores was discovered in The Post's newsroom, although it was unclear how long the letter — postmarked Sept. 18, the same day as a contaminated letter sent to NBC — was in the building. The Post letter, like contaminated letters sent to Senate Majority Leader Tom Daschle and to NBC, was sent from Trenton, the authorities said.

Also yesterday, recovery efforts at the trade center site continued. Police officers, firefighters and rescue workers could be seen saluting as what appeared to be the remains of several bodies were removed from ground zero. A spokesman for the Office of Emergency Management would not confirm that bodies had been recovered, pending notification of next of kin. But a city official at the scene said that at least four bodies had been removed from what had been a stairwell of the north tower.

City officials also said that 1 Liberty Plaza, the skyscraper that was damaged in the Sept. 11 attack and had been scheduled to reopen today, would remain closed. The director of the city's Office of Emergency Management, Richard Sheirer, said there were "a few things we weren't totally satisfied with," but he declined to provide details or to say when the building would reopen.

The mayor also announced an ambitious plan to hold a memorial and prayer service at ground zero next Sunday for the relatives of the victims. As of yesterday, the number of missing stood at 4,470, with 461 confirmed dead and 411 identified. Mr. Giuliani said that rescue efforts, which have continued around the clock since Sept. 11, would be suspended for the service.

State health officials said yesterday that 80 people who work in Gov. George E. Pataki's Midtown office, where anthrax spores were found last week, had tested negative for the bacteria. Test results on 144 environmental samples were also negative, said John Signor, a spokesman for the State Department of Health.

Investigators have not yet determined how the anthrax got into the building, an F.B.I. spokesman said yesterday. Spores were found after the governor's secretary became ill, prompting an investigation.

In addition to the dozen specialists who have already arrived to help the city with anthrax testing, Mr. Giuliani said, the federal government could send three more people to the Health Department laboratories, on East 26th Street, should the city need to increase its capacity further.

City officials say that it has become apparent over the last few weeks that they need a much greater ability to perform laboratory testing for anthrax and other potential biological or chemical threats.

That need, they say, would have existed even if a City Health Department laboratory had not been closed last week after it was contaminated with anthrax and two of its technicians were exposed.

"Even if that city lab was unaffected, we would need much more lab capacity to get this done more quickly," Mr. Sheirer said. "There is the dark side and there is the bright side. The bright side is we now see what the weaknesses are and where we can improve."

Wall Street Journal

October 22, 2001

Pg. 1

## **Of Microbes And Mock Attacks: Years Ago, The Military Sprayed Germs On U.S. Cities**

By Jim Carlton, Staff Reporter of The Wall Street Journal

SAN FRANCISCO -- Fifty-one years ago, Edward J. Nevin checked into a San Francisco hospital, complaining of chills, fever and general malaise. Three weeks later, the 75-year-old retired pipe fitter was dead, the victim of what doctors said was an infection of the bacterium *Serratia marcescens*.

Decades later, Mr. Nevin's family learned what they believe was the cause of the infection, linked at the time to the hospitalizations of 10 other patients. In Senate subcommittee hearings in 1977, the U.S. Army revealed that weeks before Mr. Nevin sickened and died, the Army had staged a mock biological attack on San Francisco, secretly spraying the city with *Serratia* and other agents thought to be harmless.

The goal: to see what might happen in a real germ-warfare attack. The experiment, which involved blasting a bacterial fog over the entire 49-square-mile city from a Navy vessel offshore, was recorded with clinical nonchalance: "It was noted that a successful BW [biological warfare] attack on this area can be launched from the sea, and that effective dosages can be produced over relatively large areas," the Army wrote in its 1951 classified report on the experiment.

Now, with anthrax in the mail and fear mounting of further biological attacks, researchers are again looking back at the only other time this country faced the perils of germ warfare -- albeit self-inflicted. In fact, much of what the Pentagon knows about the effects of bacterial attacks on cities came from those secret tests conducted on San Francisco and other American cities from the 1940s through the 1960s, experts say.

"We learned a lot about how vulnerable we are to biological attack from those tests," says Leonard Cole, adjunct professor of political science at Rutgers University in New Jersey and author of several books on bioterrorism. "I'm sure that's one reason crop dusters were grounded after Sept. 11: The military knows how easy it is to disperse organisms that can affect people over huge areas."

In other tests in the 1950s, Army researchers dispersed *Serratia* on Panama City, Fla., and Key West, Fla., with no known illnesses resulting. They also released fluorescent compounds over Minnesota and other Midwestern states to see how far they would spread in the atmosphere. The particles of zinc-cadmium-sulfide -- now a known cancer-causing agent -- were detected more than 1,000 miles away in New York state, the Army told the Senate hearings, though no illnesses were ever attributed to them as a result.

Another bacterium, *Bacillus globigii*, never shown to be harmful to people, was released in San Francisco, while still others were tested on unwitting residents in New York, Washington, D.C., and along the Pennsylvania Turnpike, among other places, according to Army reports released during the 1977 hearings.

In New York, military researchers in 1966 spread *Bacillus subtilis* variant Niger, also believed to be harmless, in the subway system by dropping lightbulbs filled with the bacteria onto tracks in stations in midtown Manhattan. The bacteria were carried for miles throughout the subway system, leading Army officials to conclude in a January 1968 report: "Similar covert attacks with a pathogenic [disease-causing] agent during peak traffic periods could be expected to expose large numbers of people to infection and subsequent illness or death."

Army officials also found widespread dispersal of bacteria in a May 1965 secret release of *Bacillus globigii* at Washington's National Airport and its Greyhound bus terminal, according to military reports released a few years after the Senate hearings. More than 130 passengers who had been exposed to the bacteria traveling to 39 cities in seven states in the two weeks following the mock attack.

The Army kept the biological-warfare tests secret until word of them was leaked to the press in the 1970s. Between 1949 and 1969, when President Nixon ordered the Pentagon's biological weapons destroyed, open-air tests of biological agents were conducted 239 times, according to the Army's testimony in 1977 before the Senate's subcommittee on health. In 80 of those experiments, the Army said it used live bacteria that its researchers at the time thought were harmless, such as the *Serratia* that was showered on San Francisco. In the others, it used inert chemicals to simulate bacteria.

Several medical experts have since claimed that an untold number of people may have gotten sick as a result of the germ tests. These researchers say even benign agents can mutate into unpredictable pathogens once exposed to the elements.

"The possibility cannot be ruled out that peculiarities in wind conditions or ventilation systems in buildings might concentrate organisms, exposing people to high doses of bacteria," testified Stephen Weitzman of the State University of New York, in the 1977 Senate hearings.

For its part, the Army justified its experiments by noting concerns during World War II that U.S. cities might come under biological attack. To prepare a response, the Army said, it had to test microbes on populated areas to learn how bacteria disperse.

"Release in and near cities, in real-world circumstances, were considered essential to the program, because the effect of a built-up area on a biological agent cloud was unknown," Edward A. Miller, the Army's secretary for research and development at the time, told the subcommittee.

But in at least one case -- the bacterial fogging of San Francisco -- the research may have gone awry. Between Sept. 20 and Sept. 27 of 1950, a Navy mine-laying vessel cruised the San Francisco coast, spraying an aerosol cocktail of *Serratia* and *Bacillus* microbes -- all believed to be safe -- over the famously foggy city from giant hoses on deck, according to declassified Army reports. According to lawyers who have reviewed the reports, researchers added fluorescent particles of zinc-cadmium-sulfide to better measure the impact. Based on results from monitoring equipment at 43 locations around the city, the Army determined that San Francisco had received enough of a dose for nearly all of the city's 800,000 residents to inhale at least 5,000 of the particles.

Two weeks after the spraying, on Oct. 11, 1950, Mr. Nevin checked in to the Stanford Hospital in San Francisco with fever and other symptoms. Ten other men and women checked in to the same hospital -- which has since been relocated to Stanford University in Palo Alto, Calif. -- with similar complaints. Doctors noticed that all 11 had the same malady: a pneumonia caused by exposure to bacteria believed to be *Serratia marcescens*. Mr. Nevin died three weeks later. The others recovered. Doctors were so surprised by the outbreak that they reported it in a medical journal, oblivious at the time to the secret germ test.

After the Army disclosed the tests nearly three decades later, Mr. Nevin's surviving family members filed suit against the federal government, alleging negligence. "My grandfather wouldn't have died except for that, and it left my grandmother to go broke trying to pay his medical bills," says Mr. Nevin's grandson, Edward J. Nevin III, a San Francisco attorney who filed the case in U.S. District Court here.

Army officials noted the pneumonia outbreak in their 1977 Senate testimony but said any link to their experiments was totally coincidental. No other hospitals reported similar outbreaks, the Army pointed out, and all 11 victims had urinary-tract infections following medical procedures, suggesting that the source of their infections lay inside the hospital.

The Nevin family appealed the suit all the way to the U.S. Supreme Court, which declined to overturn lower court judgments upholding the government's immunity from lawsuits.

Today, the U.S. military is again patrolling San Francisco's coastline, guarding against someone who might try to copy the Army tests of half a century ago. Local officials say such an attack is unlikely, given the logistical problems of blasting the city without Navy ships.

Partly as a result of Mr. Nevin's death, says Lucien Canton, director of San Francisco's emergency services, "one thing we now know is that it takes an awful lot of stuff to produce casualties, especially in a place like San Francisco that always has a stiff breeze."

Washington Post  
October 22, 2001  
Pg. 1

## **District Postal Worker Seriously Ill**

### ***As Capitol Reopens, Anthrax Case Revives Concerns About Spores' Potency***

By John Lancaster and Justin Blum, Washington Post Staff Writers

Health authorities announced yesterday that a District postal worker is seriously ill with the often deadly inhaled form of anthrax, the third such diagnosis in the baffling series of anthrax poisonings that began three weeks ago in Florida.

Five other people with suspicious symptoms were being monitored, District health officials said.

Acting on the assumption that the postal worker fell ill after handling an anthrax-tainted letter -- perhaps the same one that has caused a week of turmoil on Capitol Hill -- authorities began screening and preemptive antibiotic treatment for about 2,000 mail workers at the District's main processing center on Brentwood Road and for another 150 at an airmail center near Baltimore-Washington International Airport. The infected postal worker handled mail at both centers.

The news was particularly unsettling because it indicated that letters containing anthrax could spread the more dangerous inhalation form of the disease relatively easily.

The postal employee, identified by co-workers as Leroy Richmond, 57, of Stafford, was listed in serious condition at Inova Fairfax Hospital. A spokesman described him as suffering from flu-like symptoms.

At an afternoon news conference, District Mayor Anthony A. Williams described the postal worker as seriously ill but offered assurances that systems put in place to identify and quickly treat new anthrax cases are working as they should.

"We're going to do everything we can and everything we have to do . . . to see that people are getting the treatment they need when they need that treatment," Williams said.

Ivan C.A. Walks, the city's chief health officer, said four additional cases of "people with symptoms of concern" were being monitored by health officials after doctors and emergency rooms across the region alerted them.

Results of tests for anthrax are pending, and it is uncertain whether the four have the disease. Health officials said they had been able to make a connection to the mail facilities in one of the four cases.

Investigators, meanwhile, continued to focus on postal routes and facilities near West Trenton, N.J., that were involved in handling anthrax-contaminated letters sent to Senate Majority Leader Thomas A. Daschle (D-S.D.), NBC News and the New York Post. Two New Jersey postal workers have contracted the skin form of anthrax, which is less serious than pulmonary anthrax.

New Jersey health officials said yesterday that environmental tests had revealed the presence of anthrax spores in 13 of 23 "work areas" -- including areas where mail is sorted by machine -- in Trenton's main processing facility in Hamilton Township. A thousand postal workers were advised to undergo tests for exposure to anthrax spores.

On Capitol Hill, environmental specialists continued to swarm over the Capitol building and adjacent offices yesterday after the discovery of anthrax spores in the Ford House Office Building on Saturday.

No other tests returned positive, and Capitol Police spokesman Lt. Dan Nichols announced yesterday afternoon that the Capitol will reopen today and that the House and Senate will be in session Tuesday.

House and Senate office buildings -- including the Hart Building, where the letter to Daschle was opened last week by an aide -- will remain closed today for additional testing.

Before the District postal worker fell ill, health authorities had taken some comfort in the knowledge that six of the nine people infected in the last several weeks had the easily treated cutaneous form of the disease, which affects the skin. Pulmonary anthrax is more lethal and therefore more effective as a weapon.

For that reason, the postal worker's case has revived suspicions that the anthrax sent to Washington and elsewhere is of a particularly sophisticated nature that may suggest state sponsorship -- and perhaps a link to the Sept. 11 terrorist attacks at the World Trade Center and the Pentagon, although authorities continue to assert that they have no hard evidence for either possibility.

On NBC's "Meet the Press," Sen. Joseph I. Lieberman (D-Conn.) said yesterday that "significantly refined anthrax" was involved in the recent attacks.

To make ordinary anthrax "into the stuff that's being sent in envelopes, that requires a real effort, and, frankly, more than a couple of guys in somebody's kitchen stirring things up," he said. "So it says to me that there's either a significant amount of money behind this, or this is state-sponsored or this is stuff that was stolen from the former Soviet program."

One man, Florida photo editor Robert Stevens, has died of pulmonary anthrax. A second victim, Ernesto Blanco, 73, who worked with Stevens at the tabloid publisher American Media Inc., remains hospitalized with the disease.

Richmond, the District postal worker, handles express mail and routinely travels between two facilities -- one on Brentwood Road NE in Washington and the other near BWI Airport, according to postal service officials.

It is unclear where he was exposed, health officials said.

Yesterday, officials told about 2,000 postal employees who work at the Brentwood facility to report to a downtown office building -- or, today, to D.C. General Hospital -- for nasal-swab tests and a 10-day supply of the antibiotic Cipro. About 150 employees at an airmail center near BWI airport also will get tests and antibiotics.

Postal service officials said they would immediately close the facilities to allow for environmental testing and cleanup.

Mail handled by those facilities will be diverted to other processing centers or temporary locations, but service will not be disrupted, officials said.

At his news conference, Williams counseled against overreaction: "We're going to stand up and return to our quality of life and repudiate what these terrorists are trying to do."

Officials said there was no indication that anthrax spores had contaminated other mail. They were unable to say whether the infected worker may have come in contact with the letter sent to Daschle's office.

Officials said they did not know of any letters or packages that broke open, leaking powder.

"We are still investigating the specific circumstances," said Rima Khabbaz, deputy director of the division of viral diseases at the Centers for Disease Control and Prevention.

Deborah K. Willhite, a senior vice president for government relations and public policy for the U.S. Postal Service, said there is no evidence that customers are at risk of contracting anthrax.

In New Jersey, health authorities focused on the Hamilton Township facility, which processes mail from 46 branches in the Trenton area. The New Jersey State Health Department and the CDC ordered an estimated 1,000 mail workers to undergo nasal-swab tests, which test for exposure to anthrax spores, not infection.

FBI agents continued to interview residents along the route of a postal worker in West Trenton who is infected with skin anthrax.

Authorities have confirmed that a contaminated letter sent to the New York Post on Sept. 18 was mailed through that branch and postmarked in Hamilton Township. Two other anthrax letters -- to Daschle and NBC News anchor Tom Brokaw -- passed through the West Trenton branch.

"Which specific letter infected her, I don't know if we'll ever know that," said Linda Vizi, a spokeswoman for the FBI's Philadelphia office.

The announcement of a third case of inhalation anthrax revives debate among law enforcement and public health officials about whether the spores now harming people through the mail should be considered "weapons grade" or "weaponized."

The distinction is crucial in part because it could tell investigators about the sophistication of the person or group sending the anthrax, and whether they may have access to anthrax supplies in Iraq, Russia or other countries.

Homeland Security Director Tom Ridge and other officials said Friday that the samples found at NBC, in Daschle's office and at American Media Inc. were not weaponized. That means that the particles were not substantially reduced in size or altered to make them easier to release into the environment.

But Richard Spertzel, a Maryland-based bioterror consultant, said yesterday on CBS's "Face the Nation" that since the Washington postal employee has developed inhalation anthrax indicates, the material was small enough and remained airborne long enough to be breathed into the lungs. He said that indicates the anthrax is "weapons grade." Some experts have defined "weapons grade" anthrax as a precursor to the weaponized version, which also may be genetically modified to resist antibiotics or to withstand a missile explosion.

Health officials have said the anthrax tested so far responds to antibiotics and, according to scientists close to the investigation, has been identified as closely related to the Ames strain of *B. anthracis*.

While the question of who may be sponsoring the attacks remains open, Spertzel said in an interview last week that evidence suggesting that some of the mailed anthrax spores were finely milled was extremely worrisome to him and suggested state sponsorship.

"There's no question in my mind," said Spertzel, who was a member of the group that inspected Iraq's weapons programs after the Persian Gulf War. "The idea that this is the work of a lone nut, that's wishful thinking."

A prime suspect for state sponsorship would be Iraq, which is known to have stockpiles of anthrax and other pathogens and was turned down when it tried to obtain samples of the Ames strain from a Western European laboratory.

But Spertzel said Iraq also tried to get the strain elsewhere, including from sources in Eastern Europe and Africa, and it is unknown if those attempts were successful.

"The big question is, 'Is Iraq cooperating [with the terrorists] or not?' " Spertzel said. "If they are, I think there is ample reason to worry."

Sen. Bob Graham (D-Fla.), chairman of the Senate Select Committee on Intelligence, said on "Fox News Sunday": "We know that Iraq has played a role in the past in supporting other groups of global terrorists. Iraq will continue to be in our crosshairs. But at this point we don't have the basis on which to pull the trigger."

The FBI has said it has found no hard evidence that the Sept. 11 hijacking plot, the anthrax letters and Iraq are linked.

*Staff writers Dan Eggen, Avram Goldstein, Lisa Rein, Liz Seymour and Rick Weiss contributed to this report.*

Time

October 29, 2001

## **Can A Nuke Really Fit Into A Suitcase?**

By Bill Saporito

Could the next chapter of our national nightmare be a nuclear one? How hard would it be for operatives of Osama bin Laden to deliver a "suitcase nuke" to our doorstep?

The technical answer is that the threat is still considered to be remote; there is no hard evidence that any terrorist group, including bin Laden's, has a finished nuclear weapon in its arsenal. But not long ago, anthrax seemed a distant threat. And it is possible for the bad guys to assemble an atom bomb with contraband uranium and off-the-shelf parts. "It's not particularly probable, but it's possible," says Anthony Cordesman, a senior fellow at the Center for Strategic and International Studies in Washington. "The difficulty is that we are dealing with a wide range of low-probability cases. We can't be afraid of any one, but we have to be concerned about all of them." Among those probabilities: "dirty" conventional bombs loaded with radioactive garbage and attacks on nuclear plants that cause massive radiation leaks.

For years, cloak-and-dagger stories have circulated that Soviet suitcase nukes (also known as atomic demolition munitions, or ADMs) had gone unaccounted for and presumably ended up on the Russian black market. The Russians have offered confusing and conflicting statements about the disposition of their ADMs, leading some to suspect the worst. The ADMs weigh from 60 lbs. to 100 lbs., according to Bruce Blair, a former U.S. Air Force officer and expert on Soviet nuclear weapons. They could be carried in a case 8 in. by 16 in. by 24 in. The fissile material inside the mini-nukes degrades over time, though, and it's unlikely that the Russians maintained them or that their new owners could. "There's no good evidence that any rebel group or terrorist has these," says John Lepingwell, a nuclear expert with the Monterey Institute of International Studies.

If terrorists can't buy portable nukes, they would have to make them. And in a frightening study done by the Nuclear Control Institute, a nonproliferation group in Washington, a panel of nuclear-explosives experts concluded that a group of dedicated terrorists without nuclear backgrounds could assemble a bomb if it had the right materials (such as plutonium 239, uranium 235, plutonium oxide and uranium oxide). It would take about a year to complete the job. "There's little question that the only remaining obstacle is the acquisition of the material," says Paul Leventhal, the institute's president. Less than 110 kg of active ingredients could yield 10 kilotons of explosive power--a Hiroshima-size weapon. Even if the terrorists didn't get the recipe quite right, a 1-kiloton yield could still devastate a city. And forget the suitcase: a truck will do, or a container ship to float the bomb into an American port.

Where would bin Laden get the material? Again, the most common answer is Russia, with its reputation as a fissile flea market. And a bin Laden associate has told authorities that the mastermind is shopping for nuclear ingredients. Adds Leventhal: "My feeling is that the prudent assumption is that bin Laden is nuclear capable in some fashion." Other experts are less certain that any terrorist group could pull off a nuke. A 1999 Rand study on terrorism noted somewhat reassuringly that "building a nuclear device capable of producing mass destruction presents Herculean challenges for terrorists and indeed even for states with well-funded and sophisticated programs."

Which is why the greater danger may lie in dirty bombs, conventional weapons used to spray radioactive material--anything from used reactor rods to contaminated clothing--over wide areas. Although the death toll wouldn't be great, the contamination and the public panic could be widespread. "The ultimate dirty bomb is a nuclear power reactor," says NCI's Leventhal. That someone will run a jet into a cooling tower isn't the only risk. Periodically the Nuclear Regulatory Commission has staged mock attacks against facilities, and the faux intruders won half the time--meaning they were in a position to cause severe damage. It's a target-rich environment: not only is the core vulnerable, but one NRC study also concluded that if terrorists blew up the cooling pool that holds the spent fuel, the radiation could kill 6% of the people living within 10 miles of the plant.

*with reporting by Mark Thompson/Washington*

New York Times  
October 22, 2001

## **The Ultimate Hatred Is Nuclear**

By Bruce G. Blair

WASHINGTON -- Bioterrorism, like the anthrax threats currently rattling America, is horrific. But perhaps the ultimate horror in our newly uncertain world is the prospect of terrorists with nuclear weapons. There is no evidence that any terrorist has nuclear materials now, but the possibility is serious enough so that the government should be heightening security at home by monitoring foreign nations' weapons more closely and planning for military raids, if necessary, to keep weapons out of the wrong hands.

Sophisticated terrorists would be able to make an atomic bomb if they could get the necessary fissile materials — highly enriched uranium or plutonium. Huge quantities exist around the world. Detonated in Manhattan, a relatively small bomb — say 15 kilotons in yield, equivalent to the one used on Hiroshima — could immediately kill 100,000 and cause another 100,000 deaths in the lingering aftermath.

A terrorist wouldn't even need nuclear bomb materials to wreak nuclear havoc on a smaller scale: lethal radioactivity could spew out from a bomb made of nuclear waste and dynamite or from a nuclear power plant attacked by a hijacked plane or a truckload of explosives.

Our first line of defense against nuclear terrorism is at home. Security measures around nuclear power plants, like restrictions on how close planes may fly to them, are already being reviewed, and they should be strengthened as much as possible. But we should also immediately impose better inspection and security regimes at American seaports. Tens of thousands of cargo containers on ships arrive at American ports every day, and given the terrorist networks' extensive business ties around the world, the potential that one of those containers might carry a nuclear device is decidedly too high.

America's actual nuclear arsenal and its fissile materials are heavily guarded, but it's important to make sure security is just as tight abroad. There has been concern for years about the vulnerability of Russian bombs and bomb materials. More than 1,000 tons of bomb-grade plutonium and uranium remain in the former Soviet Union, half stored in its raw form and half inside 20,000 bombs. The United States is already working with Russia in a limited way to secure its nuclear materials and facilities by installing fences and surveillance sensors, but only half of the

needed security improvements have been completed. Congress has been balking at continuing to finance this program with \$1 billion a year, while it actually should be spending more. Last year, Russia's top security officials urgently sought American help in shoring up security at nuclear weapons sites, but bureaucratic squabbling between the Defense and Energy Departments delayed and diluted the American response. In the end, the Russians got little of the help they had sought.

The Federal Bureau of Investigation, the Central Intelligence Agency and other American security agencies should be working with Russian law enforcement not only against terrorists, but to help Russia eliminate organized crime, which could make big profits selling nuclear materials to willing buyers.

Even more pressing, given the American military campaign in Afghanistan and the angry protests by some Pakistanis against their country's cooperation, is ensuring the security of Pakistan's nuclear arsenal. Pakistan is estimated to have between 30 and 50 partially disassembled atomic weapons, from 1 to 15 kilotons in yield, stored at several locations 50 to 250 miles from Afghanistan. If the regime were destabilized or toppled, nuclear security would weaken. Moreover, there are radicals within the Pakistani government and military forces, and it is possible that insiders might collude to steal bombs and add them to the arsenal of Osama bin Laden or some other extremist. Pakistani weapons are believed to lack sophisticated locks that would prevent their unauthorized use.

Besides urging Pakistan to strengthen security where its weapons are stored and/or to disable its nuclear devices, the United States should be offering to help out by providing security equipment and guards. And regardless of the degree of cooperation between the two countries, American surveillance and intelligence efforts should be aimed at independently keeping track of the Pakistani arsenal.

To guard against the worst possibility — Pakistani weapons in the hands of our enemies — America should have plans ready to provide security without Pakistan's permission, if emergency circumstances dictate, and even to take Pakistan's weapons out of the country if the need arises. Special operations forces in the region should be kept on high alert for quick, covert incursions to disable or even relocate the weapons to prevent their capture by unauthorized people. Nuclear emergency search teams, which are trained in bomb detection and dismantling, should be ready to accompany such military operations. The teams, some from Nellis Air Force Base in Nevada, know the basic design of Pakistani weapons from defectors' reports and could devise disabling procedures on the spot. An even better idea might be to get American and Russian military-civilian bomb response teams together to conduct search and disable missions in Central Asia — and perhaps in Russia itself in an emergency. The mutual benefits would be considerable, and joint operations to protect everyone against nuclear terror could have lasting positive effects on future United States- Russian cooperation.

Obviously, the elimination of nuclear weapons would not eliminate terrorism. But just as obviously, the need for nuclear safety and security has never been clearer.

*Bruce G. Blair is president of the Center for Defense Information.*

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October 22, 2001  
Pg. 9

## **RAMOS Still Best Plan For Near-Term Missile Defense Cooperation With Russia, Kadish Says**

By Kerry Gildea

The most realistic option for cooperating with Russia on ballistic missile defense at this time remains the Russian American Observation Satellite (RAMOS) program, Air Force Lt. Gen. Ronald Kadish, director of the Ballistic Missile Defense Organization, said last week.

BMDO and Russian counterparts are "close to success" in forming real cooperation on RAMOS after eight years of trying to do so, Kadish said Thursday at a breakfast sponsored by the National Defense University Foundation. Expanded missile defense cooperation has been hindered because "there's still some degree of a Cold War mentality" in both the United States and Russia, Kadish said. However, he added, there are individuals like himself within the organizations of both countries who want the cooperation on RAMOS and other potential cooperative efforts to move forward.

"RAMOS could set an example," Kadish said, adding there could be offshoots to that program to do even closer cooperation in the missile defense arena in the future.

"It depends on the relationship that emerges in this new strategic relationship," Kadish said. "I am optimistic." Last year during markup of the FY '01 Defense Authorization Bill lawmakers debated whether to continue funding RAMOS. Some lawmakers thought there were more promising technological areas to pursue, but nonetheless supported RAMOS as a goodwill political gesture to Russia (Defense Daily, Sept. 27).

The RAMOS program has undergone a number of restructures and revised plans over the years. Just last year, BMDO restructured RAMOS into a two-satellite program. Under the revised proposal, Russia would build, launch and operate two essentially identical satellites that carry U.S. infrared sensors for in-space experimentation. Some lawmakers have said they are not convinced the United States can provide infrared sensors for integration into the Russian-built satellites without compromising the technology or providing extensive technical assistance to Russia.

But, some missile defense proponents like Rep. Curt Weldon (R-Pa.), chairman of the House Armed Services Committee procurement panel, have repeatedly pushed to restore funding to RAMOS over the past several years. Weldon has argued the program is essential if the United States and Russia are ever to reach a compromise on ballistic missile defense. He also more recently has pushed for a cooperative boost phase intercept technology program with Russia.

Meanwhile, the RAMOS team last year conducted tests on an Air Force Flying Infrared Signatures Technology aircraft, which is a modified Boeing [BA] KC-135. Those tests involved flying U.S. and Russian instruments like those that could be flown in a RAMOS satellite constellation. The RAMOS team collected data on short- and mid-wave infrared polarization from cloud cover and looked at issues like solar scattering problems from space.

Los Angeles Times  
October 20, 2001

## **Anthrax Vaccine Producer In U.S. Hit With Lawsuit**

***Courts: BioPort's only customer is the Pentagon. Plaintiffs charge the product was improperly stored or was part of a contaminated batch.***

By Robert L. Jackson, Times Staff Writer

WASHINGTON -- The sole U.S. producer of anthrax vaccine, already facing trouble from government regulators, was hit Friday with a private multimillion-dollar lawsuit alleging negligence in its manufacturing procedures. The suit against BioPort Corp. of Lansing, Mich., was filed in federal District Court here and is believed to be the first action on behalf of soldiers allegedly harmed by vaccine shots they were required to take.

Company spokeswoman Kim Brennen Root said officials could not comment because they have not seen the complaint. Root acknowledged that Food and Drug Administration inspectors had noted deficiencies, but she said the company expects a positive report on its procedures from federal regulators within six months. The lawsuit, filed on behalf of one dead and one injured soldier, notes that most of those who have received vaccine produced by BioPort are about 150,000 U.S. military personnel. The military began administering the vaccine in the early 1990s, sparked by concerns about the potential use of anthrax as a biological weapon by the Iraqi government.

Unlike antibiotics such as Cipro that are prescribed for people who have been exposed to anthrax, the vaccine is taken as a preventive measure.

The legal complaint alleges that the efficacy of the vaccine in the mass immunization program for the military was never sufficiently tested nor were adverse reactions by soldiers accurately assessed.

"There was insufficient data to demonstrate protection against inhalation anthrax," the lawsuit says.

The plaintiffs are the heirs of Army Spc. Sandra Larson of Spokane, Wash., who died June 12, 2000; and Ronda Wilson, of Savannah, Ga., a former soldier whose chronic ill health allegedly resulted from the vaccine.

According to the lawsuit, Larson began receiving her six injections in late 1998 and "almost immediately . . . began having adverse reactions to the vaccine, including exhaustion and fatigue, skin rashes and numbness and pain in her hands."

When these symptoms did not dissipate, she was admitted to a military hospital, where she later lapsed into a coma and died, the complaint said.



Wilson, a helicopter pilot, also began having adverse reactions "almost immediately" after receiving her inoculations in late 1998, including rapid weight loss and an inability to eat solid foods, the lawsuit alleged.

"We're not trying to stop production of the vaccine," said plaintiffs' attorney Alan C. Milstein of Pennsauken, N.J.

"But we want to compensate soldiers who were given the vaccine involuntarily and, as a result, were hurt or died while trying to serve their country.

"We would also like to guarantee that others who are vaccinated in the future obtain a product that is safe and effective."

Plaintiffs charge that the inoculations Larson and Wilson received have been traced to batches of vaccine that in one case were improperly stored for a period at room temperature instead of being refrigerated or, in another case, from a lot that was contaminated with microorganisms.

Some independent authorities noted that, despite claims in the lawsuit, no proof has surfaced that BioPort's vaccine is defective or harmful.

In a study published two years ago in the Journal of the American Medical Assn., 14 experts in civilian biodefense reported that 590,000 doses of anthrax vaccine had been administered to members of the armed forces and that "no serious adverse events have been causally related."

The Defense Department has the rights to all anthrax vaccine produced by BioPort, but the company has been unable to release any of its product to the Pentagon since 1998 while awaiting FDA approval, officials said.

Despite remodeling its Michigan plant in 1999, the company has failed to win a new federal license because of deficiencies found during FDA inspections.

Quality-control failures noted by FDA inspectors included the improper reuse of expired vaccine, inadequate testing and the use of lots that failed testing, according to court papers.

The company received \$126 million from the Pentagon as part of its efforts to eliminate problems in quality control. Earlier this week, Defense Secretary Donald H. Rumsfeld said the military, as the sole customer of BioPort, was looking at ways to assist the firm.

"What we're trying to do is figure out a way where we might get some help so that they might improve their performance," he told reporters.

Rumsfeld said Pentagon officials planned to meet with authorities at the Department of Health and Human Services "to try to fashion some sort of an arrangement whereby we give one more crack at getting the job done with that outfit."

National Journal  
October 20, 2001

## **A New Threshold Of Terror Crossed**

By James Kitfield

At national security conferences stretching back many years, experts who warned about a potentially catastrophic terrorist attack on U.S. soil with biological weapons were mostly viewed as alarmist. After all, the only proven incident of bioterrorism in the United States occurred in 1984, when a religious cult in Oregon spread salmonella at restaurant salad bars in order to sway a local election. Although 751 people fell ill, the incident seemed more bizarre than apocalyptic.

The October 15 anthrax attack that closed the House of Representatives and some Senate offices and threw Capitol Hill into turmoil, however, ushered in a new, more ominous chapter in the annals of bioterrorism. For the first time in history, a sophisticated germ weapon was used successfully as a weapon of terror. An enemy with large quantities of such a form of anthrax, and an efficient means of delivering it, could potentially inflict casualties on a massive scale.

For insight into the bioterror threat, National Journal Correspondent James Kitfield interviewed Michael L. Moodie, longtime president of the Chemical and Biological Arms Control Institute in Washington.

**NJ: It has been widely reported that the anthrax that arrived by letter in the office of Senate Majority Leader Thomas Daschle on October 15 was a potent, finely milled variety consisting of particles so minuscule that they can spread through the air without detection. Already, 33 Senate staffers—some in adjacent offices—have tested positive for exposure to the anthrax. Does this represent a significant escalation in the threat posed by bioterrorism?**

Moodie: If in fact this turns out to be highly pure anthrax that is milled to the right size for efficient dispersal and infection, that will definitely represent a significant elevation in the level of threat we face. Until this week, authorities had not really characterized the quality of the anthrax agent, and many people who were exposed to it did not contract the disease. Many experts thus assumed it was a relatively crude form of anthrax. Reports on the more recent attack suggest a level of sophistication and expertise in developing the anthrax agent—whether it was done by a state actor or by terrorists themselves—that is well above where experts were assuming. That’s something we have to worry about.

**NJ: Is it surprising that a single letter apparently led to as many as 33 Senate staffers’ being exposed to the anthrax?**

Moodie: One quandary that I find difficult to explain at this time is the use of an apparently sophisticated biological agent, coupled with a rather primitive means of delivery. I’m not sure what that implies about the motivations and capabilities of the perpetrators. Are they choosing to use mail sent to high-profile targets because they only have a small amount of anthrax agent, and thus want to maximize its impact? Does that imply that the terrorists, whoever they are, are unable to make more anthrax themselves? Were they unable to develop a more sophisticated dissemination technique that would have produced more casualties, or were they trying to terrorize and scare, rather than actually kill a lot of people? The incongruity of this apparently sophisticated biological agent and a primitive delivery vehicle raises all these questions that weren’t part of the mystery before the latest attack.

**NJ: Osama bin Laden has proclaimed that acquiring chemical and biological weapons was a "religious duty," and the CIA has reported that he trained followers in terror attacks using such weapons. There have also been reports that bin Laden was interested in using low-flying aircraft to dispense toxic materials. Would a crop-duster scenario represent a "sophisticated" delivery technique for bio weapons?**

Moodie: Well, the basic technologies for dispersing crop-dusting chemicals and an aerosol of biological agents are somewhat different, so it’s not necessarily an easy match. One reason the latest attack is so worrisome, however, is that once you have the technology to mill a pure form of anthrax with the correct spore sizes, you’re a major step closer to being able to put that into an aerosol form. At that point, all you need is some sort of industrial sprayer in order to have a potentially catastrophic impact.

**NJ: Do you consider it indicative that Mohamed Atta, one of the September 11 hijackers, was making pointed inquiries about crop dusters?**

Moodie: That’s a clear cause for concern. Osama bin Laden and his Al Qaeda network have not only been clearly seeking chemical and biological weapons of mass destruction, but he has articulated an elaborate rationale for using them against America and the West. The possibility that Al Qaeda is behind these anthrax attacks is certainly a scenario that has to be looked at very, very carefully.

**NJ: There have been unconfirmed reports in the media in recent years of biological agents such as anthrax leaking into terrorist hands from former member states of the Soviet Union and Warsaw Pact. Does anything about this case suggest where terrorists would acquire for the first time such a sophisticated biological agent?**

Moodie: That’s a very important question that is difficult to answer. The official guess is that there are around 15 "countries of concern" that are pursuing biological and chemical weapons. Once you look deeper into that list, however, it’s very difficult to know authoritatively how far those programs have advanced. Certainly, the Soviet Union had a massive biological weapons program, including a major program focused on anthrax. It’s generally assumed that North Korea has an offensive biological weapons program that includes anthrax, though little definitive is known about it. There’s also a lot of evidence, and a line of logic, that points to Iraq as a possible source of this anthrax, though that’s only a possibility that needs to be looked at very carefully.

**NJ: Are you aware of any evidence of a state sharing its chemical or biological weapons agents with a terrorist group?**

Moodie: A major element of the debate about the likelihood of a bioterror attack for the past five or six years has been the lack of any such evidence pointing to a "state of concern" sharing its biological or chemical weapons with a non-state actor. As we find out more about these anthrax attacks, however, one question that will have to be asked is whether a state was involved. Given the sophistication of the anthrax agent, I would say there is a higher possibility of that being the case than I would have assumed before this week.

**NJ: Why does anthrax seem to figure so prominently in the bioterrorism scenarios, and are there other agents the United States should worry about?**

Moodie: Anthrax has a long history as a biological weapon stretching back 60-plus years. Because it’s not uncommon in livestock, it’s a reasonably available disease. It’s not contagious person-to-person, and is thus a more controllable biological agent for use in warfare when your own soldiers might be in proximity. Anthrax is also a fairly hardy agent that is not overly susceptible to weather, and it’s fairly quick-acting. All of these attributes make it attractive as a potential biological weapon.

As for other biological agents, smallpox is always mentioned, primarily because of the potential consequences inherent in the disease itself. Smallpox is very contagious, and it has a roughly 30 percent fatality rate. Unlike anthrax, however, smallpox has been eradicated and is no longer found in nature. There are only a few stocks of smallpox around the world, and those are presumably tightly controlled. So it would not be simple for a terrorist to acquire smallpox. Having said that, we need to do more, in light of these recent attacks, to prepare ourselves for terrorists possibly acquiring smallpox. Beyond that, there is a long list of potential biological agents to worry about, including botulinum toxin, bubonic plague, and tularemia. The Soviet biological weapons program apparently also experimented with Ebola.

**NJ: What must the United States do to better prepare itself for an era of bioterrorism?**

Moodie: We have to focus first on the front line, which is our public health system, from disease surveillance and lab analysis to hospital care. We need to incorporate advanced information technologies into our disease-reporting system. In the era of managed care and slim profit margins, we also have a serious lack of surge capability in our hospital system. In the case of a major bioterror incident, there would just not be enough beds and caregivers. Essentially, we need to develop a strategic approach to preparedness that incorporates deterrence, prevention, and response to bioterrorism.

**NJ: Do you worry that this first successful attack in history using a sophisticated weapon of biological warfare has made the once "unthinkable" more likely in the future?**

Moodie: Well, there have been very few actual attacks in the past. There was the 1984 case in Oregon involving salmonella, and an unsuccessful attempt at bioterror using anthrax by the Japanese cult Aum Shinrikyo in the mid-1990s. In fact, one of the problems in the debate about the likelihood of bioterrorism was the fact that there were so few actual attacks. The comment was always made, "Well, if this technology is so accessible, why haven't we seen more attacks?" That was a legitimate question. For those of us who have been arguing for greater national preparedness, however, the answer was that history is not necessarily a perfectly linear or continuous progression. There are unpleasant surprises and breakouts, and with biological weapons, you only have to be wrong once. So yes, we're now witnessing that threshold being crossed.

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October 23, 2001  
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## **Anthrax Cited In 2 D.C. Postal Deaths** ***2 Others At Sorting Facility Hospitalized With Disease***

By Steve Twomey and Avram Goldstein, Washington Post Staff Writers

Two District postal workers have died of what appears to be anthrax and two others have contracted the most serious form of the disease, officials said yesterday, making the city's principal mail-processing facility on Brentwood Road the newest epicenter of the letter-borne anthrax terrorism that has afflicted the East Coast.

On another day of heightened anxiety in a string that began with the Sept. 11 attacks on the World Trade Center and the Pentagon, Homeland Security Director Tom Ridge announced that although tests will determine the precise reason the workers died, "It is very clear the symptoms are suspicious" and anthrax was the "likely" cause.

Both workers died within hours of reporting to emergency rooms. Joseph P. Curseen, 47, arrived at Southern Maryland Hospital Center in Clinton yesterday morning with flu-like symptoms and respiratory distress, and he died six hours later. On Sunday, Thomas L. Morris Jr., 55, arrived at Greater Southeast Community Hospital in Washington at 5:55 a.m. with "potential exposure to anthrax and other medical concerns." He died 15 hours later.

Two other Brentwood workers were being treated for inhalation anthrax yesterday, and at least seven other people were under observation locally, although none has tested positive for anthrax infection, city officials said. At least six of the seven are employees of the Brentwood mail facility.

If confirmed as anthrax-related, the deaths of Curseen and Morris would bring to three the number of Americans killed by the disease since a contaminated letter arrived at a South Florida publishing company earlier this month, a harbinger of anonymous letters dispatched to major media outlets in New York and the Capitol Hill office of Senate Majority Leader Thomas A. Daschle (D-S.D.).

In part because of the apparently wide exposure at the mail-sorting facility on Brentwood Road NE and the discovery Saturday of anthrax spores at the Ford House Office Building, FBI investigators assume that at least one other tainted letter -- in addition to the letter sent to Daschle -- probably is involved.

"It's difficult to believe that only one letter could be responsible for all this," an FBI official said.

D.C. officials last night decided to expand testing and antibiotic treatment to 2,000 workers at 36 neighborhood post offices in the District because of heightened concerns about anthrax spores being spread to other locations on mail and packages from Brentwood.

Larry Siegel, deputy director of the D.C. Department of Public Health, said the decision was made in part because testing showed anthrax spores at several sites around the Brentwood facility plant floor.

However, no anthrax spores have been found at any postal installations other than Brentwood, Siegel said.

Including the two new District cases, three people nationwide are being treated for inhalation anthrax; six others have contracted cutaneous, or skin-related, anthrax; and at least 37 people have tested positive for exposure, although they have no symptoms. In addition, the House and Senate office complexes have been closed since Thursday, and several thousand people have taken antibiotics as a precaution in Florida, New York, Washington and Trenton, N.J., where at least two anthrax-contaminated letters are believed to have been mailed.

The Daschle letter passed through the Brentwood center, where 2,100 employees process about 3.5 million pieces of mail daily. But until this past weekend, health and postal officials had not instructed Brentwood workers to be tested for anthrax exposure, based on the belief that "if it's in a sealed envelope that it would not transmit anthrax,"

Postmaster General John E. Potter said yesterday.

How the Brentwood postal workers were exposed to anthrax spores is unknown. But with the clear possibility that spores leaked from one or more tainted letters and became airborne, Potter said the Postal Service's practice of cleaning its machines by blowing dust out of them was being revised "as we speak."

In a morning conference call with Potter yesterday, the postal Board of Governors approved spending \$200 million to look into new technologies to combat the spread of anthrax bacteria, such as sanitizing mail the way food often is. Postal officials said they believed that the mail is safe, but offered no explanation why packages, magazines and letters would not have been tainted in the same way workers were exposed.

"Overall, since September 11, there have been well over 20 billion pieces of mail processed and delivered. We're looking at three [contaminated] letters at this point that seem to have gone through the Postal Service out of 20 billion," said Postal Service spokesman Grey Frey. He added: "Last year, according to health authorities, 21,000 people died of the flu. One might argue you have a much greater chance of dying of the flu than getting this."

Health experts said yesterday that it is unlikely that anthrax spores could survive in sufficient numbers to contaminate mail delivered to homes. And one infectious disease doctor cautioned against heating mail in the microwave or with a steam iron, saying that heat could cause any spores inside an envelope to be released.

Starting today, households and businesses will begin receiving postcards outlining what to look for in mail and how to respond to suspicious packages. The Postal Service hopes to reach every U.S. resident, Frey said. "Our goal is to begin that enormous education program so that people will continue to use the mail. It's fundamental to the American economy."

Siegel said the Postal Service plans to continue operating its local post offices without interruption while workers go to the D.C. General Hospital campus for testing. The testing is being advised only for employees who work behind counters and behind the scenes of retail operations.

Customers in the public areas, including the service counters and the post office box lobbies, are being advised not to undergo testing. "Based on the current information we have, there is no reason for people to be concerned about those areas," he said.

Siegel said the decision to have postal workers tested was made out of an abundance of caution to protect employees, contract workers, vendors and people who have delivered bulk mail shipments to the Postal Service.

In a Washington Post-ABC News poll released yesterday, 40 percent of those sampled said they had begun exercising caution about opening the mail, and 16 percent said they were seriously considering being more careful.

At Southern Maryland Hospital Center, doctors said that Curseen had been ill since Oct. 16, and had lost consciousness during a church service Sunday. Initially, doctors at the hospital believed he had stomach flu and sent him home, said Venkat Mani, chairman of the hospital's infectious disease program. But Curseen returned with breathing problems, and his condition quickly deteriorated, Mani said.

"Seeing the type of bacteria I saw on the smear of blood, it's quite convincing to me that it's anthrax," Mani said.

Neighbors in the Cambridge Estates neighborhood in Clinton described Curseen as soft-spoken and a good neighbor. Curseen, who was married and had no children, was president of the neighborhood's Homeowners Association and often organized community parties and activities. "He worked quietly, but he really got things done for the people who lived around here. He would really work like a bulldog for us," said John Ball, Curseen's next-door neighbor.

Tyrone Pruitt, who has lived across the street from Curseen and his wife for 15 years, said he watched as federal agents cordoned off his neighbor's home and carried bags from the residence. "This guy never hurt anybody," Pruitt said. "For this to happen to him, it's just unbelievable.

Pruitt added: "All those things were done to cordon off the [U.S. Capitol] and to make sure that all of them were safe, but what was done to track the letter so they could prevent further exposure? Maybe it could have been prevented."

Returning to her Suitland Road apartment last night, Mary Morris, whose husband died at Greater Southeast Community Hospital, said only that she was "looking up to Christ. I am looking up." Across the hall, neighbor Nichole Gilmore said that at 4:30 a.m. Sunday, Mary Morris had knocked on the door and said, "It is just getting worse." She and her husband soon left for the hospital, Gilmore said.

Both of the Brentwood postal workers who contracted inhalation anthrax were being treated at Inova Fairfax Hospital yesterday, where officials released few details about the patients.

The first patient, whose case became known publicly Sunday, came to the hospital Friday afternoon, officials said. Family members and co-workers have identified him as Leroy Richmond, who turned 57 yesterday.

The second patient arrived at Inova Fairfax on Sunday morning, hospital officials said, and has not been identified. Both patients were listed in serious condition.

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October 23, 2001

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## **Umatilla Residents See Nerve-Gas Facility As Bulls-Eye In The Wake Of Terror Attacks**

By Jim Carlton, Staff Reporter of The Wall Street Journal

UMATILLA, Ore. -- Like most Americans, residents of this remote farming community reacted with outrage when terrorists attacked the East Coast. Then they reached for their "Shelter-in-Place" kits.

The boxed kits are free of charge at a local community center and contain tools against chemical weapons: plastic sheeting, a roll of duct tape, and a towel to seal doorsills against gases. When Angie Counsell, a 27-year-old elementary-school teacher, found herself without a kit to call her own on Sept. 11, she rushed out to get one.

"I thought, 'Now they're gonna hit us,' " she explains.

Many other residents of this dusty corner of northeastern Oregon had similar thoughts, and for an understandable reason: On the edge of town sits the Umatilla Chemical Depot, a Cold War facility that stores nearly 4,000 tons of nerve and blister agents. The still-potent material here, about one-tenth of America's historic stockpile of chemical weapons, is scheduled to be incinerated over the next five years.

Until Sept. 11, many people here regarded the depot with the same sort of disdain communities express for landfills. Now some people here look at the depot as a bull's-eye for terrorists and worry that they're unprepared. "When I see a small plane going by at a low level, now I think twice," says David Burns, a 54-year-old cabinetmaker living in nearby Irrigon, Ore.

As anxieties about terror rise across the nation, they have a special resonance at the eight chemical-weapons depots overseen by the U.S. Army around the country. The others are near Tooele, Utah; Pueblo, Colo.; Pine Bluff, Ark.; Newport, Ind.; Richmond, Ky.; Anniston, Ala.; and Edgewood, Md.

The roughly 30,000 people living within about eight miles of the Umatilla facility, commonly considered the radius of greatest risk, have always been on alert to take shelter in case a plume of gas should escape, accidentally or otherwise. The chemicals are stored in 89 concrete-covered igloos and one metal shed on a fenced-in site of sage-and-juniper hills near the Columbia River.

Since Sept. 11, the alert has been even higher. Between 100 and 200 U.S. Army troops arrived soon after the disaster to help patrol the grounds. The site has canceled its weekly public tours and barred access through a newly barricaded front entrance to all but depot and support personnel. Media interviews with depot officials now must be conducted in the parking lot outside. Since Sept. 11, unauthorized commercial and civilian aircraft aren't allowed to fly at an altitude of less than 10,000 feet above the depot. Fighter jets are based in neighboring Washington on standby to intercept intruders.

On Thursday, Army officials cordoned off a part of a depot building after granules of some sort spilled out of an envelope that accompanied an equipment delivery from a vendor. Although depot officials thought the substance was probably just packing material, Army bioweapons experts were brought in to evaluate the granules and found them to be harmless.

Meanwhile, surrounding communities are newly vigilant. An outdoor-supply store sold out its supply of gas masks. Crop-dusters are disabling their planes at night so they can't be flown away by thieves. Police and residents are keeping an eye out for large trucks, swarthy visitors or anything else suspicious. "Not too many strangers come through here," says Mr. Burns, the cabinetmaker. "So if we see some, we'll sure keep an eye on 'em."

Emergency officials in nearby Hermiston dispensed about 20 of the shelter-in-place kits the week after Sept. 11, compared with three or four per month in the time before. Such precautions have been taken for many years around the country, particularly near oil refineries and chemical plants to offer some protection against toxic leaks. Plastic sheets in the kits are cut to fit over windows and then secured with duct tape. A towel is also provided to seal off the bottom of a door.

Some here say the shelter kits help illustrate why they worry that the local disaster plan would be deficient in the event of an attack. For example, tax consultant Mark Severson believes it would be impossible to secure his office in downtown Hermiston, which has three windows and three doors and is five miles downwind from the depot. "If a toxic cloud came over us, you would kiss this town goodbye," Mr. Severson says.

Some also question the effectiveness of another feature of the emergency plan: a provision to shelter children inside schools by pressurizing their buildings. The pressurization, which schools are outfitted to do, is designed to keep out any outside air, protecting all those inside. "But the problem is you will only have a few minutes to get the kids in if they're playing outside," says Karyn Jones, a dental assistant in Hermiston and critic of the chemical depot.

Others aren't sticking around to see what works. "You could have Armageddon there," says 46-year-old Patricia Niesen. She and her husband, Randy, hitched up their recreational vehicle in Hermiston and returned to their home several hours away in Terrebone, Ore., for fear of terrorists. They had been temporarily stationed here for a construction job.

Emergency officials defend both the pressurization and home-protection techniques as safe and effective. "The risk you take getting in your car is greater than anything that might happen at the depot," says Dennis D. Doherty, chairman of the Umatilla County board of commissioners.

But he and other officials concede the plan isn't fail-safe. For example, they say it hasn't come up with a way to let people hiding in their sealed rooms know when it is safe to come out. That's partly because federal officials haven't given enough guidance to local communities, here and at other depots, according to criticisms of the chemical weapons program in a report issued last August by the U.S. General Accounting Office. Similarly, Oregon's Department of Environmental Quality in July criticized the Army for underestimating the extent of mock chemical plumes, in recent drills.

Army officials say they are evaluating issues brought up in the GAO report and that they are continuing to try to improve overall operations related to emergency response.

People here seem to agree that the response plan has come a long way from what it was before flaws in it were exposed some years back. Like the other depot communities, the Umatilla area had to come up with a way to safeguard residents after Congress in 1985 required the Department of Defense to destroy the U.S. stockpile of chemical weapons, some dating back to World War I. Under the international Chemical Weapons Convention, which the U.S. ratified in 1997, the demolition is supposed to take place by 2007.

But on Dec. 31, 1999 -- at the height of the Y2K worries -- Umatilla found out how ill-prepared it was. As local officials tried to issue a traffic alert for fog on electronic message boards along local highways that day, a computer malfunction instead sounded the alarm of a chemical leak at the depot. Sixty-nine outdoor sirens began blaring, then broadcast instructions over the same loudspeakers for people to seal themselves in rooms. However, at the time few residents had shelter-in-place kits or emergency radios over which alarms can be broadcast more effectively. Many couldn't understand warnings sounded only in Spanish in some communities.

"It rang the bell that if something did happen, we weren't ready," says Mr. Doherty of the Umatilla County board. A subsequent critique of the program by consultants hired by the state of Oregon found that management of the area's Chemical Stockpile Emergency Preparedness Program -- a coalition of local, state and federal agencies that administers response systems in each depot community -- was so disorganized that government officials spent a lot of time squabbling. The plan covers Umatilla and Morrow counties in Oregon, and a sparsely populated part of Benton County, Wash.

So one of the first orders of business was to establish a governing board to oversee the program. Mr. Doherty, who was put in charge, says that ended most of the infighting and helped the region finish much of its deployment of

shelter-in-place kits, radios and other emergency measures. Nevertheless, he says "we still joke that you know something has happened at the depot when all the workers leave town." One thing that hasn't changed since Sept. 11 is the military's long-established worst-case scenario for the depot, which holds that a release of chemicals could kill up to 10,000 people. In a 1996 environmental-impact report for its Umatilla incinerator, the Army listed this official "maximum credible event": a large aircraft fully loaded with fuel plowing into one of the chemical bunkers.

New York Times  
October 23, 2001

## **U.S. Agrees To Clean Up Anthrax Site In Uzbekistan**

By Judith Miller

The United States has signed an agreement with Uzbekistan to remove deadly anthrax from a remote island in the Aral Sea where the Soviet Union dumped tons of lethal spores, Bush administration and Uzbek officials said yesterday.

They said the agreement reflected growing concern that terrorists or rogue states might seek to obtain the anthrax spores, which the Soviet Union secretly buried on the island in 1988.

Separately, administration officials said that the Pentagon had approved a project to make a potentially more potent form of anthrax bacteria to see if the vaccine the United States intends to supply to its armed forces is effective against that strain as well. Russian scientists say they first made the superbug in the early 1990's. In 1997, the scientists say, the genetically engineered germ appeared to defeat Russia's own vaccine, at least in hamsters.

The project, run by the Defense Intelligence Agency, was delayed for weeks as Pentagon lawyers debated whether the research violated the 1972 germ treaty banning biological weapons that the United States helped champion. Officials said yesterday that Defense Secretary Donald H. Rumsfeld approved the work last week after lawyers for the Pentagon and other agencies concluded that the project was, in fact, "fully consistent" with the germ treaty. Administration officials said that both projects, whose details they have declined to discuss publicly, were part of American efforts to deal with the legacy of the Soviet Union's vast germ warfare program. Even after the germ treaty took effect, tens of thousands of Soviet scientists and technicians in secret labs throughout the former empire worked at turning germs into weapons.

The agreements, officials added, also reflect President Bush's determination to bolster the nation's biological warfare defenses in the wake of a spate of letters containing anthrax spores, which have killed at least one person, in Florida, and sickened several others.

Uzbek and American officials said the agreement between the Pentagon and its Uzbek counterpart to clean up the island, Vozrozhdeniye, or Renaissance, was signed yesterday by a Pentagon official in Tashkent, the Uzbek capital. Under the accord, the United States will spend up to \$6 million dismantling the former Soviet germ-warfare test site on Vozrozhdeniye, removing the buried anthrax and decontaminating the island. In addition, Washington has pledged to help Tashkent upgrade security at its research institutes and other sites where deadly germs and toxins are stored.

In an interview, Sodyq Safaev, Uzbekistan's deputy foreign minister, who is visiting Washington this week, called the agreement both timely and wise.

"Today everyone understands how important it is to combat biological weapons," Mr. Safaev said. The anthrax on the island, he said, threatened the world because "not only rats and animals might be able to reach this material, but terrorists."

"All countries should help rid us of this potential threat," he said.

Until the Russian military abandoned the island in 1992, it was the Soviet Union's major open-air biological testing site. Shared by the former Soviet republics of Uzbekistan and Kazakhstan, the island today is the world's largest anthrax burial ground.

At the invitation of Uzbekistan and Kazakhstan, American military scientists and intelligence experts began traveling to the island in 1997 to survey it and take samples of bacteria.

The Soviets buried the anthrax here after a deadly accident at one of their germ plants provoked alarm in the West. The American survey teams found that anthrax spores in soil samples from 6 of the 11 burial pits were still alive and potentially deadly.

Ken Alibek, a defector from the Soviet germ warfare program, said the Soviets had used the island to test germs like tularemia, Q-fever, brucellosis, glanders and plague beginning in the 1970's. Other studies say Soviet military labs also tested typhus, botulinum toxin, Venezuelan equine encephalitis, smallpox, and microbial strains with characteristics useful in warfare, like high virulence and resistance to ultraviolet rays or heat.

Uzbekistan has been a crucial United States ally both in the war against Osama bin Laden and the Taliban in Afghanistan and in America's attempt to rid the world of biological weapons.

Under the Pentagon's Cooperative Threat Reduction program, Kazakhstan, too, has worked closely with Washington to dismantle its own former Soviet biological weapons facilities and prevent potentially lethal germs and weapons expertise from spreading to rogue states and terrorist groups. Both states have renounced weapons of mass destruction.

Since 1999, Washington has spent \$8.5 million reducing the threat posed by deadly chemical, biological and nuclear weapons in Uzbekistan by, among other things, dismantling a large chemical weapons plant and strengthening security at Uzbek installations where dangerous pathogens are kept. The agreement signed yesterday was an extension of an umbrella security agreement struck last June by Secretary of State Colin L. Powell and his Uzbek counterpart.

Pentagon officials declined yesterday to discuss precisely how they plan to kill the still deadly spores on Vozrozhdeniye Island. Soviet soldiers had tried to kill the anthrax bacteria by soaking them in bleach and burying them under several feet of sand some 13 years ago, but some of the spores survived.

American officials said yesterday that they were also concerned about the superanthrax that the Russians had developed, which the United States will try to replicate. Washington has repeatedly asked the Russians to provide samples of the modified germ but Moscow has consistently delayed transferring the germ under an agreement to share strains.

Scientists working for the Pentagon will soon begin trying to replicate the Russian-modified anthrax at the West Jefferson, Ohio, laboratory of the Battelle Memorial Institute, a military contractor.

Though government officials discussed the project in general terms, Battelle has declined to comment.

Since the 1990's, American officials have grown increasingly worried about the possibility that scientists could use the widely available techniques of gene-splicing to create even more deadly weapons that do not respond either to vaccines or antibiotics.

## **Anthrax Vaccine: Changes to the Manufacturing Process**

by Nancy Kingsbury, managing director, applied research and methods, before the Subcommittee on National Security, Veterans' Affairs, and International Relations, House Committee on Government Reform. GAO-02-181T, October 23.

<http://www.gao.gov/cgi-bin/getrpt?gao-02-181t>