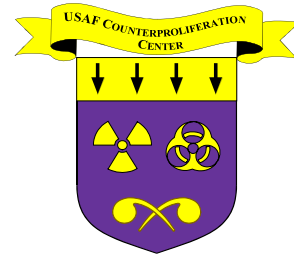


#115

18 Oct 2001

USAF COUNTERPROLIFERATION CENTER

CPC OUTREACH JOURNAL



Air University

Air War College

Maxwell AFB, Alabama

Welcome to the CPC Outreach Journal. As part of USAF Counterproliferation Center's mission to counter weapons of mass destruction through education and research, we're providing our government and civilian community a source for timely counterproliferation information. This information includes articles, papers and other documents addressing issues pertinent to US military response options for dealing with nuclear, biological and chemical threats and attacks. It's our hope this information resource will help enhance your counterproliferation issue awareness.

Established here at the Air War College in 1998, the USAF/CPC provides education and research to present and future leaders of the Air Force, as well as to members of other branches of the armed services and Department of Defense. Our purpose is to help those agencies better prepare to counter the threat from weapons of mass destruction. Please feel free to visit our web site at www.au.af.mil/au/awc/awcgate/awc-cps.htm for in-depth information and specific points of contact. Please direct any questions or comments on CPC Outreach Journal to Lt. Col. Michael W. Ritz, CPC Intelligence/Public Affairs or JoAnn Eddy, CPC Outreach Editor, at (334) 953-7538 or DSN 493-7538.

The following articles, papers or documents do not necessarily reflect official endorsement of the United States Air Force, Department of Defense, or other US government agencies. Reproduction for private use or commercial gain is subject to original copyright restrictions. All rights are reserved

CONTENTS

[A Highly Explosive Mixture](#)

[Officials Think Al Qaeda Has Some Type Of Nuclear Arms](#)

[Iran Begins Serial Production Of Shahab 3](#)

[A New State Of Fear](#)

[Anthrax Scare Moves To Capitol Hill](#)

[Russia ready to give anthrax vaccine to U.S.](#)

[Survey: Hospitals Not Ready for Large Bio Attack](#)

[Bionic systems researched as bioterrorism defense](#)

[Determining Presence of Anthrax Can Be Difficult](#)

[In Shift, Officials Look Into Possibility Anthrax Cases Have Bin Laden Ties](#)

[Information, Please](#)

[Poll Shows Anthrax Sparks Broad Concern](#)

[U.S. Needs A Contingency Plan For Pakistan's Nuclear Arsenal](#)

[Responding To Anthrax Attacks](#)

[Homeland Security: Need to Consider VA's Role in Strengthening Federal Preparedness \(GAO Report\)](#)

[Soviet chemical weapons store may be source](#)

[The Poor Man's Atom Bomb'](#)

[Suddenly, Small Gaps In Nuclear Security Are Starting To Look More Like Chasms](#)

[Police suspect bin Laden making 'dirty' nuclear bombs](#)

[Anthrax On Senate Letter Called Potent Sign Of Escalating Threat](#)

[Combating Terrorism: Considerations for Investing Resources in Chemical and Biological Preparedness \(GAO Report\)](#)

[U.S. Seeks To Stiffen Treaty on Germ War](#)

[Anthrax Trail May Lead To Hijackers, Iraq](#)

[BMDO Shifting \\$55 Million To NMD Design Effort](#)

[Vaccine Side Effects Force Woman To Quit Service](#)

[C.D.C. Team Tackles Anthrax](#)

[31 Exposed To Anthrax On Capitol Hill; House Shuts Down; Senate Offices Close](#)

[U.S. Seeks To Build A Stock Of Vaccine Against Smallpox](#)

[Military Vaccine Supply Dwindles](#)

[Spreading Fear: Elaborate Anthrax Attack Raises New Questions About Germs' Source](#)

[Sense Of Unease Grips Anthrax Preoccupied Washington](#)

[Iraq In No Hurry To Aid U.S. Anthrax Probe](#)

[Kenya Confirms Presence of Anthrax](#)

[Six Anthrax Infections Confirmed](#)

U.S. News & World Report
October 22, 2001

A Highly Explosive Mixture

Volatile chemicals and gaps in plant security may create a lethal combination

By David Whitman

For several years, law enforcement officials have warned that terrorists could seek to unleash a vast toxic plume by attacking an urban industrial plant that handles extremely hazardous chemicals. So far, terrorist schemes to use American industrial plants as weapons have been foiled. Yet relatively few facilities are truly hardened against terrorist attack. One assessment published in 1999 by the Agency for Toxic Substances and Disease Registry of several dozen facilities in Nevada and West Virginia found that while government offices and abortion clinics had excellent security, chemical-plant security ranged from "fair to very poor." No background checks had been done on key chemical process operators, the study found, and rail cars containing cyanide compounds, chlorine, and liquefied petroleum gases were parked alongside residential areas.

Since September 11, chemical plants around the country have restricted their access and now monitor incoming shipments more carefully. Some have hired additional guards, barred unscheduled visitors and deliveries, or moved rail tank cars holding hazardous materials into fenced areas. The Federal Aviation Administration has advised pilots not to loiter and circle above industrial complexes. And after the United States bombed Afghanistan, the Federal Bureau of Investigation contacted 27,000 corporate security managers, including many at industrial plants, to place them on the highest state of alert. But concerns about the vulnerability of chemical plants persist. Trucks, rail cars, and barges full of volatile chemicals transit the roads, rails, and ports leading to the plants, storage tanks can be attacked from outside the fence, and concentrations of chemicals remain vulnerable to sabotage from an employee. In fact, many of the dangers that chemical plants pose to surrounding neighborhoods have explicitly been exposed on numerous Web sites.

These concerns are now heightened by the yet unsolved explosion at a chemical fertilizer plant in Toulouse, France, on September 21, which killed 29 people and injured more than 3,000. While most French investigators have said they believe the explosion was an accident, police are looking closely at a man named Hassan Jandoubi, 35, who died in the explosion. Family members insist that Jandoubi, of Tunisian descent, was not a terrorist, nor a practicing Muslim. But he reportedly was seen shouting at plant truck drivers who displayed an American flag in their vehicle following the World Trade Center and Pentagon attacks.

Foiled plots. In the United States, it seems, only good police work has staved off catastrophe. Since 1997, the FBI has broken up an attempt by members of the Ku Klux Klan to blow up a gas refinery in Bridgeport, Texas, and a plot by antigovernment militia members to blow up a 24 million-gallon propane storage facility outside Sacramento, Calif. The arrests of 18 Middle Eastern men since September 11 charged with fraudulently obtaining licenses to

drive trucks hauling hazardous materials has only underscored the threat that someone might unleash common toxic chemicals.

Unlike biochemical warfare, which requires technical and operational expertise and most likely a state sponsor, the nation's industrial and chemical plants are ready-made targets. Nearly 15,000 facilities that handle extremely hazardous chemicals have filed risk management plans with the Environmental Protection Agency, detailing the often-catastrophic toll that would result from a worst-case chemical release. Several hundred plants have estimated that worst-case releases could spread toxic vapor clouds that travel 14 miles or more. And over 2,000 facilities have projected that their worst-case accident could potentially affect parts of surrounding areas that collectively contain more than 100,000 people, according to a study by an EPA analyst. These disastrous releases, which seemed so implausible before September 11, could in some cases kill thousands of people and injure tens of thousands.

The cautionary tale of industrial vulnerability starts with right-to-know legislation signed by Ronald Reagan in 1986 and George H. W. Bush in 1990. When it enacted those laws, Congress was seeking to prevent a very different kind of tragedy—an accidental chemical release. In 1984, a methyl isocyanate leak from a Union Carbide plant in Bhopal, India, had killed more than 3,000 people and injured some 200,000.

The new laws, however, had the unintended effect of making it easier for terrorists to acquire information online. Several of the September 11 hijackers were Web-savvy, and a man held in Minnesota as a material witness to the attacks, Zacarias Moussaoui, reportedly used the Internet to research the application of pesticides from crop-dusters. From Kansas City to Kabul, would-be terrorists were able for several years to pull up profiles of many industrial facilities' emissions of toxic chemicals from government and public interest group Web sites used by hundreds of thousands of Americans each month to research pollution in their own communities. The profiles detailed a facility's annual emissions and could include information on the maximum amount of hazardous chemicals stored for use in a specific part of the production process, as well as risk management plans. In some cases, they also included the size of potential disaster zones in the event of worst-case accidental releases.

To reduce risks and facilitate local emergency planning, the EPA first proposed to post facilities' worst-case accident scenarios on the Web in 1996. The graphic scenarios spelled out how far a vapor cloud could travel from a factory and retain its toxicity, the number of people who could be harmed, and the schools, hospitals, and national parks located within the potential disaster zone. Federal law enforcement officials objected, saying that terrorists could easily use the data to target facilities. E. James Monihan of the National Volunteer Fire Council testified at a 1999 congressional hearing that there was no reason to provide terrorists with "a Home Shopping Network to the most hazardous sites in the country." Later that year, Congress, this time with support from the Clinton administration and EPA, temporarily blocked the posting of the worst-case scenarios on the Net.

Still, while the most dangerous information has largely been kept off the Web, many industrial facilities have not prepared for terrorist attacks. A survey of 982 plants earlier this year by the American Chemistry Council did find that 80 percent or more of the sites had electronic or manned control measures, perimeter barriers, and crisis management plans. But one third had not identified areas subject to sabotage or criminal threats, and 1 in 4 had not conducted criminal background checks of employees and contractors.

Slow to act. Many plants, moreover, have been slow to slash their use of hazardous chemicals. One water-treatment plant in the Washington, D.C., area has taken nearly a decade to convert from chlorine and sulfur dioxide treatment to less volatile chemicals. In 1982, a city-commissioned study projected that if the contents of one of the 90-ton chlorine rail cars at the plant discharged, the resulting gas cloud could kill people as far as 3 miles away, an area that today contains more than 5,500 workers.

In 1991, the Defense Department, which has an Air Force base and naval lab nearby, complained. A mayor's study recommended the water plant switch to less volatile chemicals like bleach. But the switch won't be completed until 2002. The chief engineer for the plant told U.S. News that perimeter security has been boosted substantially since the terrorist attacks.

After September 11, the EPA pulled the risk management plans, or RMPs, filed by facilities off its Web site. Even so, terrorist targeting tips of a sort are still publicly available. Executive summaries of the RMPs, which sometimes contain summaries of worst-case releases, are posted on Web sites other than the EPA's. And before the terrorist attacks, more than 900 industrial plants had already released their worst-case accident scenarios to the public, while earlier studies by public interest groups rank by name and location the facilities that store the largest amounts of a dozen or so extremely hazardous chemicals.

Environmentalists and right-to-know advocates maintain that the data posted on the Net from the EPA have not been helpful to terrorists. Still, as Carl Pope of the Sierra Club notes, the EPA itself could make good use of the restricted worst-case data to identify and boost security at a select group of facilities most likely to suffer a terrorist assault.

That would be a good start toward shielding this vulnerable Achilles heel.

Washington Times

October 13, 2001

Pg. 1

Officials Think Al Qaeda Has Some Type Of Nuclear Arms

By Bill Gertz, The Washington Times

Al Qaeda terrorists in Afghanistan have developed chemical and biological weapons and could have nuclear-related arms, defense officials said yesterday.

"What we believe is that they have a crude chemical and possibly biological weapons capability," a senior defense official said.

"And if there's any nuclear capability, it is liable to be more radiological than fissile," the official said.

Radiological weapons are bombs that combine radioactive material with conventional explosives to increase their deadliness. A fissile nuclear device produces a nuclear blast.

The chemical weapons al Qaeda is believed to have include simple poison weapons such as chlorine and phosgene.

"We're not talking up to sarin," the official said. Sarin is an extremely deadly nerve agent.

The chemicals are relatively simple to produce, the official said, noting that "they don't take a lot of mixing."

Delivering the weapons could be difficult for the terrorists, but they may resort to "innovative" means, the official said.

As for biological weapons, the senior official said it is "probable" the al Qaeda terrorists have developed some type of deadly toxin weapons, possibly including anthrax.

"And this could be a bucketful; this could be a ton," the official said.

The officials would not discuss the facilities for the development of the weapons of mass destruction inside Afghanistan.

Other U.S. intelligence officials have said there have been reports that al Qaeda has secret weapons laboratories in the country.

"We have copies of the manuals that they've actually used to train people with respect to how to deploy and use these kinds of substances," Vice President Richard B. Cheney said in an interview yesterday on PBS' "NewsHour with Jim Lehrer."

Officials said al Qaeda terrorists in Afghanistan are predominantly "Arab Afghans" and number between 1,500 and 4,000. The Islamic extremist fighters were described as more ideologically motivated than regular Taliban troops. The officials, who briefed reporters on the condition of anonymity, said opposition Northern Alliance forces have made several major gains in the past week.

A group of 40 Taliban officers and 1,200 Taliban fighters appear to have defected to the alliance, a loose-knit group of northern Afghans who have a total of about 15,000 fighters, the officials said. The defections occurred at the central Afghanistan town of Konduz. "We think it's highly possible that that has happened, although we're not sure about numbers," one official said.

Additionally, the alliance has succeeded in taking the key central Afghan town of Chaghcharan in the last two days.

"The Northern Alliance has claimed that that has been taken from the Taliban," one official said. "We believe that may very well have happened."

The town is significant because it could allow two groups of opposition forces in the east and west to link up.

Military clashes between Taliban and Northern Alliance forces have been concentrated in four areas: north of Kabul, near the town of Taloquan, near Chaghcharan in the province of Ghowar and the northern area around the city of Mazar-e-Sharif.

One official said that a Taliban military unit known as the 55th Division is "part of the important relationship between Osama bin Laden and Mullah Mohamed Omar and their top commanders," referring to the leader of al Qaeda and the leader of the Taliban.

Meanwhile, Defense Secretary Donald H. Rumsfeld said yesterday that U.S. military forces have damaged al Qaeda terrorists and Taliban military forces during.

Mr. Rumsfeld said opposition forces on the ground in Afghanistan are poised to take action against the Taliban after U.S. warplanes finish bombing Taliban military targets.

"Clearly, at some point when we feel we have done a certain amount with respect to those Taliban and al Qaeda military targets, it may very well be more appropriate for ground forces to be moving in areas where we previously have been bombing," Mr. Rumsfeld said.

Overall, Mr. Rumsfeld said the military campaign is progressing.

"We have disrupted their communications somewhat, and we have, we believe, weakened the Taliban military, and damaged but certainly not eliminated their air-defense capabilities," Mr. Rumsfeld told reporters at the Pentagon. "And we have worked over a number if not all of their terrorist training camps," he said. "Those camps have been locations where terrorists that are today spread across the globe have been trained. Threats clearly still exist." Gen. Richard B. Myers, chairman of the Joint Chiefs of Staff, said military operations are "going according to our plan."

"We have made a good first step in the military effort destroying or damaging terrorist training camps, disrupting communications, weakening the Taliban military forces in Afghanistan and damaging their air defenses," Gen. Myers said.

On Thursday, Air Force bombers and Navy jets attacked six targets in Afghanistan, including a training facility and camp, military garrison compounds, and motor vehicle and ordnance facilities.

Gen. Myers said the military's "sustained effort" will not be limited to conventional military attacks, which he described as "stage-setters for follow-on operations."

U.S. and allied special operations commandos are expected to move in to Afghanistan at some point in order to identify and attack terrorists, as well as gather intelligence.

"We want to get their Rolodexes," said one administration official of the ground operations.

Mr. Rumsfeld said he does not believe the Taliban will surrender bin Laden to the United States.

President Bush on Thursday said the Taliban might be able to end the U.S. bombing campaign by turning over bin Laden.

Jane's Defence Weekly

October 10, 2001

Iran Begins Serial Production Of Shahab 3

By Andrew Koch, JDW Washington Bureau Chief, Washington DC, and Steve Rodan, JDW Correspondent, Tel Aviv

Iran has launched serial production of the Shahab 3 medium-range ballistic missile (MRBM) with a range of 1,300 km, US and Israeli officials have told Jane's Defence Weekly. The officials said that that production began earlier this year and includes subsystems as well as assembly of the Shahab 3.

Iran is not yet believed capable of indigenously producing the missile's engine, relying on a supply of approximately 20 No-Dong engines received from North Korea in 1999. The Shahab-3 - including its guidance system - is based on the No-Dong MBRM. Israeli officials and US defense sources said that Iran, despite extensive Russian and North Korean assistance with the programme, continues to face obstacles in developing the missile. That difficulty, they said, lies in engine development. The Shahab 3 has been flight-tested three times. The latest test, in September 2000, was designed to determine the reliability of Iranian-made subsystems. However, both the first and final flight-tests, US officials said, were failures due to engine difficulties.

The second test of the Shahab 3 - in July 2000 - was a success and that missile has become the basis of the current production model. A 7 September unclassified US Central Intelligence Agency report to Congress said that Iran has already built several prototypes of the Shahab 3. John McLaughlin, Deputy Director of the CIA added in late August that "the Iranians will soon field the 1,300km-range Shahab 3" (JDW 5 September). The officials said the liquid-fuel missile could carry a warhead capable of delivering chemical weapons although this has not yet been tested in any flight-test. The US officials added, however, that Iran might not need to flight-test such a warhead and instead could rely on simulation and modelling techniques.

Other US officials say they are increasingly concerned about the pace of progress Tehran is enjoying in its nuclear weapons programme. The officials told JDW that Iran appears to be nearing a point in its nuclear weapons programme where it would become adequately self-sufficient that external pressures such as export controls and other attempts to limit foreign assistance could not effectively halt the programme.

In a separate programme, US defence officials said Iran is developing a solid-fuel missile with an intended MRBM range similar to the Shahab 3. The project, based on Chinese assistance, will utilise a different guidance package to that of the Shahab 3, the officials said. The officials noted that Iran's missile programmes are "not much different from Pakistan's attempts" to increase its missile capabilities. Pakistan also has a liquid-fuelled MRBM called the Ghauri, based on the No-Dong, and a series of solid-fuel missiles called Shaheen which are based on Chinese technology called 'Shaheen'.

U.S. News & World Report
October 22, 2001

A New State Of Fear

Anthrax and warnings of more terror send America into higher anxiety

By David E. Kaplan

In a nation most definitely on edge, the news sent icy chills down spines from coast to coast. It tumbled out almost hourly. On Saturday, Nevada officials revealed that the contents of a suspicious letter mailed to a Microsoft office in Reno had tested positive for anthrax, exposing as many as six people to the dreaded disease. Just the day before, in New York, an aide to NBC News anchor Tom Brokaw had tested positive for anthrax, apparently after opening another envelope bearing a suspicious powder. Both discoveries came hard on the heels of reports from Florida that three workers at American Media Inc. also had been exposed to and one had died of the bacterium, long favored as a biological weapon. The offices sat only miles away from airports where Osama bin Laden's hijackers had trained and asked about crop-dusters.

In the panic that followed the initial reports, the few patterns that emerged only fed the fears. Mysterious powders were also found last week in letters to the New York Times and the St. Petersburg Times, as well as on a floor at the U.S. State Department. Preliminary tests on those powders have all come up negative for anthrax. But not so with a brown granular substance mailed September 18 from Trenton, N.J., to NBC. That, like the powder mailed to Microsoft, was anthrax and is believed to be the sample that infected Brokaw's aide.

Suspicious. As in a bad sci-fi movie, technicians in hazmat suits and gas masks marched into offices, quarantining rooms and decontaminating employees. At the New York Times, terrorism reporter Judith Miller opened a letter Friday morning to find an angry note threatening an attack on Chicago's Sears Tower—and a white substance that she promptly got on herself. Soon, specialists were taping off the area around her desk and carting away boxes of material. More than 30 Times staffers were tested and appear unaffected. Still, media organizations around the country shut down their mailrooms and passed around an FBI advisory on suspicious packages, warning about strange odors, misspelled words, and oily stains. Magazine editor Geoff Van Dyke, who watched as New York police and the National Guard sealed off his street, remembers thinking: "What is this world coming to? Will this ever end?"

Not anytime soon. That, at least, was the message from America's top officials. Even as Attorney General John Ashcroft stressed there was no apparent connection between the anthrax cases and bin Laden, Vice President Dick Cheney said the country "should proceed on the basis that it could be linked." And the FBI released a rare public alert warning of imminent terrorist assaults, relying, in part, on intercepted orders to bin Laden operatives to launch new attacks. Said Ashcroft, "Every American should be vigilant."

Vigilant they are, but the sudden worries over anthrax have also heightened a wave of paranoia and made it all too clear how quickly the rules have changed. As the nation stood at its highest state of alert since World War II, everyone from presidential bodyguards to small-town cops were on guard. The FBI has shifted agents away from its investigation of the September 11 hijackings to concentrate on new threats. In New York, the National Guard searched the trunks of drivers entering Manhattan. In Washington, D.C., police have banned all trucks from arteries leading to the Capitol. Passengers on the Washington-to-New York shuttle were made to sip from their carry-on coffees before boarding. Alice Gold, a Los Angeles advertising consultant, moved her son's birthday party from Disneyland to a shopping mall, only to decide that even the mall was too risky.

In the air above the nation's biggest cities, meanwhile, armed F-16 fighter jets now patrol the corridors. Twice last week, the jets scrambled to escort U.S. airliners with unruly passengers, including a mentally ill man who rushed an American Airlines cockpit. And back on terra firma, no place, it seemed, was too small to escape the jitters. In Dodge City, Kan., local police ran sweeps every two hours at the town's tiny airport where, just days earlier, concrete barriers had been put up to keep drivers from the terminal.

False alarms are adding to the tension. Police in the nation's capital have seen a fourfold jump in bomb threats. Bogus E-mails have raced through the Internet, warning Americans to avoid malls on Halloween, swamping FBI switchboards with calls from concerned parents. Anxious consumers stocked up on gas masks and antianthrax drugs. If America seems under siege, the warnings of a major new terror attack appear, at least for now, only precautionary, albeit wisely so. Officials tell U.S. News they have no concrete intelligence of any specific imminent threat. Because they have not located all associates of the September 11 hijackers, and with U.S. military action underway, they have no choice but to prepare for the worst.

The worst may be very bad indeed. For decades, terrorists were menacing figures wielding machine guns and bombs, capable of inflicting damage but not of derailing whole societies. They wanted, in the words of analyst Brian Jenkins, "a lot of people watching, not a lot of people dead."

New age of terror. That, clearly, is no longer the case. The roots of change began with the 1995 nerve gas attack on Tokyo's subway by the Aum Shinrikyo doomsday cult. Since then, terrorism experts have predicted the rise of a kind of superterrorism, fueled not by political creed but by religious and apocalyptic zeal. The tools of this new age in terror, they warn, are weapons of mass destruction—chemical, biological, and nuclear arms—and the goals are mass murder on an unimaginable scale.

Scary stuff, but given the results of the Aum attack, an influential group of analysts argue that the chances of a major chem-bio attack are exaggerated. They point out that all 10 of Aum's biological attacks, using anthrax and botulinus toxin, failed completely. The cult's most devastating attack, with the nerve agent sarin, killed only 12 people. The problem, experts say, is that should terrorists find the resources to create these agents—no easy task—"weaponizing" them would pose daunting challenges, even for countries like Iraq. As bad as the anthrax scares are today, say experts, they remain localized and under control. "To make the huge quantities required to inflict casualties is very tough," says analyst Amy Smithson of the Henry L. Stimson Center. Their best use, in fact, may be in causing chaos—what one expert calls weapons of mass distraction.

Still, the problem facing the public mirrors that faced by counterterrorism officials: gauging the level of threat. Terrorist use of a true weapon of mass destruction poses what analysts call "high consequence, low probability"—an event unlikely to happen, but devastating if it does.

Most security experts agree that the simpler, more conventional threats are the most likely. Machine-gunning shoppers on a crowded street, staging car bombings, even crashing jets, are relatively easy to do and terrifying to the public. The hijackers reportedly also considered attacks on Chicago's Sears Tower, Disney parks, and Minnesota's Mall of America. Of 200 terrorist attacks last year against U.S. targets overseas, all but 21 were bombings, followed by 11 kidnappings and four armed attacks. None involved chemical or biological weapons.

A chemical attack is thought easier to stage than a biological one, and a nuclear attack is believed toughest of all. Easier than constructing a chemical agent is simply attacking an industrial plant or crashing a truckload of toxic material. Attacking a nuclear power plant is another nightmare scenario. Still another worry is that terrorists could hit at other vulnerable points in America's infrastructure—the vast web of computers, communication lines, pipelines, roads, and more that keeps the nation's business humming. And a determined cyberattack could impact key systems ranging from air traffic control to ATM transactions.

Worse, America has never faced an enemy quite like bin Laden's al Qaeda. Its wily operatives have shown an uncanny knack for exploiting America's vulnerabilities while also changing tactics—employing truck bombs in Africa, boat bombs in the Middle East, and kamikaze air attacks in the United States. Equally worrisome, the group has grown skilled at conducting simultaneous operations. Intelligence analysts are now convinced that the September 11 hijackings were part of a larger campaign that included attacks in Europe and the Middle East.

A skilled strategist, bin Laden may well have already plotted his counterattack against America, although targets overseas are easier to hit. "The biggest threat is overseas in Islamic countries, where they've got a presence, a network," says Larry Johnson, a former counterterrorism official. "They're going to go for soft targets in the least defended places—Kentucky Fried Chickens, McDonald's."

With Americans on their guard, though, it may be tougher than ever for al Qaeda's terrorists to strike here at home. Moreover, officials stress that bin Laden's training camps have been destroyed, his operatives seized, and his finances frozen. Similarly, the anthrax scare also should be put in perspective, they say. Until the hijackings, federal officials had dealt with 171 anthrax cases since 1998—all of them hoaxes. Still, that's small comfort to Americans worried about what might be in the morning mail.

With Nell Boyce, Angie Cannon, Douglas Pasternak, Chitra Ragavan, Kit R. Roane, Linda Robinson, Christopher H. Schmitt, Stacey Schultz, Betsy Streisand, and Lisa Griffin

Anthrax Scare Moves To Capitol Hill

Letter to Daschle Tested for Bacteria; ABC Worker's Son Has Disease in N.Y.

By Ceci Connolly and Helen Dewar, Washington Post Staff Writers

Preliminary tests of a letter opened yesterday in the offices of Senate Majority Leader Thomas A. Daschle (D-S.D.) showed traces of anthrax bacteria, bringing the threat of bioterrorism to the nation's capital.

Capitol Police, after conducting two tests on the suspicious material, quarantined Daschle's personal office, administered antibiotics to more than 40 of his staff members and temporarily stopped delivering mail to House and Senate buildings.

What began in Florida two weeks ago as a single case of the rare and often fatal disease has become an ever-widening investigation into confirmed incidents of anthrax exposure at five locations in two states and the District, as well as hundreds of hoaxes and false alarms around the world.

In New York, where officials already were investigating a case of cutaneous anthrax in an NBC News employee, the 7-month-old son of an ABC-TV employee was found yesterday to have that same, relatively mild form of the illness, transmitted through the skin. ABC News President David Westin said the child had visited the network's Manhattan offices Sept. 28 and that, although they did not know for sure, officials were operating under the assumption that the child had contracted the disease there. Westin said the child's "prognosis is excellent."

At the tabloid newspaper office in Florida where the first case was reported, a second man was found to have pulmonary anthrax, the far more serious variation caused by inhaling the bacteria. Last week, doctors said Ernesto Blanco, 73, had anthrax spores in his nasal passage but had not actually developed the disease. Yesterday, on the basis of new tests, health officials reported that Blanco has, indeed, developed anthrax but is on antibiotics and expected to recover. His co-worker, Bob Stevens, 63, died of the illness Oct. 5.

In all three locations -- Florida, New York and Capitol Hill -- swab tests have been conducted on hundreds of people who may have been near the bacteria. Most of them are also preventatively taking the antibiotic ciprofloxacin. Even as potential new cases arose, investigators were in the process of ruling out others that had been widely reported. Officials in Nevada and New Jersey, pursuing separate incidents of possible anthrax infection, said yesterday that all the individuals involved had tested negative.

That news did little to slow the onslaught of calls to emergency rescue teams. In New York City alone, from 7 a.m. to 2 p.m. yesterday, police received 84 possible anthrax reports. The Planned Parenthood Federation of America said envelopes containing powdery substances arrived at 90 family planning offices and abortion clinics in 13 states. No region or institution seemed immune from the anxiety. Newspaper offices, a bank in France, a U.S. Embassy in Australia, the nuclear authority in the Czech Republic and the headquarters of the U.S. Department of Health and Human Services all reported deliveries of questionable substances.

"Our labs are going nuts testing all kinds of things: post office packages, drums of liquid, packages," said Scott Becker, a spokesman for the Association of Public Health Laboratories. "We are overwhelmed."

Although anthrax is not contagious, ready access to the bacteria and its potential to kill combine to make it the perfect tool for inflicting widespread fear, said Sen. Bill Frist (R-Tenn.), a physician.

"Anthrax is in many ways the ideal terrorizing agent," he said. "The goal is to personalize the potential for harm, and clearly, that goal is being accomplished."

At about 10:30 a.m., a woman working in Daschle's personal office opened a heavily taped envelope, and a "powdery substance" fell out, Capitol Police Lt. Dan Nichols said at an afternoon news conference. She immediately called the police and the Capitol physician, he said.

The material was sent to an Army laboratory at Fort Detrick for conclusive testing, the results of which should be available today, Nichols said.

"We hope within 24 hours we'll have a positive indication of what we're dealing with," he said.

The large, heavily taped envelope, dated Oct. 9, came from a postal distribution center in Trenton, N.J., according to the FBI. The contaminated mail sent to NBC had the same postmark.

There was growing evidence yesterday that the first anthrax outbreak at Blanco's tabloid newspaper office may also have come through the mail. Florida's Department of Health said it had found anthrax spores in a nonpublic mail sorting area of Boca Raton's main post office.

Nichols declined to identify the woman who opened the envelope in Daschle's office, which spreads over the fifth and sixth floors of the Hart Office Building, about a block from the Capitol. Daschle said his office was closed and quarantined, with no one allowed either in or out, for several hours.

John Eisold, the Capitol physician, said about 50 members of Daschle's staff, police officers, mail handlers and others who may have been exposed to the substance in the letter were receiving antibiotics.

Daschle was in a different office that he maintains at the Capitol when the letter was opened, and he was unable to go to his Hart office because of the quarantine. He said he talked with staff members by telephone but had not been able to talk to the woman who opened the letter, although he spoke to a member of her family.

"I would say without equivocation our staff feel very confident about their circumstances, and they've been given assurances . . . that there is no immediate danger for them, given the fact that we were able to respond as quickly and as directly as we could," he said.

As he opened the Senate for business, Daschle said the incident would not interfere with normal operations. "The Senate, this institution, will not stop. We will not cease our business, we will continue to work," he said.

Yet all around him, procedures were changing.

Capitol tours were suspended. Federal agencies announced plans to tighten the handling of their mail, and the U.S. Postal Service prepared to send a warning about biological hazards to every mailing address in the country -- 135 million in all.

At the Capitol, overall security will continue to be tightened, Nichols said. "This is not something that's going to be one isolated incident," he said. "I think you're going to find that security within the Capitol complex is going to change."

Meanwhile, six Planned Parenthood facilities in the Washington area received letters signed by the Army of God, a little-known group that advocates violence against abortion providers. According to local Planned Parenthood spokeswoman Virginia Martin, each letter said: "You have been exposed to anthrax. We are going to kill all of you. From the Army of God, Virginia Dare Chapter."

President Bush was the first to deliver the news of the latest outbreak, announcing to reporters after a meeting with Italian Prime Minister Silvio Berlusconi that Daschle's office had received a piece of mail containing white powder. "His office received a letter, and it had anthrax in it," Bush said after talking on the telephone with the majority leader. "The letter was field-tested. And the staffers that have been exposed are being treated."

Sen. Edward M. Kennedy (D-Mass.) scheduled a meeting for Wednesday with pharmaceutical and biotech executives to discuss the prospects of speeding up production of vaccines and antibiotics that may be used to treat harmful biological agents.

Health and Human Services Secretary Tommy G. Thompson, who was traveling in Texas yesterday, announced Sunday that he wants an additional \$643 million to expand the National Pharmaceutical Stockpile. Part of that money would be spent purchasing enough anthrax antibiotics to treat 12 million people for the recommended 60-day course. The United States currently has medicine for 2 million people.

Staff writers Justin Blum, Susan Schmidt, Cheryl W. Thompson, Avram Goldstein, Rick Weiss, Michael Powell, Dale Russakoff and Christine Haughney contributed to this report.

Published Tuesday, October 16, 2001

Russia ready to give anthrax vaccine to U.S.

From Herald Staff and Wire Reports

Russian health officials said Monday that they could share an anthrax vaccine that Russian scientists developed to defend against the threat of American biological weapons during the Cold War.

"We are ready to supply the United States with vaccines against anthrax if the necessity arises," said Lyubov Voropayeva, a spokeswoman for the Health Ministry's chief public health officer, Gennady Onishchenko.

Russia's vaccine is different from the one used in the United States, said Veniamin Cherkassky, a leading anthrax expert. While the U.S. vaccine is chemically based and has to be repeated frequently, the Russian vaccine contains live anthrax strains and lasts for a year, he said.

UNITED STATES

Sen. Bill Nelson, a Florida Democrat, announced an effort to greatly expand research funding for the Center for Biological Defense, based at the University of South Florida in Tampa and five other state university campuses. The defense center, in its first year, has received a \$4 million Defense Department grant for research into identifying and responding to a bioterrorism threat. Nelson's proposal would increase the grants to \$8.4 million.

IRAN

A former Lebanese Hezbollah security chief, who is on the FBI's "Most Wanted Terrorists" list, has left Iran on the advice of the Iranian government, a leading Arabic newspaper said Monday.

Imad Mughniyeh left Iran voluntarily after being told that his presence in Iran "is not in the interest of the country and his safety is not guaranteed," Cairo's Asharq Al-Awsat newspaper said.

IRAQ

Iraq criticized the Organization of the Islamic Conference on Monday for failing to denounce the U.S. strikes on Afghanistan, saying the organization had failed to reflect the true feelings of Muslims.

Last week's meeting in Qatar of foreign ministers from the peak Islamic body "should have condemned this aggression, which is an act of terrorism directed against all humanity," Iraq's foreign minister, Naji Sabri, said.

NEW YORK

Mayor Rudolph Giuliani received an honorary knighthood Monday from Queen Elizabeth II for his "outstanding help and support to the bereaved British families in New York."

The queen also conferred honorary titles -- Commander of the Most Excellent Order of the British Empire -- on the city's police and fire commissioners. The titles were announced during a City Hall visit by the queen's son, Prince Andrew, the Duke of York.

Giuliani, who was named Knight Commander of Most Excellent Order of the British Empire, does not get the right to call himself "Sir Rudolph." But he can put the initials "K.B.E." after his name.

KAZAKHSTAN

Kazakhstan denied any involvement Monday in the anthrax cases discovered in the United States, and said it was meeting its commitments to prevent the spread of weapons of mass destruction.

A U.S. military team helping to decommission a former Soviet biological weapons factory in Stepnogorsk, Kazakhstan, found anthrax spores in a pipe last week, U.S. officials said.

YEMEN

Honey dealers based in Yemen who are named in a U.S. list of people and companies suspected of links with terrorists denied Monday they were fronts for the al Qaeda organization of terror suspect Osama bin Laden.

At Al-Nur Honey Press Shops, employee Nabil al-Hattar expressed surprise that the business had figured among 39 people and organizations that Washington suspects of having links with terrorism.

MEXICO

The suspects in the attacks in the United States should be tried before a world court, President Vicente Fox of Mexico said in Madrid on Monday.

Fox said he would present this proposal to a session of the Asian Pacific Economic Cooperation Forum in Shanghai this weekend.

WASHINGTON

President Bush welcomed Italy's prime minister, Silvio Berlusconi, to the White House on Monday by praising the Italian government's efforts to disrupt the financial networks of terrorist organizations.

"I'm pleased that we're sharing intelligence," Bush said. "I'm pleased that the prime minister understands that al Qaeda has cells all around the world and he's more than willing to work with us to disrupt those cells, to bring people to justice."

Berlusconi, who said his government would provide moral and material support, said he was in Washington "to express our great pain and sadness for the attack on September the 11th."

<http://www.miami.com/herald/content/news/national/digdocs/002330.htm>

Survey: Hospitals Not Ready for Large Bio Attack

Tuesday, October 16, 2001

CHICAGO — American hospitals are not prepared to handle a widespread biological disaster, researchers reported Monday. A survey of 30 hospitals in four states and Washington, D.C., found the institutions unequipped — disturbing news for a country gripped by fears of additional anthrax attacks.

Just one of the hospitals in the study had medicine stockpiled to fight a bioterror attack, emergency-room workers said. Twenty-six hospitals reported they could handle only 10 to 15 victims simultaneously, and 22 said they were not ready for a chemical or nuclear attack at all.

Staff at only seven hospitals had any training to care for casualties resulting from bioterrorism.

"If 'fully prepared' means you can handle 10 times your normal load, we'll never be fully prepared," said Dr. Stephen Cantrill, associate director of emergency medicine at Denver Health Medical Center.

A hopeful sign might be the quick response by hospitals, suggesting preparedness was improving, to the isolated anthrax cases over the past couple of weeks, exhibiting "a great deal of heightened awareness" resulting from the Sept. 11 attacks, Cantrill said.

The results of the year-long study by Dr. Janet Williams and colleagues at West Virginia University were unveiled at the American College of Emergency Physicians' annual meeting in Chicago. The findings probably apply to hospitals nationwide, attending experts said.

"It's evident that hospital personnel keenly recognize a need for training," Williams said, though lack of time, available courses and funding were cited as obstacles.

The four-day convention's agenda was amended after the Sept. 11 attacks to include sessions addressing terrorism, but it was not the first time the meeting had addressed the issue. ACEP represents more than 20,000 doctors who specialize in emergency medicine and who consider themselves "the front line" in treating victims of a mass attack. Doctors who attended the meetings said they used to feel like they were overreacting in calling for better disaster preparations.

"We've been talking about this for years, and people in general have not been interested," said Dr. Jonathan Burstein of Harvard Medical School, a member of the college's task force on weapons of mass destruction. "Now, of course, everyone's coming to us and saying, 'Well, gee, we understand this is a problem.'"

Since Sept. 11, most hospitals nationwide have begun to improve their ability to quickly diagnose anthrax, said Dr. Michael Carius, ACEP's president, in an interview. The simplest test involves merely swabbing fluid or discharge from the nose and examining it under a microscope. But in many cases, health care workers need to be trained to identify magnified anthrax spores, Carius said.

"It's something that obviously we weren't testing for on a regular basis," Carius said.

More than 250 people crowded a room at the meeting Monday for a slide show on how to identify skin rashes from anthrax and other potential biological and chemical weapons.

One graphic photograph showed a patient's forearm with a large, black ulcerated sore — typical of cutaneous anthrax poisoning, instructor Dr. Kristi Koenig told the audience.

Anthrax means "coal" in Greek, and refers to the telltale color of such lesions, said Koenig, national director of an emergency management group at the Veterans Health Administration in Washington, D.C. Dr. Eric Mailman, an emergency room physician at Swedish Hospital in Seattle, called the presentation an excellent crash-course in cases he, like most of the audience, had never seen.

Already, Mailman said, worried patients were showing up in his emergency room with colds and flu they think might be anthrax "and we're not even deep into the cold and flu season."

Such fears show the public needs better training, too, Carius said.

If those with run-of-the-mill symptoms continue seeking emergency care, "we are going to inundate the medical system within the next few months," Carius said.

The study sampled 22 rural hospitals and eight urban hospitals in Washington, D.C., Pennsylvania, Maryland, Virginia and West Virginia. Results also will be published in the November issue of group's medical journal, *Annals of Emergency Medicine*.

<http://www.foxnews.com/story/0,2933,36550,00.html>

Published Tuesday, October 16, 2001

Bionic systems researched as bioterrorism defense

BY ROBERT S. BOYD

Herald Washington Bureau

WASHINGTON -- Seeking better defenses against biological terrorism, the Defense Department is pushing research into new devices that combine inanimate materials with living tissues.

The idea is to exploit the abilities that all living creatures -- from bacteria to humans -- have developed to protect themselves over billions of years of evolution.

"We are learning from nature and trying to imitate it," said Michael Goldblatt, director of the Defense Sciences Office in the Defense Advanced Research Projects Agency, or DARPA.

Such bionic machines -- hybrid systems that marry the biological and physical worlds -- could also detect and clean up toxic wastes and help paralyzed people live better, among other useful tasks.

Practical applications of most of these far-out systems are years away. But since the challenge of biological warfare, disease and environmental pollution are likely to be unending, the government is financing such work at scores of universities and private laboratories.

DARPA's "Tissue-Based Biosensor" program, for example, is testing whether an animal's brain cells can be linked to computer chips to sense poisonous chemicals. The goal is to "use living cells and tissues to detect that there's a threat in the environment," said Jane Alexander, the agency's deputy director.

Researchers compare this technology to putting a canary in a coal mine to warn of deadly gas.

"If cells could be engineered to respond to the presence of dangerous chemicals, they could be used directly in a canary-like fashion," said Eric Eisenstadt, a DARPA scientist.

In one such project at the University of Southern California's Center for Neural Engineering in Los Angeles, Michel Baudry and colleagues attach silicon chips to neurons from a rat's hippocampus, the part of the brain where memories are preserved. The chips pick up tiny changes in the electronic signals coming from the neurons when they perceive a chemical or drug. A human observer can detect the changes and issue a warning.

If this system can be perfected, the biosensor will be able to "test combat fields for traces of neurotoxic chemicals, one of the most feared military weapons," said Ghassan Golmieh, a biomedical engineer working on Baudry's project.

Theoretically, such chips could also be placed in building air ducts to detect dangerous chemicals or even carried by soldiers into battle.

Work on animate-inanimate hybrids is extensive, including these projects:

NASA and the Department of Energy are financing a project to pack millions of bacteria on a silicon chip to detect toxins that could sicken astronauts in a spaceship or pollute areas around nuclear plants.

Christine Keating, a biochemist at Penn State University in University Park, and her colleagues have created microscopic metallic "bar codes," coated with biological molecules, that can detect alien substances in blood or other bodily fluids

The National Institutes of Health are supporting a project at Arizona State University in Tempe to develop a robotic arm that a paralyzed patient can control through brain waves. Electrodes implanted in the patient's brain "will provide a control signal for an artificial arm to make natural movements with little effort by the subject," said Andrew Schwartz, an Arizona State professor of bioengineering.

In a DARPA-financed project at Duke University in Durham, N.C., Miguel Nicolelis is building "neurochips" containing as many as 1,000 chimpanzee brain cells. The chips will record the signals required to control a robotic arm.

Researchers also are seeking ways for humans and robots to cooperate in performing tasks that neither men nor machines can do as well separately.

In the days after the World Trade Center collapse in New York, shoe-box sized robots, tethered to human controllers, searched crevices in the rubble that were too small for people to enter. The little robots helped find five victims, according to the Center for Robot-Assisted Search and Rescue at Stewart Air Force Base in Newburgh, N.Y.

<http://www.miami.com/herald/content/news/national/digdocs/051505.htm>

Determining Presence of Anthrax Can Be Difficult

Early Detection Hindered By Tests, Sample Types

By Rick Weiss

Washington Post Staff Writer

Tuesday, October 16, 2001; Page A08

The bacterium that causes anthrax is a hearty, fast-growing microbe that is relatively easy to isolate and identify from the blood and tissues of people who have fallen ill with the disease. But the bacterium can be difficult to detect at the earliest stages of exposure or infection. And some of the tests that have been drafted into use to offer speedy

diagnoses during the current spate of apparent acts of bioterror were not designed for the purposes to which they are being put.

Those facts help explain why some of the anthrax test results coming out in recent days have been less than conclusive and -- in the case of the test on a piece of paper sent from Malaysia to a Microsoft Corp. office in Nevada -- apparently wrong.

"The big problem is, we don't have rapid diagnostic capacity for use with human specimens," said Jerome Hauer, the former director of New York City's Office of Emergency Management.

When patients grow ill from an infection with *Bacillus anthracis*, the bacterium that causes anthrax, the microbe multiplies quickly in the body. If the rod-shaped microbes have entered the body through the lungs -- as in the case of Bob Stevens, the Floridian who died of the disease 10 days ago -- they accumulate in the blood and spinal fluid, where they can be seen easily under a microscope. They have a characteristic shape -- large rectangles, connected in twos, threes and fours -- and if a standard microbiological dye is applied, they stain bright purple.

Similarly, if a person has acquired cutaneous anthrax, the variety of the disease that affected an NBC employee in New York, even a drop of fluid taken from one of the resulting skin ulcers will reveal the boxcar-like microbes on a microscope slide.

To confirm the diagnosis, these blood, spinal fluid or pus samples are placed on a laboratory dish filled with a nutrient gel, and usually within a day a characteristic gray colony of quickly dividing bacteria becomes visible to the naked eye. Follow-up biochemical and genetic tests, which take about a day, can confirm the obvious diagnosis.

But testing is much trickier in people who have just been exposed, and even harder in samples such as the mysterious powders that have been arriving with alarming frequency in the nation's mailrooms of late.

The nasal swab tests that have been conducted now on about 2,000 Americans who may have been exposed to anthrax-contaminated powders are a crude measure of exposure at best. The idea is to catch a few of the microbes in the nose (if any are there), wipe the swab on a culture dish, and see if any anthrax bugs grow.

If *B. anthracis* does grow, then clearly the person was exposed to the microbe. Doctors don't know what percentage of the population is walking around with *B. anthracis* in their noses because no one has ever done a large, baseline study. But they presume the percentage is extremely low, so anyone testing positive has probably had a recent exposure.

If the test is negative, however, it could mean either of two things: There is no *B. anthracis* in the nose, or none was effectively picked up by the swab. So a negative test does not guarantee that the person was not exposed.

"These are not tests that are in any way designed to guide treatment decisions," said David Fleming, deputy director of the Centers for Disease Control and Prevention in Atlanta. Rather, he said, they were designed to provide crude epidemiological information about exposure levels in a population as a whole.

Another method that looks for recent exposure to the anthrax bacterium is an antibody test, which looks in the blood for the presence of antibodies directed specifically against *B. anthracis*. It can take a few weeks after exposure for the body to generate antibodies, so a negative test soon after a suspected exposure does not mean that no exposure occurred.

Moreover, a positive antibody test by itself does not mean there's been a recent exposure, because antibodies can last for years in the blood. So antibodies detected in a single test may simply be left over from a brief exposure years ago -- one that was successfully fought off.

That means doctors must order a second test a few weeks after the first blood is drawn. An increase in the concentration of *B. anthracis* antibodies in the blood would indicate that the body is building up an antibody army, meaning that the exposure was fairly recent.

Even then the results may be difficult to interpret, said Fleming of the CDC. How much of an increase is needed to count as a real increase, he asked, and how much may just be due to normal variation? No one knows for sure.

Tests on nonbiological specimens, such as powders or, as in the Nevada case, a page from a pornographic magazine, can be the most difficult of all to conduct accurately. Contaminants often interfere with such tests, experts said, especially in the quick-and-dirty field tests like those used yesterday to test a sample of powder sent to the office of Senate Majority Leader Thomas A. Daschle (D-S.D.).

Those field tests use cards that are coated with *B. anthracis* antibodies. The suspect substance is dusted over the card, and if the microbes are present they attach themselves to the antibodies, like locks and keys. A chemical detection agent turns a specific color if such binding has taken place, offering a presumptive positive result.

But field tests are imperfect and are designed to err on the side of false positives, since the goal is to make sure that nothing is missed. Followup tests -- including tests for *B. anthracis* DNA, which take a day or more -- are more specific.

<http://www.washingtonpost.com/wp-dyn/articles/A63726-2001Oct15.html>

New York Times
October 16, 2001

In Shift, Officials Look Into Possibility Anthrax Cases Have Bin Laden Ties

By David Johnston

WASHINGTON, Oct. 15 — Federal authorities say they are now investigating the possibility that followers of Osama bin Laden were behind the anthrax cases around the nation.

This represents a significant shift in the thinking of investigators, who had earlier speculated that the initial case in Florida was an isolated criminal act unconnected with the Sept. 11 attacks.

The shift of the investigation is based not on definitive proof but on circumstantial information drawn from cases diagnosed in recent days, like the postmarks on the letters known to contain anthrax. Each one was sent from places near where some of the terrorists involved in the Sept. 11 attacks lived or visited.

Two letters, the one sent to the Washington office of the Senate majority leader, Tom Daschle, and another to NBC in New York City, were postmarked from Trenton. Several hijackers had lived in New Jersey before boarding the United Airlines flight from Newark that slammed into a field in rural Pennsylvania.

A third letter, from Malaysia, was sent to a Microsoft office in Nevada. Khalid Almihdhar, the pilot who was aboard the American Airlines flight that crashed into the Pentagon, was spotted on a surveillance videotape in Kuala Lumpur, the capital of Malaysia, in January 2000. He was accompanied to a meeting of suspected members of Mr. bin Laden's network, Al Qaeda, by an unidentified man who later became a suspect in the October 2000 bombing of the Navy destroyer Cole.

Tonight, the case grew after officials said that a child of an ABC News employee in New York had tested positive for anthrax. It was not immediately clear how the child was infected or whether a letter had been found that could be tested for the spores that cause the disease.

Investigators also have not found the letter or letters believed to have that carried the substances causing the Florida anthrax cases, which so far have centered on a building in Boca Raton, Fla., occupied by American Media Inc., a publisher of supermarket tabloids. Several hijackers lived nearby, among them Mohamed Atta, who has been identified by the authorities as a ringleader of the plot.

Until late last week, F.B.I. investigators, struggling to keep up with the investigation into the Sept. 11 attacks and the huge preventive effort to head off further violence, said the incident appeared to be confined to the American Media office.

Those investigators said a careful reconstruction of mail-handling procedures at American Media suggested that the most likely explanation was that the anthrax contamination was a deliberate act committed by an individual with a grudge or other motive unrelated to terrorism.

But the additional cases in New York, Nevada and Washington have jolted the bureau, altering the investigative landscape and raising the possibility that Americans are for the first time experiencing a continuing episode of bioterrorism whose full extent is not yet known.

Some counterterrorism officials have complained that the bureau was slow to accept the possibility of terrorism.

F.B.I. officials defended their actions, saying they had responded to nearly 3,000 anthrax-related threats since Sept. 11, burdening investigators with a flood of hoaxes, each of which has been evaluated.

Attorney General John Ashcroft and the director of the F.B.I., Robert S. Mueller III, are said by officials to have demanded an explanation of actions by agents in New York who did not obtain an immediate analysis of the powder sent to NBC after an assistant to Tom Brokaw tested positive for the disease.

Investigators seemed to have stumbled in recent days trying to keep up with the swirl of reports of new exposure cases and trying to investigate a disease that few agents understand. The case is even more complicated because field tests may show positive results for anthrax only to be contradicted later by more elaborate tests.

Mr. Ashcroft, who has taken an aggressive role in the bureau's investigation, is said to have demanded, along with Mr. Mueller, a full investigation into whether terrorism is behind the anthrax incidents. Aides to both said that neither one had been critical of the performance of agents.

Officials, in law enforcement and intelligence agencies, said today that the government still lacks concrete evidence to explain any of the cases, nor do they have intelligence or proof that Al Qaeda are behind the exposure cases. It is still possible, the official said, that investigators will uncover other motives and perpetrators.

"The bottom line is we don't know," the government official said. "You can't rule it out. But there isn't any information that would substantiate a bin Laden or Al Qaeda role. There is no credible information to suggest foreign involvement at this point."

Today, Condoleezza Rice, the national security adviser, added her comments to those of President Bush, Vice President Dick Cheney and Mr. Ashcroft, who have said in recent days that they have suspicions but little evidence. "There isn't any hard evidence of a link of any kind," she said. "But we don't want to be blind to that link. It would be hard to be blind to that link, given what happened on Sept. 11. But there isn't any hard evidence at this point."

Other letters have also been investigated. A second letter to NBC and a letter to The New York Times were postmarked from St. Petersburg, Fla. Officials said that neither letter contained anthrax but that they were being investigated because of threatening language they contained.

The officials said that they had not yet determined the strain of anthrax found in the letter sent to NBC and to the office of Mr. Daschle. They said the anthrax that killed a photo editor in Florida was a naturally occurring strain that had not been developed in a laboratory for use as a weapon.

In Newark, F.B.I. officials said the letter to Mr. Daschle had been postmarked in Trenton, but they would provide no further details. Earlier, other officials said that the letter to Mr. Brokaw had also been sent from Trenton. A postal official said the letter to Mr. Brokaw was sent in a prestamped first-class envelope, a type sold in postal vending machines.

One bureau official said investigators were trying track down the source of the letters, but their task was complicated because the Trenton processing center handles mail from 46 post offices and nearly 300 mailboxes in central and southern New Jersey.

F.B.I. agents were reviewing videotapes from the security cameras in many post offices lobbies, hoping to identify the person who mailed the letters. But because there are no such cameras at street mailboxes, the possibility that a picture of the sender was captured is unlikely.

New York Times

October 16, 2001

Pg. 1

News Analysis

Information, Please

By Todd S. Purdum

WASHINGTON, Oct. 15 — For the Bush administration, a week of bombing and missile attacks on Afghanistan have proceeded with dispatch and, at least so far, success. But the war at home has been much harder.

A string of anthrax- tainted letters — and a nationwide wave of suspicious packages, spurious threats and false alarms — has created public alarm and left public officials grappling to explain the invisible menace of biology and its links, if any, to the attacks of Sept. 11. The results have been uneven.

Fear has been fueled by the fitful and sometimes contradictory flow of information from the government and by the sometimes sloppy and slow response on the ground.

In the immediate aftermath of Sept. 11, it seemed as if the government might be withholding information from the public to preserve investigative or diplomatic secrets. In recent days, as the anthrax incidents have ballooned, it has seemed all too apparent that the government itself has not had command of the facts.

In Washington, top law enforcement and health officials until today played down possible links between the anthrax cases and Osama bin Laden's terror network. Then, as a new letter appeared in the office of the Senate majority leader, they abruptly acknowledged that such a link is now at the center of their investigation into who is behind the anthrax attacks.

Meanwhile, the effort to collect and identify the tainted letters and the strains of anthrax that contaminated them has been maddeningly slow. Public health officials around the country have complained about a lack of centralized, accurate information.

There has been no single, coordinated effort by officials to provide a daily televised update like those at the Pentagon, where Defense Secretary Donald H. Rumsfeld offers crisp, if controlled, summations of the latest action in the air war in Afghanistan.

Tom Ridge, the director of the new Office of Homeland Security, has been publicly invisible since his swearing-in last week.

At his morning briefing for reporters today, the White House press secretary, Ari Fleischer, was asked if anthrax cases in Florida and New York were "acts of terrorism, regardless of who did it," and his answer was firm: "I'm not going to engage in guesswork."

Hours later, after a new batch of anthrax was found in the letter delivered to the office of Senator Tom Daschle, Democrat of South Dakota and the majority leader, Mr. Fleischer's boss did some very public guesswork of his own when asked if there were links between Mr. bin Laden and the anthrax attacks.

"I wouldn't put it past him," President Bush said, "but we don't have hard evidence yet."

In the 10 days since the first anthrax case was confirmed in South Florida, the flow of information made public by the federal government has been similarly inconsistent, confusing and even wrong. Tommy G. Thompson, the secretary of health and human services, initially went so far as to suggest that Robert Stevens, the tabloid photo editor who became the first anthrax victim identified in Florida — and the only one to die — might have contracted the disease while drinking from a tainted stream.

The frequent lack of specificity in the government's warnings and information has also heightened public fear. On Thursday, the Justice Department warned of imminent terrorist attacks, as soon as the weekend, but said it had no information about where the new threats might come. They did not link those warnings to anthrax.

"We have taken into account that this is a very scary topic for Americans," said the Justice Department's spokeswoman, Mindy Tucker, "and we have taken into account how do we best and most responsibly convey this information."

Today, even as Mr. Daschle announced on live television the unsettling news that workers in his office across from the Capitol had opened a package containing a "suspicious substance" that twice tested positive for anthrax, he insisted, "We can't go into the details because this is an ongoing investigation."

In an administration renowned for its tight control of information, balancing the effort to reassure a fearful public with the need for quick warnings about health risks mirrors the White House's larger dilemma, as it encourages the public to resume normal life while remaining on high alert for more terrorist attacks.

Officials have tried to balance the demands of quick dissemination of information about a deadly illness with the painstaking requirements of criminal investigations from Florida to New York to Nevada to Capitol Hill. But the sheer range of views and voices has not always been reassuring.

Administration officials say they have tried to coordinate information from multiple agencies as best they can, in as many as three or four daily information-sharing conference calls that include officials from the National Security Council, the Centers for Disease Control and Prevention and the Federal Bureau of Investigation. They say they have sought to release information about confirmed anthrax cases as quickly as possible, even when that means acknowledging how much they still do not know.

Amy Smithson, an expert on bioterrorism at the Henry L. Stimson Center, a nonprofit research group here, said:

"Part of the problem here is that when the discussions first turned, in the days after the Sept. 11 attack, to the prospects for chemical and biological terrorism, senior voices from Washington did not get out there and put this in a context for the American public."

Mr. Fleischer said the administration had tried to work cooperatively with local and federal officials from the first case in Florida, with local officials typically holding the first briefings on their home turf, followed by officials in Washington. He said officials had tried to strike a balance between getting information out quickly and making sure it was accurate.

"If we have evidence, we're going to reveal it," Mr. Fleischer said of any links between the anthrax incidents and terrorism.

Officials might take a page from Mr. Rumsfeld, who, when asked today about the package in Mr. Daschle's office, replied: "I really do tend not to talk about things that I don't know. I don't know if it's been validated, for example, so why would I opine on it?"

Poll Shows Anthrax Sparks Broad Concern

Respondents Split on Link to Terrorism

By Richard Morin and Claudia Deane, Washington Post Staff Writers

Most Americans express broad concern about the discovery of anthrax in five locations around the country. But the public remains sharply divided on whether these incidents signal the start of a new terrorist offensive or are merely isolated events, according to a new Washington Post-ABC News survey.

The poll found that nearly two in three – 65 percent – said they were at least somewhat concerned about reports that letters containing anthrax bacteria had been sent through the mail. And slightly more than half said they feared that they, a family member or a personal friend could become a victim of anthrax.

"It's concerning me very much," said Joseph Mizrachi, 22, a computer company executive who lives in North Miami Beach and was interviewed in the Post-ABC poll. "When I open the mail, I'm much more cautious. When I go out, I'm much more cautious. I look around to see if there are any weird substances."

Despite widespread concern over anthrax, the large majority of Americans – 85 percent – said they were satisfied with the way the government was handling the situation. And seven in 10 said they were confident that authorities could deal effectively with a large-scale biological or chemical attack.

"I think they've done a pretty good job so far," said Naomi Byrne, 69, of Arkansas City, Kan. "They went right to tracking down the cases of anthrax." The anthrax scares have not shaken the public's confidence in President Bush as more than nine in 10 said they approved of the way Bush is handling the campaign against terrorism, unchanged in the past week.

"I tell you, I did not vote for Bush, but he has really socked me how he's handled this," said Kathy Jones, 42, who lives in Horn Lake, Miss. "I think he's done a great job. Right now, I think he's doing all he can."

Concern about another major terrorist attack remained unchanged in the wake of widespread publicity over the anthrax incidents. Slightly more than three in four said they were at least somewhat concerned about another major terrorist strike, a proportion that has remained roughly unchanged in recent weeks.

"I feel about the same, and I'm not jumping to conclusions," said Mary Lozowicki, 31, who works for a legal publishing company and lives in Philadelphia. "I'm kind of taking it day by day."

A total of 509 randomly selected adults were interviewed Monday night for the survey. The margin of sampling error for the overall results is plus or minus 4 percentage points. The practical difficulties of doing a survey in a single night represent an additional potential source of error.

The survey suggests that Americans may be as perplexed as authorities appear to be about the source of anthrax-tainted letters as well as the motives of the individuals or groups that sent them.

Nearly half – 45 percent – said they believed the letters were merely isolated incidents, while 50 percent said they marked the start of "an ongoing series of cases that could affect large numbers of people."

"I think it's isolated," said Peter Monitello, 61, a retiree living in Elmira, N.Y. "It's a shame that the post office has to put up with this stuff." He doubts that the incidents are the work of Osama bin Laden's international terrorist network: "They would do it in a large area, not send a few letters out," he said. Besides, he said, there are more than enough "nuts" in this country who might try to take advantage of the situation.

Gregory Voss, 48, of Miami Beach, disagrees. "Sure, we've got a lot of crazy people. But it's not that easy to get ahold of this stuff. These are terrorists with connections."

Voss was laid off just last week from his job as a systems administrator for a cruise line that had been hurt by the tourist slump following Sept. 11.

"I don't think we have seen anything of what's to come," said Voss, a single father with two teenagers. "I'm very scared. . . . Good luck to all of us."

Women and Democrats surveyed were far more concerned about the anthrax incidents than men. A majority of women – 61 percent – said they feared that they or someone they knew would be the victim of an anthrax attack, compared to 47 percent of all men. Sixty percent of women interviewed said they worried that these incidents marked the start of a major terrorist offensive, a view shared by 39 percent of all men.

Overall, the survey found that 54 percent said they worried that they or someone they knew might be the victim of an anthrax attack – including one in four who said they worried "a great deal" about the possibility. But 45 percent did not feel personally threatened.

Those polled said the news media have acted responsibly in their coverage of the anthrax incidents. Sixty-two percent said the media have not exaggerated the story, while 34 percent said they have.

Los Angeles Times
October 16, 2001

U.S. Needs A Contingency Plan For Pakistan's Nuclear Arsenal

By Jon B. Wolfsthal

There is growing concern, and evidence for concern, that the instability in Afghanistan could quickly spread to neighboring Pakistan and undermine the security of that country's nuclear arsenal. Of all of the negative consequences this turn of events might bring, none would be more dangerous and catastrophic than nuclear weapons falling into the hands of the Taliban or Al Qaeda.

Until Sept. 11, the Pakistani regime and the Taliban were very close, and there have been reports out of Pakistan that military officers assisted the Taliban in preparing for U.S. airstrikes—counter to direct orders from Pakistan's leader, Gen. Pervez Musharraf. Top military officers, including the head of Pakistan's intelligence services, recently have been sacked, reportedly for their pro-Taliban views.

Violence in the streets, while not widespread beyond the border area with Afghanistan, speaks to the tensions inside Pakistan. A Newsweek poll this week found that 83% of Pakistanis polled sympathized with the Taliban in the current conflict. It is possible, therefore, that Pakistani forces assigned to protect Pakistan's nuclear forces could be compromised.

This is surely the nightmare scenario, and immediate steps should be taken to prevent such a turn of events from coming to pass.

Pakistan possesses enough nuclear material for close to 40 nuclear weapons, if not more. The U.S., however, knows very little about how this material is stored, what security measures are applied to its protection, how personnel with access to nuclear weapons and materials are screened and where the material is located.

Pakistan has a responsibility to ensure that its assets are adequately protected and to convince other countries that this responsibility is taken seriously. Other countries and organizations have a responsibility to help Pakistan keep these materials secure, without in any way assisting that country in modernizing or deploying its nuclear capability. The International Atomic Energy Agency, or IAEA, a U.N.-affiliated organization, has decades of experience in developing and verifying security measures associated with nuclear weapons-usable materials. The agency routinely assists countries in ensuring that their peaceful nuclear programs are adequately protected. Despite its lack of membership in the Nuclear Nonproliferation Treaty, Pakistan could receive advice and assistance from the IAEA. In addition, the U.S. and other IAEA members have extensive experience—publicly available—on how to protect nuclear materials and on how to ensure that weapons-usable uranium or plutonium cannot be diverted without being detected. States could make equipment available to Pakistan that did not directly assist in its development or control of nuclear weapons, such as alarm systems and polygraph equipment for personnel screening. In addition, corporations and nongovernmental organizations with significant expertise in nuclear matters could provide Pakistan with assistance on security.

Pakistan has resisted any outside attempts to help secure its nuclear materials. There is the risk that receiving assistance for its nuclear program from outside powers might further destabilize the current situation. Yet Pakistan has already made its strategic decision to throw in with the West against terrorism. Taking this additional step, while difficult, may be part of the price it pays to reestablish itself as a responsible global partner.

If Pakistan does not agree to these types of programs, the U.S. should begin to work immediately on contingency plans should the Islamabad regime lose control over its nuclear arsenal. These plans should include the ability to rapidly deploy forces to Pakistan to find and regain control of any lost nuclear materials and, only as a last option in a crisis, remove them from Pakistan to a secure location.

These steps might seem extreme. Yet when faced with the real possibility of losing control of nuclear weapons to the types of organizations capable of the destruction seen Sept. 11, they could be considered realistic and even prudent. The consequences of not being prepared to act are too great for us to imagine, even with our new ability to imagine the horrible.

Jon B. Wolfsthal is an associate in the Carnegie Endowment's nonproliferation program and a former nonproliferation policy advisor to the U.S. Department of Energy.

New York Times
October 16, 2001

Responding To Anthrax Attacks

Discovery that a child who visited ABC News has contracted the cutaneous form of anthrax and tests showing that the office of the Senate majority leader, Tom Daschle, has received anthrax-laced mail bearing the same Trenton postmark and date as an anthrax-contaminated letter sent to NBC News in New York are reason for increased concern about biological terrorism. The spate of attacks is still limited and the number of people actually coming down with illness quite small. However, the incidents have revealed weaknesses in the public health system that need to be fixed if the nation is to handle even bigger biological attacks in the future.

The first line of defense — namely the doctors who first see patients showing up with symptoms of illness — performed better than expected in Florida and with mixed results in New York. Anthrax is so rare in this country that most doctors have never seen a case, and it was widely assumed that most would be unable to identify the first victims of an anthrax attack should it occur. But in Florida, an alert infectious-disease specialist became suspicious and ordered laboratory tests that confirmed pulmonary anthrax in a tabloid newspaper's photo editor. In New York, by contrast, a case of cutaneous anthrax in an NBC employee was not firmly diagnosed until a week and a half after her symptoms first appeared, and the cutaneous anthrax in the ABC child was initially treated as an infected spider bite until the mother pushed for more testing.

Given the intense attention now being paid to anthrax and terrorism, it is increasingly unlikely that doctors will fail to think of it when making diagnoses. But there are other potential bioterrorism agents besides anthrax, and authorities will need to redouble their efforts to make sure doctors are aware of the symptoms. It has been all too common in recent years for physicians to treat microbial infections with broad-spectrum antibiotics without bothering to identify the particular germ involved. In the case of a bioterrorism agent, that could prove fatal if the wrong antibiotic is used or is prescribed for too short a period.

The first tests of the nation's medical laboratories also had mixed results. In Florida, laboratory confirmation of anthrax spores in humans and in environmental samples came relatively quickly, aided in part by the fact that Florida laboratory chiefs had just returned from special bioterrorism training by the Federal Centers for Disease Control. But in New York, it seemed to take an unduly long time to confirm that anthrax had indeed been mailed to NBC, partly because tests at the Centers for Disease Control were slowed by a power failure, revealing a surprising lack of backup capability at a lab that is supposedly the final word on these matters. Laboratories throughout the country will need to be upgraded to provide prompt results.

The public health system has shown signs of strain in handling even the relatively small-scale incidents in which anthrax was mailed to addresses in Florida, New York, Washington, D.C., and Reno, Nev. There was confusion in Florida as to which authorities were in charge of the investigation. A police officer and two lab technicians in New York inadvertently exposed themselves to anthrax while handling the contaminated letter from NBC, underscoring the need for better training of both health and law enforcement personnel. Health authorities in Florida were able to take nose swabs of employees at the publishing company hit by anthrax, but it was left to the company to arrange the blood antibody tests that suggested five other employees had been exposed to anthrax spores. And experts around the country complain that health authorities are putting out too little information on test results and clinical findings for them to assess how well the incidents are being handled. Meanwhile, panicky citizens have hoarded so much Cipro, the antibiotic typically recommended to treat anthrax, that supplies have run low at many pharmacies and medical institutions, and false reports and hoaxes have taxed the capacity of laboratories to test samples.

The federal government is now moving to increase the national stockpile of antibiotics for treating anthrax and other biological agents so that 12 million Americans could be treated for 60 days each should a much larger incident occur. It has also ordered additional supplies of smallpox vaccine to increase the small stockpile now in hand. Those are sensible responses. But the entire public health system needs to be bolstered to create a safety net strong enough to protect the nation from a threat whose dimensions are difficult to anticipate.

Homeland Security: Need to Consider VA's Role in Strengthening Federal Preparedness

by Cynthia A. Bascetta, director, health care-veterans' health and benefits issues, before the House Committee on Veterans' Affairs.

GAO-02-145T, October 15. (2 p.m.)

<http://www.gao.gov/cgi-bin/getrpt?gao-02-145t>

Soviet chemical weapons store may be source

The Scotsman - United Kingdom; Oct 15, 2001

BY DAMIEN MCELROY IN TASHKENT, UZBEKISTAN

INVESTIGATIONS into the source of anthrax in the United States are focusing on a storage dump in the Aral Sea, in northern Uzbekistan, where barrels left over from Soviet experiments are buried in a shallow pit.

Vozroshdeniye (Renaissance) Island was used by the Soviet Union as its main site for experiments with anthrax as a weapon in biological warfare.

Congressional inquiries into the outbreaks of anthrax across the United States have heard that extremists linked to Osama bin Laden could easily obtain anthrax from the island, which is now split between Uzbekistan and Kazakhstan.

Congressman Christopher Shays, chairman of the National Security sub-committee, said the former Soviet facilities are possible source of the anthrax that has been posted across the United States. He said: "It just sits there in very hard form. Tons of it."

More than ten years of neglect since the collapse of the Soviet Union has drawn increasing concern in Washington over the vulnerability of the facility. After Soviet troops and scientists withdrew, both governments virtually abandoned the island, although it lies just 600 miles north of bin Laden's bases in Afghanistan.

Colin Powell, the Secretary of State, signed an agreement with the government of Uzbekistan in June for American scientists to help eliminate stores of the chemical on the island.

The dilapidated complex of more than 80 buildings on Renaissance Island will be demolished and "residual" containers of anthrax spores will be destroyed. The US programme will be launched by the end of this year.

Diplomats have tried to play down the possibility that lieutenants of bin Laden may have smuggled anthrax off the island.

The American embassy in Kazakhstan last week attempted to allay fears that anthrax spores had leaked out of the region.

"The embassy would like to reiterate that there is no possible linkage between the Kazakhstan facility and recent anthrax cases in the United States of America," a spokesman said.

But security on Renaissance Island is known to be so lax that scientists working around the Aral Sea believe that terrorists would only need a boat and a minimal knowledge of how to handle anthrax spores to take material off the island.

Getting to the island has become increasingly easy as the Aral Sea has shrunk by half in the past decade. A land bridge linking Renaissance with the mainland has also been identified as a point of vulnerability.

Large numbers of animals brought to the island for Soviet experiments are now roaming wild. Fears that rats could now reach the mainland were ignited last year by reports that a dozen people living near the Aral Sea had been treated for anthrax at a hospital in Kazakhstan.

<http://globalarchive.ft.com/globalarchive/article.html?id=011015009050&query=chemical+weapons>

Miami Herald

October 15, 2001

'The Poor Man's Atom Bomb'

By Arvind M. Dhople

Now the focus of many Americans has shifted from hijackers taking commercial jetliners on suicide flights to the threat of biological warfare. Nothing in the realm of natural or man-made disasters rivals the complex problems of response following a bio-weapons attack against a civilian population. The consequence would be an epidemic, and we in the United States have had little experience in coping with epidemics.

Last February, former U.S. Sens. Gary Hart and Warren Rudman, co-chairs of the U.S. Commission on National Security in the 21st Century, singled out bio-weapons as perhaps the greatest threat that the United States might face in the first 25 years of this century.

In 1993, the Office of Technology Assessment estimated that 100 kilograms of anthrax released upwind of a large American city could cause between 130,000 and three million deaths, depending on weather and other variables. This degree of carnage is in the same range as what is forecast for a hydrogen bomb. (Ten grams of anthrax can produce as many casualties as a ton of a chemical nerve agent.) The federal Centers for Disease Control and Prevention estimates that such a bioterrorist attack would carry an economic burden of \$26.2 billion per 100,000 people exposed to the spores.

Bioterrorism also can be directed against water and food. An example is the contamination of salad bars with salmonella in Dalles, Ore., in 1984, by followers of the cult leader Baghwan Sri Rajneesh. One major reason why biological agents are more likely to be used by terrorist groups than belligerent nations is because producing and effectively spreading biological weapons requires relatively little sophisticated technology. A biological weapon can be produced with the same equipment as for the manufacture of an ordinary vaccine; it can be readily housed in a small building.

The technologies needed to build biological weapons are available in the open literature and on the Internet. For these reasons, biological weapons have been called "the poor man's atom bomb." The insidious manner by which a biological attack would unfold is itself alarming.

Individuals affected by agents of biological terrorism only slowly develop symptoms of disease after exposure and could escape diagnosis for many days. Also, because infectious diseases often begin with mild symptoms and manifest their true character only with time, an illness caused by a bioterrorism agent initially may be misinterpreted as a less-severe natural infection.

Infected persons who continued to move about in the population during the early, mild stage of illness could spread the disease. Most likely, we would know that something happened only when people started appearing in the emergency rooms and doctors' offices with strange maladies.

It is very difficult to guess how the public might respond to a fast-moving epidemic. The status of our national preparations against bioterrorism is difficult to summarize. The diverse initiatives taken by different agencies of government have not been well coordinated, even within the agencies themselves.

Before Sept. 11, there was no comprehensive national plan or an agreed strategy for addressing biological weapons. Particularly serious are the vulnerabilities in our health-care system and our public-health infrastructure. Hospitals are under serious pressure today. The lack of elasticity is also evident in the pharmaceutical field, as companies have focused on just-in-time production and delivery. Ventilators to aid respiration are in short supply.

However, the most intractable problem for hospitals is likely to be staffing. More nurses are retiring than are being recruited. The public-health system is in even worse shape because public health is a long-neglected stepchild to modern medicine. There really is no comprehensive public-health "system" for dealing with infectious diseases in this country, but, rather, a fragmented pattern of activities.

What can be done to diminish our vulnerability to biological terrorism?

We must better prepare our public-health and medical-care services to respond to outbreaks, epidemics and mass casualty situations, whatever their origin.

We should mount a robust research and development program for bio-defense, a joint Department of Defense and Department of Health and Human Services effort by engaging experts from universities, pharmaceutical companies and biotechnology companies.

Public health must identify those critical capacities necessary to fight contagious disease epidemics.

In cooperation with the World Health Organization and other countries, we must strengthen greatly our intelligence gathering capability. Biological terrorism is a significant threat. Biological weapons, even in crude forms, can inflict horrible suffering and death. In this age of globalization, an attack on U.S. citizens quickly could become a worldwide epidemic. By mitigating the consequences of such an attack, we can make ourselves less-attractive targets to would-be perpetrators.

Arvind M. Dhople is a research professor in biological sciences and director of the Infectious Diseases Laboratory at Florida Institute of Technology in Melbourne.

Suddenly, Small Gaps In Nuclear Security Are Starting To Look More Like Chasms

By John Emshwiller, Michael Orey, Daniel Machalaba and Rebecca Smith, Staff Reporters of The Wall Street Journal

In February, Jamal Ahmed Mohamed al-Fadl, a longtime member of Osama bin Laden's al Qaeda organization, gave some unsettling testimony in New York federal court: He helped arrange meetings in Khartoum, Sudan, in the early 1990s with the aim of helping al Qaeda acquire uranium.

Mr. al-Fadl, who testified that he was told that "it's easy to kill more people with uranium," said he didn't know whether the deal ultimately went through. His testimony came in connection with the federal indictment against Mr. bin Laden and others for their alleged roles in the 1998 bombings of two U.S. embassies in Africa.

The evidence that Mr. bin Laden's group has tried to obtain weapons-grade nuclear material is sketchy and unverified. But it has sent authorities around the world rushing to shore up security measures that are in some cases surprisingly weak. The armed guards at nuclear-weapons depots often lose in exercises with mock assailants.

Materials for making a nuclear bomb are accessible enough to support a black market.

The first reaction after Sept. 11 was to tighten security. Kansas officials are keeping fishermen off a lake near the Wolf Creek nuclear plant. Japan ordered round-the-clock patrols of the waters near its nuclear plants. France, which even encouraged school trips to its many nuclear-power plants to promote acceptance, has severely restricted access to facilities. Authorities in the Czech Republic tightened airspace restrictions over nuclear power stations.

The U.S. Department of Energy briefly halted shipments of nuclear materials. Just last week, the Nuclear Regulatory Commission temporarily closed its Web site, saying that it had to review all the material as part of "our mission to protect public health and safety."

Corbin McNeill Jr., the chairman of the Chicago-based power company Exelon Corp., has a plan for making future nuclear plants more resistant to an airborne assault by terrorists: Bury them. He's thinking that if and when Exelon builds a new-generation nuclear plant, most of the structure and equipment will be housed below the surface of the earth. "There should be no vital components above ground," he says.

"The whole world has been turned upside down" by the events of Sept. 11, says Richard Meserve, chairman of the NRC, which oversees commercial security measures for nuclear-power plants. "We have to re-examine our entire capability to withstand a terrorist attack."

The means for carrying out nuclear attacks are scattered around the globe -- in the form of hundreds of commercial nuclear plants, tens of thousands of nuclear weapons and tons of stored uranium and plutonium that could be fashioned into bombs. Efforts to make nuclear materials more secure have been hampered by tight budgets, geopolitical squabbling and inertia.

While security has frayed in many places, authorities believe that a nuclear assault by terrorists remains unlikely. Since Hiroshima, 56 years ago, there have been few significant breaches of security anywhere in the world that could have produced a nuclear weapon or incident, and there have been no incidents. Besides the technical barriers to making a nuclear bomb, nuclear weapons and bomb-grade material have always been relatively well-guarded. Authorities have long counted on the technical barrier -- namely, that designing and fabricating a nuclear device remains a formidable challenge. Despite the sophistication of Mr. bin Laden's al Qaeda network, the prospect of terrorists going nuclear is still "highly unlikely," says Graham Andrew, a senior official at the Vienna-based International Atomic Energy Agency, a United Nations-related body created to prevent the proliferation of atomic weapons.

But the possibility remains. A draft report for an IAEA conference in May cited intelligence-agency and other reports of bin Laden efforts to obtain small nuclear weapons, with the devices to be possibly stored in Afghanistan. The draft report, prepared by Alex Schmid, officer-in-charge of the United Nations' Terrorism Prevention Branch, stated that while he hadn't seen evidence that the terrorist had succeeded, "it's clear that bin Laden is actively seeking to acquire weapons of mass destruction." Mr. Schmid declined to be interviewed. A U.S. intelligence official says intelligence sources also have reported efforts by Mr. bin Laden's organization to acquire nuclear weapons.

The technical barrier also seems to have gotten lower. A 1998 report by the Carnegie Endowment for International Peace, a foreign-policy think tank in Washington, found that "a number of American college students have come up with plausible designs based on unclassified information."

The simplest bomb to build would resemble the one used over Hiroshima. It essentially involves placing two slugs of highly enriched uranium in a tube and driving them together with an explosive charge -- a design that is considered so reliable that bomb experts say it doesn't even have to be tested. Weapons experts say this sort of bomb could be built with about 125 pounds of uranium -- though more-sophisticated designs require far less material. Such a bomb would produce a blast equivalent to about 15,000 tons of TNT and, in a city, could kill more than 100,000 people, says Robert Gallucci, dean of the Georgetown University foreign-service school who worked on nuclear-proliferation issues for the State Department. Scientists estimate that the explosions and subsequent fires that took down the World Trade Center released energy the equivalent of about 1,000 tons of TNT.

Building a 'Dirty Bomb'

Far easier to build, and much less deadly, is a "dirty bomb," in which conventional explosives are used to spread radioactive material. The key to averting this and any other nuclear threat, security experts say, is keeping nuclear material out of terrorists' hands, particularly plutonium or highly enriched uranium, which are what is needed to create nuclear fission.

That means wiping out the shadowy black market for nuclear materials. The biggest potential source of such material is Russia and other parts of the old Soviet Union -- though the IAEA considers all the ex-Soviet Republics, except Russia itself, free of nuclear weapons. Here, too, information can be incomplete and even contradictory. Take the Russian "suitcase" bombs.

Republican Congressman Curt Weldon of Pennsylvania recalls that in hearings held in 1997, retired Russian Gen. Alexander Lebed testified that Russian authorities couldn't account for dozens of portable nuclear bombs once in the Soviet arsenal and designed for use behind enemy lines to blow up specific objects, such as tunnels or power stations. Mr. Weldon said other top Russian military officials, including former Defense Minister Igor Sergeev told him directly that such devices existed. More recently, both U.S. and Russian officials have issued statements denying the Soviets ever built such weapons. Portable atomic demolition devices produced by the U.S. military were all dismantled by 1989, a Defense Department official adds.

Watchdog groups such as the nonprofit Monterey Institute of International Studies in Monterey, Calif., which attempt to verify reports of nuclear proliferation, keep track of various incidents in which nuclear materials may have escaped the grip of governments. In the Monterey files is an example from 1998 when the Russian Federal Security Service announced that it had thwarted an attempt by employees at a facility in the Chelyabinsk region to steal around 40 pounds of nuclear material. Matthew Bunn, a nonproliferation expert at Harvard University, says an official with the Russian Ministry of Atomic Energy told him the material had been highly enriched uranium. Vladislav Petrov, a spokesman for Russia's Ministry of Atomic Energy, maintains that this incident "did not happen."

Some bomb-grade material does seem to have made its way out of Russia. In 1994, Czech officials seized nearly six pounds of enriched uranium from a car in Prague. Investigators in that case believed that the material came from one of two Russian facilities. Mr. Petrov, however, says the Czechs never allowed Russia to test the material to determine its origin. The information about the theft "was created by their special services," he says, "to show that Russia isn't in control of its uranium."

One of the suspect facilities in the Czech case is the Mayak nuclear materials production complex in the Chelyabinsk region, which is home to a number of nuclear facilities. In a visit to Mayak last year, former Energy Department official Rose Gottemoeller says she found several tons of plutonium "stored in simple bucketlike containers." It would be "easy to carry," she notes, "if you could get through the wooden door or nonbarred window." Although a joint Russian-U.S. venture was in the process of upgrading security at Mayak during her visit, Ms. Gottemoeller notes, it was just starting to install a perimeter fence. That fence has now been completed, according to Sarah Lennon, a DOE official. She also says windows have been bricked up and that other security improvements are in progress.

Ms. Gottemoeller also visited Russian Naval facilities in 1999 and 2000, where she said that nuclear weapons being moved on and off of ships were kept in shacklike buildings on the base. The DOE's Ms. Lennon says there is an "aggressive program under way" to improve security measures for the Russian Navy's weapons.

Behind on Upgrades

For the past eight years, the U.S. government has been helping the Russian government shore up security at its nuclear installations. So far, though, upgrades have been completed for less than 40% of the more than 660 tons of enriched uranium and plutonium not contained in Russia's nuclear-weapon stockpiles, says Mr. Bunn, who is also a former Clinton adviser on nuclear proliferation. In a Sept. 19 letter to President Bush and Russian President

Vladimir Putin, Mr. Bunn wrote that "over the past five years, many of the major U.S.-Russian cooperative nuclear security programs have slowed" and "had their timelines unnecessarily extended into the future."

Jonathan Kiell, a spokesman for the DOE, insists that major strides have been made in helping Russia secure its nuclear material and in redirecting the activities of Russian weapons scientists. However, he says, "following the attacks of Sept. 11, [the DOE] is evaluating possibilities of accelerating its [security program], based on guidance from the administration."

As the U.S. has pondered the post-Cold War nuclear threat, attention has focused on a "rogue" nation attacking the continental U.S. with a missile. But many national-security experts worry about a much simpler scenario, particularly now that the efficacy of suicide attacks in the U.S. has been proven. If overseas terrorists wanted to get a nuclear weapon into the U.S., the most likely means would be by ship, they say. About nine million shipping containers, typically 20 or 40 feet long, enter American ports each year.

For years, U.S. Customs Service inspectors have worn small devices to detect radiation in containers. So far, the searches have found radioactive cheese from Ukraine's Chernobyl region and medical devices that use radioactivity for diagnostics. Officials also routinely review shipping documents looking for suspicious cargo, which are then subject to X-ray or physical searches.

But tearing apart containers is time-consuming and labor-intensive. On Oct. 5, for example, two customs inspectors in a warehouse at the port in Elizabeth, N.J., strained to lift and heave bags of birdseed out of a container that had arrived from Ethiopia. Another inspector removed boxes of sweatpants from Pakistan. An X-ray check had showed an oddly shaped object near the trailer door. "It could be a booby trap or a trigger for a device," said Kevin McCabe, chief inspector for the Port of New York and New Jersey. It turned out that one of the pants boxes had fallen and wedged itself against the door.

October 17, 2001

Police suspect bin Laden making 'dirty' nuclear bombs

Troubling signs

By David Pugliese

Ottawa Citizen

Police in Canada, Britain and Bulgaria are urgently investigating suspicious activity involving atomic energy research facilities as fears grow that Osama bin Laden may be attempting to build crude nuclear weapons.

Terrorists could build a "dirty" radiological bomb with little effort capable of killing 2,000 people and contaminating thousands more, according to a report from the Center for Defense Information, a think tank in Washington.

A U.S. defence official has said bin Laden's al-Qaeda terrorists had developed chemical and biological weapons and possibly nuclear-related arms.

"If there's any nuclear capability, it is liable to be more radiological than fissile," the official said, according to The Washington Times.

Radiological weapons -- or dirty bombs -- combine radioactive material with conventional explosives to increase their deadliness. A fissile nuclear device produces a nuclear blast.

British intelligence officials are reportedly tracing the activities of a Pakistani scientist, connected to bin Laden, who is believed to have tried to obtain nuclear waste materials in England. Also being investigated is a scheme by the bin Laden organization to set up a fake environmental company to obtain radioactive material from a nuclear power plant in Bulgaria.

In Canada, police continue to follow leads on a Kuwaiti man found with sensitive documents about Canadian atomic energy facilities.

In a report, Mr. Blair says a radiological bomb is an expedient weapon, in that radioactive waste material is relatively easy to obtain and not as well guarded as nuclear weapons. He estimated the worst-case calculation for a noon-hour explosion in downtown Manhattan to be more than 2,000 deaths.

"There's a potential for that type of action," said John Thompson, who studies terrorism trends for the Mackenzie Institute, a Toronto-based think-tank. "I don't think you would create a large number of casualties, but you would certainly generate a lot of panic."

Canadian defence analyst David Rudd notes bin Laden would be courting the demise of his cause if he used a nuclear weapon against the United States. Such an action would turn supporters among the Arab establishment against him and spark massive retaliation from the U.S. government against any country to give him sanctuary.

"All bets would be off if he used nuclear weapons," said Mr. Rudd, director of the Canadian Institute of Strategic Studies.

Bin Laden has voiced his desire to have a nuclear bomb. In May, 1998, he issued a statement arguing it was necessary to obtain nuclear weapons and that it was the duty of Muslims "to prepare as much force as possible to terrorize the enemies of God." In a 1998 interview with Time, bin Laden dodged the question of whether he actually had such a device. "If I have indeed acquired these weapons, then I thank God for enabling me to do so," he said. One of his former aides, Jamal al-Fadl, testified during a terrorism trial this year he was directly involved in an attempt to purchase uranium for bin Laden in 1993. He was instructed to meet a Sudanese military officer, who supposedly possessed radioactive material to sell for \$1.5-million.

Mr. al-Fadl arranged for the purchase of a device to determine whether the material was radioactive, but he was taken off the job. Mr. al-Fadl testified he did not know if the purchase was completed.

Earlier this year, customs officers from Uzbekistan seized 10 lead-lined containers at a remote border crossing with Kazakhstan. Intelligence analysts say they were filled with enough radioactive material to construct dozens of crude radiological weapons. The containers were being shipped to a company in Quetta, Pakistan, but since Pakistan already has an arsenal of nuclear weapons, most analysts believe it would have no need for such material, prompting speculation it was destined for bin Laden.

There is also the possibility bin Laden has built or obtained a nuclear bomb, stolen from the stockpile of the former Soviet Union. In 1998, an Arabic news magazine reported bin Laden's organization paid Chechen gangsters US\$30-million for 20 Russian nuclear warheads. The plan, according to the magazine, was to detonate the bombs in U.S. cities.

The Russian government denies any of its warheads are missing. But according to Republican Congressman Curt Weldon, the former Soviet Union cannot account for 48 of its 10-kiloton suitcase nuclear weapons.

<http://www.nationalpost.com/home/story.html?f=/stories/20011017/740701.html>

Washington Post

October 17, 2001

Pg. 1

Anthrax On Senate Letter Called Potent

Investigators Pursue Links to Fla., N.Y. Letters

By John Lancaster and Dan Eggen, Washington Post Staff Writers

The anthrax that arrived in the office mail of Senate Majority Leader Thomas A. Daschle on Monday is a highly potent, finely milled variety that spreads easily by air and is similar to the spores that killed Florida photo editor Robert Stevens almost two weeks ago, senior government officials said yesterday.

Senior officials also disclosed that the letter sent to Daschle bears striking similarities -- including references to Allah and a warning that the envelope contained anthrax -- to another contaminated envelope sent to NBC News anchor Tom Brokaw.

Although it has yet to be established that the anthrax sent to Brokaw and Daschle is the same high-grade variety, FBI investigators believe that the three cases -- in Florida, New York and now Washington -- are likely connected, officials said.

"Mr. Stevens died of pulmonary anthrax, which is the finely milled anthrax, which is what we believe we see in the Daschle letter," a senior government official said. "We're looking at the NBC case to see if it's the same kind. . . . We think we're going to see a connection between the three."

After tests confirmed the presence of anthrax in the letter sent to Daschle, authorities yesterday sealed the southeast wing of the Hart Senate Office Building, where his office is situated. They closed 12 Senate offices as hundreds of congressional aides and others underwent medical screening and began taking antibiotics as a precautionary measure.

Authorities said the growing web of connections among the bioterrorist episodes has deepened suspicions that they may be linked, and may be connected to the Sept. 11 terrorist attacks. They did emphasize that there is no firm evidence to tie them to Saudi fugitive Osama bin Laden, the purported mastermind of the Sept. 11 plot.

Tom Ridge, the new director of the White House Office of Homeland Security, said yesterday he suspects the anthrax contamination is linked to the Sept. 11 attacks and bin Laden's al Qaeda network.

"To me, it's just beyond coincidence," Ridge, the former Pennsylvania governor, told the Associated Press. "It's more than coincidence, and we don't have the credible evidence. It's somewhere in between."

Ridge said he gets regular intelligence, as well as law enforcement and military briefings. "As the evidence unwinds, there may end up being a formal tie" between the anthrax case and bin Laden, he said.

Authorities declined to comment publicly on whether the anthrax in the three known bioterrorist episodes may have come from the same source, saying they were awaiting conclusive test results. Investigators are still studying the contents of a letter sent to a Microsoft office in Nevada, but officials increasingly have come to believe that incident may have been a false alarm.

Yesterday's most striking disclosure initially came from Daschle. After receiving a briefing on the investigation, he told reporters -- on the basis of tests conducted Monday night in a military lab in Fort Detrick, Md. -- that the letter contained "a very strong form of anthrax, a very potent form of anthrax that was clearly produced by someone who knows what he or she is doing."

A federal official said last night the anthrax was of a potency capable of killing thousands of people if dispersed in the air and appeared to have been developed for purposes of biological warfare. Capitol police and Daschle emphasized, however, that there was no evidence the anthrax in the envelope had contaminated Daschle's office, the Hart building or anyone in it.

Senators came away from yesterday's briefing with the strong impression that the anthrax was, as Daschle suggested, of a potent and concentrated nature. One senator, asking not to be named, said it was characterized as "weapon-grade." Another, also requesting anonymity, said it was described as "high-quality."

Authorities had indicated a connection between the letters to Brokaw and Daschle, both of which were postmarked in Trenton, N.J.

The letter to Brokaw was opened by an assistant, Erin O'Connor, 38, who has fallen ill with a skin-transmitted form of the disease that is less serious than the pulmonary, or inhaled, variety that killed Robert Stevens on Oct. 2 and has afflicted one of his co-workers, Ernesto Blanco, 73.

The infant son of an ABC producer in New York has also been diagnosed with cutaneous anthrax, though the source of that infection remains unknown. Nine other people may have been exposed to the bacterium in Florida and New York.

Copies of the envelopes to those letters released yesterday -- to alert the public to similar mailings -- showed they featured block-like, childish script sloping down and to the right. The letter to Daschle was postmarked Oct. 8. Both letters were about six lines long, stated that their envelopes contained anthrax and made reference to Allah. FBI officials noted that one came with a fake return address.

There were conflicting reports last night about whether the anthrax in the two letters may have come from the same source. While a senior government official suggested that such would turn out to be the case, following completion of tests, U.S. Postal Inspector Dan Mihalko said his office has been told that the New York and Washington anthrax strains are not the same, that the anthrax received by Daschle's office is stronger. The two strains are being compared now, he said.

FBI Director Robert S. Mueller III said the federal Centers for Disease Control and Prevention is evaluating the samples, and it is "premature" to discuss similarities or differences because the tests have not been completed. Caree Vander Linden, spokeswoman for the U.S. Army Medical Research Institute of Infectious Diseases at Fort Detrick, said "There is no evidence that this is engineered to be more potent than the naturally occurring form of anthrax. The question of whether it was genetically modified -- there is no evidence of that."

On Capitol Hill, police closed off the southeast wing of the eight-story Hart building, where the letter was opened in Daschle's office by a junior member of his staff at 10:15 a.m. Monday. Police said they had no evidence that anyone in Daschle's office -- or elsewhere in the building -- had been exposed to anthrax, and emphasized they had sealed the area as a precaution so the ventilation system could be checked.

Also as a precaution, Capitol physician John Eisold advised anyone who had been in the Hart building on Monday to undergo medical screening for anthrax exposure and start treatment with Cipro.

Yesterday, hundreds of congressional staff and others lined up outside a hearing room on the second floor of the Hart building, where medical staff took a swab from each nostril of those tested and distributed three-day supplies of the antibiotic. Those who took the test were advised to return on Thursday for the results and further medical advice.

Many of those waiting in line yesterday wondered why they had not been told to leave the building on Monday.

"They should have just evacuated the building when they found out," said Rebecca Kessler, 23, a staff assistant in the Republican conference office on the fourth floor of the Hart building.

Speaking to reporters yesterday, Daschle said the overall risk to people who may have been in the building in Monday is "negligible . . . almost nonexistent" because of the effectiveness of the antibiotics against anthrax.

Daschle said his staff tested negative in preliminary tests for infection and "I'm quite confident that will remain the case."

The office of Sen. Max Baucus (D-Mont.), which is next door to Daschle's, was closed yesterday. Baucus said he planned to get tested later in the day.

He said he wasn't criticizing anyone, but that too many questions remain unanswered involving the origin of the letter, health risks and other issues. "We're in a whole different world and we've lost our innocence," he said.

Sens. Paul Sarbanes (D-Md.) and Barbara Mikulski (D-Md.) also were tested.

In Florida yesterday, Secretary of Health John O. Agwunobi said yesterday that more than 1,100 people in the state have been tested for anthrax. He said that all but about 50 of the nasal swab test results have come back.

So far, three people have been confirmed as infected: Stevens, 63; Blanco, the mail room employee who has been hospitalized and is being treated with antibiotics; and Stephanie Dailey, 36, an administrative clerk who had anthrax in her nasal passages but has shown no symptoms and is being treated with antibiotics preventatively.

Officials at American Media Inc., the tabloid newspaper company, have said blood tests on five other employees indicated they had been exposed to anthrax. But Agwunobi and other health officials said no conclusions can be drawn about those employees until a second set of blood tests is completed.

Agwunobi said health officials were looking into whether a former AMI intern is ill as a result of anthrax. Jordan Arizmendi, who has been hospitalized with a fever, initially was suspected by some employees as having been involved in the anthrax contamination of AMI because he had written a seemingly suspicious e-mail before leaving his job. Subsequently, law enforcement officials said the former intern was not a suspect. Agwunobi said Arizmendi had been tested but that results were not yet available.

Also yesterday, Judy Orihuela, a spokeswoman for the FBI's Miami office, said investigators believe the anthrax inside the AMI building was received by letter. She said investigators have not drawn that conclusion because of a specific letter that has been discovered, but rather because of the anthrax spores found in the building's mail room, in the nasal cavities of two AMI mail handlers and in a post office that sorts mail for the building.

AMI employees said they have been told by the newspaper company that they will never have to go back to work in the contaminated building. They said the tabloids, including the National Enquirer, Globe and Sun, will find new editorial offices.

Mueller also acknowledged that there were "missteps" in the FBI's initial delay in testing a suspicious letter received by NBC News. He said the delay did not affect the outcome of the investigation, but that FBI offices around the country have been given instructions about prompt testing.

Staff writers Bob Woodward, Susan Schmidt, Helen Dewar, Justin Blum, Peter Slevin, Michael Powell, Ellen Nakashima, David Brown, Ceci Connolly and Christine Haughney contributed to this report.

New York Times

October 17, 2001

Pg. 1

News Analysis

Sign Of Escalating Threat

By Stephen Engelberg and Judith Miller

The discovery of what government officials say is high-grade anthrax in a letter mailed to Congress is the most worrisome development yet in a series of bioterrorist attacks that has already rattled the nation.

The officials and weapons experts said yesterday that it suggested that somewhere, someone has access to the sort of germ weapons capable of inflicting huge casualties.

So far, the officials said, the attacker or attackers have used a rudimentary delivery system: the mail. Their intent and capabilities remain unknown, as does the amount of anthrax available to them. But what worries the officials in Washington is the possibility that an adversary with even a small quantity could easily find much more effective means of spreading the disease.

Until yesterday's preliminary analysis of the letter received by Tom Daschle, the Senate majority leader, the spate of anthrax-laced envelopes stirred considerable anxiety but posed a limited threat. Some experts assumed that the anthrax being sent around the country was crudely made, composed mostly of large particles that fell to the ground and thus endangered primarily those in the immediate area.

What government officials say arrived in Senator Daschle's office was significantly more threatening. Following the use of anthrax in Florida, it suggests that for the first time in history a sophisticated form of anthrax has been developed and used as a weapon in warfare or bioterrorism.

The key to understanding the danger, experts said, is in the size of the particles. The anthrax sent to Mr. Daschle, government officials said, was finely milled so that it would float a considerable distance on the smallest of air currents.

Producing germs that could be spread as a mist had been the main technical challenge facing germ warriors throughout the 20th century. Anthrax is what the Nobel laureate Joshua Lederberg calls a "professional pathogen," a hardy germ that could wreak havoc if inhaled. The trick was turning it into an aerosol that lingers.

Decades ago, Soviet and American scientists separately devised methods to dry and grind anthrax into the tiny particles — five microns or less — that could easily enter the nostrils and lodge in the lungs.

Experts say an adversary armed with anthrax in this form would have a host of possible targets for mass terrorism. Experiments by the United States in the 1960's showed that anthrax released in the New York City subway could spread widely underground, infecting large numbers of people. Federal officials used a benign germ related to anthrax to demonstrate the possible effects.

An enemy with large quantities of high-grade anthrax could mount a credible attack on a city or large office building. Dried anthrax could be spread using a crop-duster or small airplane equipped with the appropriate nozzles. Buildings are an easier target and could be contaminated with a much smaller amount of anthrax pumped through a garden spray bottle, experts say.

Victims of an anthrax attack can be easily treated with antibiotics, but that requires that public health officials recognize the germ has been dispersed at a particular location. Experts say that detection equipment is far from reliable, which means the first signs could come when people show up in the emergency room with flulike symptoms.

Anthrax was one of the most important weapons in both the Soviet Union's and the United States' germ weapons arsenals.

Officials from both countries say they never used germ weapons, though Ken Alibek, a prominent defector from the Soviet germ warfare program, maintains that Moscow may have used germs as weapons against Germany and in Afghanistan.

The United States abandoned its own germ program in 1969, and soon after most of the world's nations signed an international treaty banning the development and possession of such weapons.

The Soviet Union also signed the pact, but cheated on a massive scale, say former Soviet officials who worked to refine the strains of anthrax, among other germs, until the fall of the Soviet Union in 1990.

In the 1980's, other nations, notably Iraq, began developing the germ as a weapon. Iraqi scientists spent more than five years on the project, cultivating anthrax and processing it into a wet slurry that was loaded into bombs and missiles.

United Nations inspectors who later studied the Iraqi program said Baghdad did not manage to produce dry anthrax that could be delivered as an aerosol though it did buy specialized nozzles for its fleet of crop-dusters.

In the years since, United Nations officials say, Iraq has acquired the capability to produce the high-grade, dry anthrax of the appropriate particle size.

None of this history gives investigators much of a hint as to the origins of the current attack. It is not clear whether the anthrax sent to Senator Daschle was produced by the attacker or attackers, bought from a foreign nation or made with the help of a rogue scientist.

Nor was it known whether the attacker or attackers could make or obtain larger quantities.

Former germ weapons scientists say that neither is easy. It took experienced Iraqi scientists several years to figure out how to cultivate large amounts of anthrax, which is the crucial first step to making a weapon.

Drying the germs is relatively straightforward. But that process creates a mix of particles that stick together, and most of them are far too large for use as an effective weapon. Grinding the material to a small, uniform size without damaging a significant portion of the germs is not easily done, former American and Soviet germ scientists say.

The discovery of expertly processed anthrax, one former scientist said, casts serious doubt on the theory advanced by some investigators that the germ attacks were the work of a lone amateur with a smattering of knowledge about biology.

"I do think in one form or another, a state was involved," one former American scientist said. "It could be employees of a former state, such as a Russian scientist."

Nor is it clear whether Al Qaeda, Osama bin Laden's network, was involved in any way. American intelligence officials say Mr. bin Laden has tried to acquire nuclear, chemical and biological weapons.

Until now, there has been no suggestion that he has succeeded in this goal, although there have been reports of testing chemicals and crude biological weapons on animals at one of his training camps in Afghanistan. The attempted use of anthrax against a United States senator takes President Bush into a new, uncharted realm, particularly if the attack is ever linked to a specific nation. On the eve of the gulf war, his father weighed the question of whether to respond with nuclear weapons to a germ attack against the United States-led coalition. After a discussion among his senior advisers, President George Bush decided against such retaliation. Instead, American officials sent Baghdad an ambiguously phrased warning that was delivered in a letter from Mr. Bush to Saddam Hussein.

"Your country," the letter said, "will pay a terrible price if you order unconscionable acts."

Combating Terrorism: Considerations for Investing Resources in Chemical and Biological Preparedness

by Henry L. Hinton, Jr., managing director, defense capabilities and management, before the Senate Committee on Governmental Affairs. GAO-02-162T, October 17.

<http://www.gao.gov/cgi-bin/getrpt?gao-02-162t>

U.S. Seeks To Stiffen Treaty on Germ War

Pact's Enforcement Mechanism Faulted

By Mike Allen

Washington Post Staff Writer

Wednesday, October 17, 2001; Page A21

President Bush continues to oppose a proposed enforcement mechanism for a treaty banning the development or stockpiling of biological weapons but is pursuing an alternative with new urgency in the aftermath of the Sept. 11 attacks, administration officials said yesterday.

The administration began telling allies this spring that it would not support a proposal to prevent cheating on the 1972 Biological Weapons Convention, which the United States ratified with 142 other nations. The administration said the verification proposal was fatally flawed, but said the United States wanted to find other ways to strengthen the treaty and reduce the chance of germ warfare.

Administration officials said they plan to present their ideas at a biological weapons conference that begins Nov. 19 in Switzerland. Officials said the administration plans to propose that nations pass stricter laws criminalizing the use and import or export of biological weapons, fund more research into illnesses caused by biological weapons, and share information and expertise to minimize the effects if the weapons are used.

Avis Bohlen, assistant secretary of state for arms control, said at the United Nations last week that the administration favors adopting mechanisms "to question and challenge in the event of suspected use." She did not elaborate, but arms control specialists took that as a reference to the need for an inspection system to monitor compliance with any treaty.

National security adviser Condoleezza Rice said an adequate inspection mechanism for biological weapons "continues to be a huge problem because these are easy to hide."

Despite criticism from other countries, Rice reiterated the administration's opposition to the proposed protocol -- which would give teeth to the 1972 treaty -- during a White House briefing Monday, saying the draft language would not impede terrorists.

"I think that anyone who really thinks that the biological weapons protocol as it is currently drafted would stop the likes of people that we're worried about right now from getting biological weapons would have to really think twice," Rice said. "We do not believe that the protocol as it currently exists, that this protocol serves the interests of the United States or anyone else that is trying to stop the spread of biological weapons."

Bohlen said the Sept. 11 attacks make the risk of biological attacks less remote than ever, despite what experts call the frequent overestimation of the ease with which toxins and biological agents could be dispersed in areas with large concentrations of people.

"This possibility must give new urgency to our efforts to combat the threat of biological weapons," Bohlen said. She said the international community must state "that any use of biological weapons -- whether by a state, an organization or an individual -- would be a crime against humanity to which the international community will respond."

An administration official said the proposal is not being hastened because of the possibility of terrorist links to anthrax scares in the United States. "We have been looking for some time for ways to work together with our friends and allies to stop or impede the spread of biological weapons," the administration official said. "The attacks of September 11th have highlighted the lengths terrorists will go to."

But Seth Brugger, the chemical and biological weapons analyst for the Arms Control Association, a private group, said the Bush administration has appeared more interested in defensive measures than preventing the spread of the weapons.

"One country can't do it by itself, just as we can't fight terrorism all by ourselves," Brugger said. "What they're proposing is a good start, but it doesn't begin to do what the draft protocol would."

Bush also signed an executive order yesterday creating a board to work with private businesses to combat cyber-terrorism, or attacks on the nation's computer infrastructure. Bush said it is essential to the nation's security to protect information systems supporting telecommunications, energy, financial services, manufacturing, water, transportation, health care and emergency services.

<http://www.washingtonpost.com/wp-dyn/articles/A5411-2001Oct16.html>

Washington Times

October 17, 2001

Pg. 3

Anthrax Trail May Lead To Hijackers, Iraq

By Jerry Seper, The Washington Times

Law enforcement authorities investigating anthrax scares nationwide have focused on meetings between one of the hijackers in the Sept. 11 attack on America and an Iraqi intelligence agent as a possible source of the potentially deadly bacteria.

Mohamed Atta, 33, believed to be the pilot aboard the American Airlines flight that first struck the World Trade Center, met secretly twice last year with Iraqi intelligence agent Ahmed Samir Ahani — raising the possibility of Iraqi involvement in the suicide strikes that killed more than 5,000 people.

Atta lived at one time lived near the Florida site where deadly airborne exposures of the anthrax bacteria killed one man and infected another. He has been identified as the ringleader of the Sept. 11 attacks in New York and Washington and as the head of a terrorist cell linked to fugitive Osama bin Laden.

The Iraqi agent later was expelled by Czech officials for activities they said conflicted with his diplomatic mission. Czech officials also are investigating whether Atta met with other Iraqi officials in Prague, including Farouk Hijazi, Saddam Hussein's former director of external security who also met with bin Laden.

Iraq is one of the nations on the State Department's list of "state sponsors" of international terrorism. The country is believed to have used its technology to produce anthrax for itself and various terrorist organizations. Former CIA Director R. James Woolsey has said the sophistication of the attacks on Sept. 11 suggested possible Iraqi support.

Richard Butler, former U.N. arms inspector in Iraq, told reporters in London there was some evidence that bin Laden's al Qaeda network had acquired anthrax from Iraq. He said the Egyptian government believed the bacteria could have been handed over to Atta during the Prague meetings.

He said a "credible report, not yet fully verified" says Iraq may have given anthrax to the terrorists who struck the World Trade Center.

Justice Department and FBI officials have declined to discuss specifics of their ongoing criminal investigation into the anthrax exposures.

Anthrax is a colorless, odorless and tasteless bacteria that protects itself from sunlight, heat and disinfectant by forming a protective coat. With this coat, the bacteria is called a "spore," which are so small that even an infectious dose — between 8,000 and 10,000 spores — is smaller than a speck of dust.

It is considered a biological weapon and when used as an airborne threat, such as the Florida cases, can be fatal 90 percent of the time. Less-lethal forms include cutaneous anthrax infections, which occur if the bacteria comes in contact with the skin.

Bob Stevens, a photo editor at a Florida-based supermarket tabloid, died Oct. 5 after inhaling the anthrax bacteria. A co-worker, Ernesto Blanco, also has been diagnosed with the airborne form of the disease. Mr. Stevens lived about a mile from an airstrip where flight school owner Marian Smith said Atta rented planes. Several suspected hijackers visited a crop-dusting business in Belle Glade, 40 miles from Mr. Stevens' home in Lantana, Fla.

The two men paid \$38,000 to the Florida school for flight training.

The Palm Beach Post yesterday reported Atta sought treatment for "abnormally red" hands from a Florida pharmacist in the months before the Sept. 11 attacks. The newspaper said the pharmacist recognized Atta from news reports and contacted the FBI.

Police in Germany said Atta and Marwan Al-Shehhi, named as the pilot aboard United Airlines Flight 175 that crashed into the World Trade Center's south tower, shared an apartment in Hamburg before traveling to Florida.

German authorities said Atta was part of an anti-American Islamic fundamentalist group in Hamburg.

Atta obtained a visa to enter this country at the U.S. consulate in Berlin on May 18, 2000, and came to Newark, N.J., on June 3 on a flight from Prague. He was admitted under a temporary visitor's visa good for six months.

He lived in at least five Florida cities: Venice, Hollywood, Coral Springs, Lantana and Opa-Locka.

Atta, who traveled regularly between this country and several countries, used an Egyptian passport but was believed to have been a United Arab Emirates national. At one point, he was registered as a student at the Technical University in Hamburg.

U.S. intelligence officials said bin Laden also was in contact with Iraq from his base in Afghanistan in the days leading up to Sept. 11.

Inside Missile Defense

October 17, 2001

Pg. 1

BMDO Shifting \$55 Million To NMD Design Effort

Congress has approved a request from the Ballistic Missile Defense Organization to shift \$55 million earmarked for initial national missile defense construction to begin designing the Bush administration's ground-based element of its NMD project, according to BMDO officials and documents.

BMDO Director Lt. Gen. Ronald Kadish sent the request to Congress on Sept. 19 and approval was granted shortly thereafter, a BMDO spokeswoman told Inside Missile Defense.

According to Kadish's letter to Congress, the \$55 million is available because near the end of his term, President Clinton decided against deploying the limited NMD system his national security team was developing. The Clinton plan called for 100 interceptor missiles, along with a new X-band radar, based on Shemya Island, AK. Upgrades would have given the system 125 interceptors in Alaska and 125 in North Dakota. BMDO's fiscal year 2001 budget justification to Congress shows the Clinton administration plan would have required \$365.9 million in military construction funds through FY-05.

Now, however, BMDO will use the \$55 million in FY-01 funds to complete design of a test bed facility at Ft. Greely, AK that will support the midcourse defense segment, BMDO spokeswoman Maj. Cathy Reardon said. These requirements include an X-band radar capability, an In-flight Interceptor Communications System data terminal prototype facility, and an NMD communications network that will include the Defense Satellite Communications Systems and Milstar. Also included in the design are battle management command and control nodes, early warning radars and program-wide force protection, Reardon said.

"Additional design funds are also required to initiate the alternate booster program and non-tactical facilities at Fort Greely," she added.

"Architectural and engineering services and construction design efforts are necessary to develop accurate cost estimates for military construction projects and to design the projects," Kadish said. "Planning and design funds are used to accomplish these efforts. This reprogramming request is specifically for design funds for the Midcourse defense segment (MDS) Block 2006 construction requirements. The MDS Block 2006 will, if authorized, be constructed using military construction funds."

Kadish also warned that if the reprogramming request were not approved, "sustainment of the Block 2006 schedule approved by the [Defense] Department is unlikely."

According to BMDO's FY-02 budget justification material, sent to Congress in June, the Alaska missile defense test bed will require \$404.6 million in military construction funds between FY-02 and FY-04. The figure is considered "notional" by the administration because it has not yet addressed FY-03/07 requirements, according to the budget document.

Kadish told the Senate Armed Services Committee in July that the Alaska facilities would be part of a significantly strengthened BMDO test architecture stretching from the Marshall Islands in the South Pacific to Alaska. "It will allow more realistic flight-testing of capabilities in the Boost, Midcourse and Terminal Defense segments," he testified.

-- *Thomas Duffy*

Washington Times

October 17, 2001

Pg. 6

Vaccine Side Effects Force Woman To Quit Service

By Sidney Schuhmann, Scripps Howard News Service

Jenny Willingham-Enoch was vomiting, fainting and sleep-deprived. A member of the Air Force's security forces, she discovered the source of her malady — contaminated anthrax vaccine.

The vaccine she began taking two years ago was supposed to protect her from an infectious bacterial disease that can be used in biological or germ warfare. Instead, it caused her life to take a disastrous turn.

Mrs. Willingham-Enoch, 23, of Cheyenne, Wyo., hopes her experience will deter people from supporting the anthrax vaccine.

"I don't want Americans supporting something they're uneducated about," she said. "If this ever becomes available to the public, I don't want people to become sick. I don't want them to push it on troops and make more of them sick."

In 1998, when she enlisted, the Pentagon ordered that all troops must take the anthrax vaccine. The vaccination calls for six injections over 18 months followed by annual boosters.

A Defense Department Web site says the vaccine is produced from a strain of anthrax that does not cause the disease.

About 30 percent of men and 60 percent of women experience mild reactions to the shots, such as swelling and tenderness around the injection area. Five to 35 percent of those vaccinated experience aching joints and muscles, headaches, fever and nausea.

These symptoms are supposed to go away after a few days. But for Mrs. Willingham-Enoch, the effects have lasted years.

She began her series of anthrax shots in September 1999. Just after her third shot, while she was stationed in Kuwait, she started feeling sick.

"I wasn't able to get more than a couple hours of sleep," she said. "When I did, I slept like I was drugged. I wasn't able to hold anything down. I was constantly tired and really weak. I had a couple of episodes where I passed out." Soon she wasn't able to perform her security forces job. Carrying 180 rounds of ammunition, an M-16 rifle and gear was wearing down her 100-pound body.

"I didn't know why," she said. "I do now. I have fibromyalgia."

The condition is characterized by chronic pain in the muscles and soft tissues surrounding joints. Physically unable to do her job, she found the Air Force wearying of her complaints. Earlier this year, she received a general discharge under honorable conditions — a step below an honorable discharge.

Despite her ailments, Mrs. Willingham-Enoch did not receive disability support from the military.

She says she has learned the contaminated vaccine was caused by higher than normal doses of an agent that quickly transports the vaccine into the body's system.

More than 400 troops have either quit or faced court-martial rather than take the vaccine for fear of side effects.

New York Times
October 16, 2001

C.D.C. Team Tackles Anthrax

By Lawrence K. Altman, M.D.

Fifty years ago, the federal government set up an elite corps of medical detectives to counter a threat it hoped never to face. Now, with the emergence of anthrax, that corps, the Epidemic Intelligence Service, is facing the challenge of that mission: tracing the cause and stemming the spread of a disease that may have been deliberately introduced — in other words, a biological attack.

Summoned to action immediately after the destruction of the World Trade Center on Sept. 11, the Epidemic Intelligence Service has been working with the F.B.I. and state and local health departments to conduct its effort on two fronts.

One is directed at detecting any communicable agent that might have been released. After anthrax was detected in Florida, the epidemic service, which is based at the Centers for Disease Control and Prevention in Atlanta, set out to determine how the patient contracted the disease. The information is crucial in assessing the potential harm to other people.

The second front is informing the public of the anthrax cases, the steps the C.D.C. is taking to combat the threat to public health, and what people can do.

Much of the detection effort went well, though there were disturbing glitches like a power failure at the C.D.C. that delayed the detection of anthrax in an NBC employee in Manhattan. (The failure was caused by a short in a cable that was awaiting repairs.)

But there is ample evidence of distressing lapses in communication with the public that, if the illness had been more widespread, could have made the bad situation even worse.

The lapses were not entirely the fault of the C.D.C., which is the federal agency charged with controlling communicable diseases in this country and coordinating an early warning system for bioterrorism. The lapses underscore the need for the government to heed the advice of the epidemic service's first director, Dr. Alexander D. Langmuir. He advocated a system to monitor disease and rapidly disseminate information, as a prime defense against biological warfare.

But many experts have criticized the C.D.C. for remaining largely silent about the anthrax threat instead of providing more detailed information sooner to people who may have been exposed as well as to doctors and the public.

C.D.C. spokesmen have said they were restricted in disclosing information because of provisions of the Federal Emergency Response Act and because the F.B.I. was conducting a criminal investigation.

That was so, said the C.D.C. director, Dr. Jeffrey P. Koplan, even though the centers and the F.B.I. are conducting parallel public health and criminal investigations, and the centers are not under the bureau's direction. "If anything, we are under the direction of the Florida state health department, with whom we are there assisting," Dr. Koplan said in an interview.

The only other known bioterrorism act the epidemic service ever investigated was in 1984 in Oregon, where followers of Bhagwan Shree Rajneesh deliberately contaminated restaurant salad bars, leading to 751 cases of salmonella poisoning. That case was hardly a model of timely communication of health threats to the public. The C.D.C. delayed publishing a scientific report of the outbreak for 13 years, saying it did not want to aid in creating copycat episodes.

On Oct. 4, when Tommy G. Thompson, the secretary of health and human services (the C.D.C.'s parent agency), disclosed the first anthrax case, he said it appeared to be an isolated case in Florida, possibly linked to natural exposure to anthrax in the environment.

Last week, when the most pressing health problem was the degree to which the country was vulnerable to anthrax, the C.D.C.'s Morbidity and Mortality Weekly Report, the bulletin that doctors and health workers look to for information about communicable diseases, devoted only two paragraphs to the anthrax situation, providing only sketchy details of the first two cases and a description of anthrax symptoms.

As a former editor of the report, I know that it can quickly transmit needed health information. But this time, its current editor, Dr. John W. Ward, said the report "was out of the loop." Even the little that the bulletin was able to publish "was an achievement," he said.

At times, C.D.C. spokesmen have issued puzzling statements and have said they did not have access to information about developments in New York and Florida. In response to my questions, they have asked me to explain the science, saying they did not understand it or had not been informed.

Underlying the silence is a mind-set that has developed in recent years among scientists who have become accustomed to obeying embargoes imposed by journals that prohibit public discussion about scientific findings until publication. Even though journals waive embargoes for information of an urgent public health nature, some researchers still hesitate to discuss their work, for fear that the journals will then refuse to publish it.

In this vacuum, journalists and the outside experts they consulted could only speculate about what might be going on. The resulting news reports were often conflicting and occasionally inaccurate.

Communication from the C.D.C. is particularly important because anthrax in humans is rare in this country, with just 236 cases of all types reported between 1955 and 1999. Most doctors have never seen a case, and look to the C.D.C. for guidance.

Anthrax is one of the most difficult infections to trace and has often challenged the ingenuity of medical detectives in past generations who sought the source of cases.

For instance, anthrax cases among World War I aviators were traced to a natural source, helmets lined with wool from infected sheep. And when a man developed cutaneous anthrax in Philadelphia years ago, epidemiologists learned its source only after they tore apart his newly purchased wool coat and found *Bacillus anthracis* in one sleeve.

When Florida health officials called the C.D.C. to report that Robert Stevens, 63, had apparently developed inhalation anthrax, the centers deployed 15 epidemiologists and other scientists. In confirming the case and seeking its source, the Epidemic Intelligence Service has relied on traditional Sherlock Holmes-style sleuthing and the skills of colleagues in the laboratory, who use the latest genetic and other laboratory tests, Dr. Koplan said.

Mr. Stevens had traveled with his wife to visit a daughter and go hiking in North Carolina, but became ill on the drive back to Florida.

So while some epidemiologists examined Mr. Stevens and talked with his doctors about the evolution of his symptoms, others fanned across Florida and North Carolina, joining colleagues from those states seeking clues to where he might have acquired the illness.

In the investigation's initial stages, the epidemiologists could assume nothing, and the patient himself was unable to communicate — he was in a coma when he arrived at the hospital in Atlantis, Fla., and died without regaining consciousness. So health workers had to interview his wife and family to reconstruct what he did during the preceding two weeks. Where did the Stevenses stop, eat and sleep on the trip? Was he exposed to a sick animal? Goat hair?

Mr. Stevens worked as a photo editor for *The Sun*, a tabloid sold in supermarkets and published by American Media Inc. in Boca Raton, Fla. Epidemiologists went there and to his home in nearby Lantana, where they asked what Mr. Stevens did in his spare time. Did he garden? Did he spend a lot of time outdoors? If so, where? With whom? They also collected samples of dust, soil and vents seeking a possible source of anthrax-contaminated materials.

While these investigators focused on possible natural causes, others looked at the more ominous possibility: that Mr. Stevens was the victim of an organized anthrax attack. They visited all hospitals in the area to talk with infection-control workers and other doctors, reviewing medical, microbiology and X-ray records of patients treated for meningitis, severe respiratory failure, septicemia, unexplained fevers and diseases like tularemia that can produce symptoms similar to those of anthrax. Might any have been anthrax, but misidentified as something else?

Inhalation anthrax produces swollen lymph nodes in the mediastinum, an area between the back of the lungs and the spine. The swelling can show up on an X-ray. Did a radiologist miss the finding?

In all their work, the epidemiologists "found nothing that was suspicious," said Dr. James M. Hughes, a top C.D.C. expert who oversaw the investigation from Atlanta.

Mr. Stevens's co-workers were given a phone number to call if they developed any symptoms. Epidemiologists also set up a system to monitor any unexplained pulmonary illness in hospitals serving the area.

Meanwhile, C.D.C. workers sought advice from Dr. Philip S. Brachman, an expert in anthrax epidemiology and a former director of the Epidemic Intelligence Service who now works at the Emory School of Public Health, next to the centers' campus.

Dr. Brachman said he reviewed his records from his days as an officer with the epidemic service in the late 1950's and early 1960's, when he investigated anthrax cases that developed among workers exposed to contaminated goat hair and wool at three mills in North Carolina and one in South Carolina.

The mills are now closed, but given how long anthrax spores can live in the environment, Dr. Brachman wondered if Mr. Stevens could have contracted the disease in one of the cities where the mills had been. Had the mills been renovated for a new use? Was one a motel? If so, had Mr. Stevens stayed there?

But when Dr. Brachman asked the epidemic service officers these questions, he was frustrated. "They say, 'We cannot say,' Dr. Brachman said. "They have strict orders."

Dr. Brachman is among the health leaders who have criticized the C.D.C. for not making an investigator regularly available to reporters. He said: "The media is an extremely important part of the public health team in providing education. If you turn them off, what is the media going to do?"

On Oct. 7, the investigation took a new twist when anthrax was identified in a swab of Mr. Stevens's co-worker Ernesto Blanco, 73. Because anthrax is not contagious, the finding immediately heightened suspicions of a bioterrorist attack.

Mr. Blanco developed a fever, severe pneumonia involving at least two lobes of his lungs, and bloody fluid in the pleural lining. He needed a mechanical respirator to help him breathe. B. anthracis has not been identified in cultures of the fluid and sputum. His symptoms are atypical for inhalation anthrax, and there may be no way of knowing if his symptoms were caused by anthrax, Dr. Hughes said. Blood tests taken over the next few weeks to detect antibodies to anthrax and other infectious agents may help clarify the diagnosis. Meanwhile, Mr. Blanco is recovering.

Epidemiologists talked to Mr. Blanco to learn everything he did for the preceding two to three weeks. Was he an avid gardener like Mr. Stevens? Did they share a garden plot? Had they bought fertilizer or bone meal from the same distributor? What, if anything, did Mr. Blanco and Mr. Stevens do together outside work?

Because Mr. Stevens and Mr. Blanco were co-workers, epidemiologists asked about recent construction or renovation at American Media. Could someone have dug up soil that contained spores from a cow that died of anthrax many years ago?

They swabbed dust in cracks, under the desks and from ventilation ducts and filters. Anthrax spores were found on Mr. Stevens's keyboard. Spores also were detected in samples from work surfaces in the mailroom at American Media, the C.D.C. said.

The exercise was repeated several times, after anthrax was identified in other people.

Anthrax was cultured from the nose of Stephanie Dailey, 36, who worked with Mr. Blanco in the mailroom. Then attention turned to New York City when Erin M. O'Connor, an assistant to Tom Brokaw at NBC headquarters, developed cutaneous anthrax after opening two envelopes, one containing powder and the other a granular substance.

The initial skin lesions from anthrax can resemble an insect bite, and a doctor who examined Ms. O'Connor initially thought she might have been bitten by a brown recluse spider, Dr. Hughes said. Luckily, however, an infectious disease specialist who had worked in areas of the world where anthrax is endemic suspected it was the cause of the sore on her skin and a dermatologist then took a biopsy of the lesions and sent a sample to the C.D.C.

Special staining and immunologic tests performed at the centers identified anthrax as the cause of the skin lesion, but the organisms have not grown in the laboratory, presumably because the antibiotics Ms. O'Connor had already been taking destroyed them, Dr. Hughes said.

Tests on Ms. O'Connor's biopsy were among thousands of others that C.D.C. and state and local health laboratories have performed in the search for the source of the anthrax.

Cultures from swabs of noses and environmental sources may grow several microbes. So scientists may have to repeat the tests before they can confirm anthrax. Newer laboratory techniques based on DNA, like the polymerase chain reaction, have allowed more rapid detection of microbes. But such successes have also created overly optimistic expectations. When it is necessary to grow microbes in the laboratory, the process cannot be speeded up, Dr. Koplan said.

In recent years, many public health leaders have warned that the country was ill prepared to detect anthrax and other diseases that only a few American doctors have seen. Yet the quick detection of anthrax in New York and Florida suggests that doctors may be better prepared than expected to respond to the threat, Dr. Koplan said.

Dr. Martin E. Hugh-Jones, an anthrax expert at Louisiana State University, said: "Official agencies have learned they must talk to each other. We've for years been trying to get doctors to understand what to look for. Now everyone knows."

31 Exposed To Anthrax On Capitol Hill; House Shuts Down; Senate Offices Close

Investigators See Tie in Letters in Fla., NBC and Daschle Cases

By John Lancaster and Susan Schmidt, Washington Post Staff Writers

The House suspended work and three Senate office buildings were closed yesterday as congressional leaders announced that 26 Senate staffers and five police officers had been exposed to anthrax spores that arrived in the office mail of Senate Majority Leader Thomas A. Daschle (D-S.D.) on Monday.

Almost simultaneously, New York Gov. George E. Pataki (R) added to the sense of national anxiety and confusion when he announced that anthrax microbes had been detected in his Manhattan office. Pataki and his staff began taking the antibiotic Cipro as a precaution.

The disclosures came amid growing evidence of connections between the anthrax sent to Daschle's office and similar episodes involving NBC News in New York and Florida tabloid publisher American Media Inc. Officials at the Centers for Disease Control and Prevention in Atlanta said yesterday that preliminary testing indicates the strain of anthrax that infected workers at the Florida firm, killing one, is almost identical to the strain that arrived in a letter sent to NBC.

FBI officials previously disclosed that the letters sent to Daschle's office and NBC bore Trenton, N.J., postmarks, were written in similar block letters and contained similar references to Allah, as well as warnings that anthrax was enclosed.

Seeking to calm public fears, officials emphasized yesterday that the anthrax sent to Daschle's office is a common strain that responds readily to antibiotics. But they also reiterated suspicions, first outlined on Tuesday, that the anthrax powder may have been produced in a sophisticated way, so that it wafts easily through the air.

"There's been some attempt to collect it, perhaps refine it, and perhaps make it more concentrated," Scott Lillibridge, a bioterrorism expert at the Department of Health and Human Services, said at a hearing yesterday. "That seems certain."

Attorney General John D. Ashcroft tamped down expectations of arrests anytime soon, saying the government has not yet determined culpability for the Daschle letter or other anthrax contamination at three news organizations. The attorney general reiterated that investigators have neither found links to organized terrorist groups, including Osama bin Laden's al Qaeda, nor ruled them out.

Although no one has fallen ill from the anthrax sent to Daschle's office, yesterday's disclosures about the number of people who have been exposed to the spores on Capitol Hill – a number that could grow with additional test results – deepened the sense of alarm in Washington and across the nation.

At a late-afternoon briefing yesterday, Senate leaders and officials responsible for the anthrax investigation said that nasal swabs had turned up evidence of the bacterium in 23 Daschle staffers, three aides to Sen. Russell Feingold (D-Wis.), whose office is next to Daschle's, and five law enforcement officers who responded to the initial report Monday morning.

On Tuesday, hundreds of jittery staffers lined up outside a hearing room to submit to nasal swabs and receive precautionary three-day supplies of Cipro. But Deputy Surgeon General Kenneth Moritsugu said at the briefing yesterday that no other positive tests had turned up during the day and expressed confidence that "we will not see large numbers" of new exposures, although some more positives were possible. No spores had turned up in the ventilation system, he added, although the Hart building's mailroom had yielded a single positive test.

News of the exposures caused some degree of confusion in the Capitol as well as a rift between House and Senate leaders who seemed to have a different take on the situation. House Speaker J. Dennis Hastert (R-Ill.) generated a wave of anxiety when he announced erroneously that investigators had found anthrax "in the ventilation system." Then House leaders made the decision to adjourn through the weekend so their side of the Capitol could be checked for anthrax, while their counterparts in the Senate pointedly declared their intention to remain in session through today. "We don't believe there's a rationale to shut down," said Sen. John F. Kerry (D-Mass.). The three Senate office buildings were closed to allow for additional testing, however.

Federal investigators examining the anthrax in the letter sent to Daschle are finding leads in their analysis of the material, said a senior federal bioterrorism expert yesterday. "We have substantive leads, and I regard that as very useful. These are leads in the sense of working with the material," said the official, declining to comment further on the probe in a briefing with reporters.

Ashcroft, interviewed on PBS's "NewsHour With Jim Lehrer," also said it is possible that individuals who sent the letters containing anthrax may be associated with some of the false anthrax threats that have swamped law

enforcement officials this week. "There may in fact be some linkage," said Ashcroft. "There may be that people would do both."

Ashcroft said investigators are getting limited information from the hundreds of people taken into custody. "We've not been overrun with cooperation, which is not to say that we don't have some capacity to improve our awareness of what happened and what may happen," he said.

One law enforcement official said investigators continue to look strongly at the possibility that the attacks could be the work of a domestic terrorist.

The bioterrorism official said the FBI does not know at this point if the substance in the Daschle letter was "weapons-grade material," as some others in government have suggested, but he said the anthrax is "professionally made."

Weaponization involves processing anthrax with additives to keep it from clumping. It also involves creating spores of a size small enough to be inhaled but large enough to be retained in the lungs rather than exhaled. Samples of the specimens retrieved from Daschle's office and other apparent targets of reported attacks around the country have been sent to Los Alamos National Laboratory in New Mexico, which has more than 1,200 anthrax strains on file.

The anthrax criminal probe is being run as three separate investigations by FBI field offices in New York, Washington and Florida, officials said, with coordination from the counterterrorism division at FBI headquarters. Bar codes and other identifying marks that appear on the envelopes sent to Daschle and NBC News anchor Tom Brokaw are being used to try to develop information about who might have mailed them, said postal inspector Tony Esposito. "We feel like we're making a lot of progress," he said late yesterday.

The letters passed through the postal service's processing and distribution center on Route 130 outside Trenton.

The bar codes – including those that appear on the front in black ink and the fluorescent identification tags that appear orange on the back of an envelope – indicate which machine at the facility processed a piece of mail and at what time.

By comparing those times with records of mail deliveries from branch offices, investigators have been able to narrow the geographic area they may have come from, Esposito said. He declined to say which branches investigators are focusing on.

Investigators also are reviewing post office surveillance videotapes and interviewing employees and customers.

The new cases reported yesterday bring to 45 the number of people – in Washington, New York and Florida – who have been exposed to anthrax. Of those, two people have come down with the most serious form of the disease, called pulmonary anthrax because it is acquired through inhalation. They are Florida photo editor Robert Stevens, 63, who died, and Ernesto Blanco, a 73-year-old co-worker at American Media who remains hospitalized.

Two more people have contracted the skin-transmitted form of the disease, which is less serious. They are Erin O'Connor, 38, an assistant to Brokaw, and the infant son of a producer at the rival ABC network in New York who apparently was exposed to the bacterium during a visit to the studio. Both are expected to recover. ABC offices in New York remain sealed off indefinitely as investigators seek to discover the source of the anthrax.

The CDC yesterday said preliminary tests had matched the anthrax sent to Brokaw with the strain of anthrax that killed Stevens in Florida. David Fleming, deputy director of the CDC, said in a telephone conference call with reporters that investigators had matched a fairly complete genetic fingerprint of the Florida strain with a small set of genetic markers from the New York strain. Comparable test results for the strain found in Senate offices are not yet available, he said. No anthrax has yet been recovered at ABC.

"The strain in New York, on the results of a small number of genetic comparisons, preliminarily appears to match the strain in Florida," Fleming said.

But investigators also had a new case to contend with yesterday. In New York, Pataki said anthrax spores were found on a hard surface in a small office in his Manhattan headquarters where his security officers usually sit.

Officials evacuated Pataki and about 75 staff members from the high-rise building.

Health officials first tested Pataki's office after his secretary developed flu-like symptoms after handling a "suspicious" letter Sept. 25. The officials said the letter bore a New York state postmark and did not include threats. The secretary delivered the letter to the governor's police detail, but officials later determined the letter was not the source of the anthrax.

Aiming to alleviate heightening concerns about bioterrorism, New York Mayor Rudolph W. Giuliani said none of the 500 results nasal swabs taken from NBC News employees last week had returned positive. Public health officials expected results from another 500 results from that network's employees to return late yesterday.

"It just reinforces the sense that this is a safe environment," the mayor said of the results.

ABC News President David Westin said in a statement that tests of air ventilation system filters at the network's midtown offices also showed no trace of anthrax bacteria. Still, employee testing continued, he said, adding that at least 150 employees so far voluntarily undergone testing for exposure to the bacterium.

After Friday's disclosure that anthrax had been found at NBC News, public health authorities conducted sweeps for anthrax in mailrooms at City Hall, the fire department, police department and other government agencies. Neil Cohn, the city's health officer, said "there's no public health concern."

At a news conference yesterday, Pataki added that state health labs are running 24 hours a day to handle the volume of anthrax testing. By Wednesday afternoon, the state health department had 74 different samples from ABC News to review. The state is moving workers dedicated to the West Nile virus to help test the large number of incoming samples, authorities said.

NBC said the powder that contained anthrax in the letter to Brokaw was brown and granular. When it was opened by a woman in the office, some of the brown powder fell onto her leg. She brushed it off and handed the letter, and a hate note inside, to O'Connor. The woman who opened the letter almost certainly developed symptoms of cutaneous anthrax as well, including a fever, black lesions and swollen glands. "She very much had symptoms of anthrax," said a spokesperson. "But it's been difficult to culture because she's on Cipro."

There is no connection between the information that prompted the Justice Department to issue a national warning of future terrorist attacks last week and the anthrax attacks, a law enforcement official said. The earlier warning was "time-specific" said a U.S. official, and was based on intelligence information generated by the wide-ranging investigation into the Sept. 11 attacks.

Staff writers Helen Dewar, Dan Eggen, Juliet Eilperin, Steven Gray, Michael Powell, Peter Slevin, Ceci Connolly, Justin Blum, Justin Gillis, Rick Weiss, Jo Becker, Fredrick Kunkle and special correspondent Christine Haughney contributed to this report.

New York Times

October 18, 2001

Pg. 1

U.S. Seeks To Build A Stock Of Vaccine Against Smallpox

By Sheryl Gay Stolberg

WASHINGTON, Oct. 17 — Federal health officials are negotiating with four drug companies to buy 300 million doses of smallpox vaccine — enough for every American — and are gingerly discussing the possibility that ordinary Americans might someday once again be vaccinated against the disease.

While there are no immediate plans for vaccination, Tommy G. Thompson, the secretary of health and human services, said today that he was asking lawmakers for \$509 million so that the government could stockpile enough vaccine to protect everyone in the nation against the potentially lethal smallpox virus.

"I can report to you that it looks very promising that we will have the 300 million doses by sometime next year," Mr. Thompson told reporters this evening. He said that he had met with representatives of two drug companies today, and that he would meet with two others on Thursday.

The decision to pursue more stocks of smallpox vaccine came as fears of attack with another biological agent, anthrax, spread across the country. Mr. Thompson did not say whether the recent spate of anthrax-laced letters, including one mailed to Tom Daschle, the Senate majority leader, influenced his decision.

Nor did he say whether the government was aware of any specific threat involving smallpox. Asked what prompted the policy shift, Mr. Thompson simply replied, "We thought we should go and see if we could get some other companies interested in the 300 million doses."

The health secretary and President Bush have been discussing bioterrorism preparedness since the Sept. 11 attacks on the World Trade Center and Pentagon, said Kevin Keane, a spokesman for Mr. Thompson. Sometime within the past week, Mr. Keane said, the White House gave Mr. Thompson the go-ahead to ask Congress to pay for the 300 million doses, so the country could be prepared for "the worst-case scenario."

Unlike anthrax, which is not transmitted from person to person, smallpox is highly contagious, and Mr. Thompson is clearly aware that it poses a potential menace. After the Sept. 11 attacks, he named Dr. Donald A. Henderson, who led the global effort that resulted in the eradication of smallpox in 1979, to lead a new advisory council on bioterrorism.

In June, a war game with the code name Dark Winter showed what chaos could erupt from a bioterrorist attack involving smallpox. The exercise, at Andrews Air Force Base, outside Washington, began with a report of a single case of smallpox in Oklahoma City. By the time it was over, the imaginary epidemic had spread to 25 states and

killed several million people. As it unfolded, growing grimmer and grimmer, the government quickly ran out of vaccine.

Smallpox vaccine can be used not only to prevent infection with the smallpox virus but also to treat people exposed to the virus, and thus contain an epidemic.

But the United States abandoned smallpox vaccinations in 1972, because the disease had been virtually wiped out here. The vaccine itself carries serious health risks: It produced adverse reactions in roughly 1 in 13,000 vaccinated people, ranging from severe rashes to brain inflammation, which killed about one person in one million. So experts said that the risk of vaccination was greater than the risk of getting the disease.

On Oct. 3, Mr. Thompson said his agency had negotiated with Acambis, a British company that makes the vaccine, to deliver 40 million doses by next summer, and not in 2004 or 2005 as originally planned. Today, he said that the Acambis contract has been expanded to 54 million doses, and that his department was conducting additional negotiations with Acambis, as well as negotiating with Merck & Company, one of the major vaccine makers in the United States. Mr. Thompson said his department was also negotiating with Baxter International, as well as another company he did not name.

Experts say that the chances that terrorists could lay hands on the smallpox virus — which officially exists now only in government laboratories in the United States and Russia — are remote.

"It's impossible to quantify but I would assess it to be quite low," said Jonathan B. Tucker, an expert in bioterrorism and the author of "Scourge: The Once and Future Threat of Smallpox," (Atlantic Monthly Press, 2001).

But smallpox, which kills about one of three people infected with it, is a particularly worrisome threat because it is easily transmittable. Even those Americans who have been vaccinated are at risk, because the vaccine's protection is believed to last only 15 or 20 years.

And unlike anthrax, which would require that spores be prepared according to precise specifications to infect large numbers of people, a smallpox epidemic could begin with a single infected person — a "smallpox martyr," in the terminology of bioterrorism experts — simply walking through a crowd.

The two official laboratory repositories for smallpox, one at the Centers for Disease Control and Prevention in Atlanta and the other at a Russian government facility in western Siberia, are monitored by the World Health Organization, and are generally thought to be secure.

But, Dr. Tucker said, there are "suspicions that there are undeclared stocks of smallpox virus in Russia," particularly at a top-secret virology laboratory under control of the Russian Ministry of Defense. A federal intelligence report completed in 1998 concluded that clandestine stocks of smallpox virus probably existed in Russia, as well as in Iraq and North Korea.

The growing fear of bioterrorism has renewed the question of whether Americans should be vaccinated. Today, a higher proportion of the population than in the past may run the risk of being harmed by the vaccine. It could cause serious illness in people whose immune systems are suppressed, including organ transplant recipients and people with AIDS, a disease that was not even known the last time Americans were vaccinated for smallpox.

So a decision to vaccinate Americans would not be made lightly, and Mr. Thompson emphasized today that there are no plans to do so.

But he did suggest that the government would revisit the question, a startling comment in and of itself. "Sometime in the future there may be a discussion that may lead to voluntary vaccination for the smallpox bug," he said.

Should that happen, it would constitute a huge shift in public policy. Mohammad N. Akhter, executive director of the American Public Health Association, has been publicly urging the administration to reopen the question of smallpox vaccination.

"My worry is that there will be a case in the U.S., we will rush to contain it, we will immunize some people but the level of public concern and the demand will be such that we will not be in a position to make a thoughtful decision," Dr. Akhter said today. He said the scientific community needed to "rethink the immunization priority for our people against smallpox."

The renewal of the immunization debate, said Dr. Irwin Redlener, president of a children's hospital at Montefiore Medical Center in the Bronx, "makes us really all pause in terms of what has happened to our country."

Dr. Redlener added, "If we have to go back to vaccinating people for smallpox, we are really about to turn back the hands of time."

USA Today
October 18, 2001
Pg. 2

Military Vaccine Supply Dwindles

By Dave Moniz, USA Today

WASHINGTON — The U.S. military is giving anthrax vaccinations only to troops considered most at risk of a bioterrorism attack because its stocks of the vaccine are dwindling and are unlikely to be replenished until next year, a Pentagon source says. Amid growing fears in the USA about the spread of anthrax, the Pentagon is administering the vaccine sparingly to forces going overseas. The military is waiting for the only U.S. company that makes the vaccine to obtain Food and Drug Administration certification to release new batches. The military source says the manufacturer, Michigan-based BioPort, might not receive FDA approval for the vaccine until next spring.

In June, the Pentagon said it had 24,000 doses of the vaccine. It won't say how many doses remain.

The Pentagon began inoculating all military personnel against anthrax in 1998. But the military has had to scale back the vaccination program because BioPort has had difficulty winning FDA approval for its manufacturing process.

Last week, BioPort submitted final papers for FDA approval, a process that normally takes 4-6 months. However, the FDA is expected to expedite the process as domestic bioterrorism fears rise and the military's vaccine supplies shrink.

BioPort has an exclusive contract to provide anthrax vaccine to the armed forces but is unable to release stockpiled batches it has produced for 2 years until the FDA says its plant meets government standards.

It's unclear how quickly the expedited approval will take. BioPort has been plagued by problems ranging from poor documentation to questions about its ability to manufacture a reliable and potent vaccine.

A BioPort spokeswoman, Kelly Rossman-McKinney, says that if the government certifies the plant in the next few months, its stockpiles might be used in limited cases to inoculate civilians. She says the Centers for Disease Control and Prevention can ask the Pentagon to release some of its vaccine stocks for people outside the military.

Since 1998, the military has used stores of vaccine manufactured by BioPort's predecessor, a laboratory run by the state of Michigan. Until June, the military had required that all troops who travel to the high-risk Middle East be inoculated. But there's not enough supply left to keep doing that.

The anthrax vaccine was developed in the 1950s and is considered crude by today's standards because it requires six shots over 18 months. Most other vaccines require fewer shots.

The program, which has inoculated more than 520,000 active military and reservists, has been controversial since its start 3 years ago. Critics charge that the military is relying on an experimental vaccine that is not fully tested and that BioPort has a poor track record of demonstrating to government regulators that it can produce a safe vaccine.

About 450 military personnel have faced disciplinary action since 1998 for refusing to take the vaccine, and 51 have been court-martialed, the Pentagon says.

Despite complaints from military personnel that the vaccine has caused an alarming number of adverse reactions, the Pentagon says it is safe. Defense officials contend that serious illnesses from anthrax shots are in line with other vaccines and that only one in 200,000 doses results in hospitalization.

Wall Street Journal
October 18, 2001
Pg. 1

Spreading Fear: Elaborate Anthrax Attack Raises New Questions About Germs' Source

If Iraq Played a Role, Strains Could Tear The Coalition Assembled by the President

By Carla Anne Robbins, Marilyn Chase and Hugh Pope, Staff Reporters Of The Wall Street Journal

The anthrax scare reached the center of American democracy Wednesday, when Congressional leaders decided to close the six giant office buildings surrounding the U.S. Capitol through this weekend so experts can search for signs of the deadly bacteria.

The decision came after more than 30 Senate staffers and Capitol police officers tested positive for exposure to anthrax, apparently as a result of a letter delivered to the office of Senate Majority Leader Tom Daschle that was laden with a fine powder containing anthrax. In addition, a suspicious package that arrived by mail on the other side of the Capitol, at the office of House Speaker Dennis Hastert, was removed by authorities to be examined for anthrax.

Coming on the heels of anthrax infections in Florida and New York -- and the discovery Wednesday of anthrax in the Manhattan office of New York Gov. George Pataki -- the spreading problem in Washington has left American officials unsure about the precise nature of the bioterrorism threat they face. But it's clear that it's being produced by someone with more advanced technology and skills than originally thought. Justice Department officials late Wednesday called it "professional grade" anthrax.

Some officials speculated that hate groups within the U.S. might have acquired anthrax capabilities. But more attention focused on foreign terrorists, raising the question of whether the culprits have the help of one of perhaps a dozen states known to have biological-weapons programs.

At the top of that suspect list is Iraq. Although federal officials said Wednesday they see no evidence yet of Iraqi involvement, many bioterrorism experts point out that Iraq has both the means and the motive. Former United Nations weapons inspector Richard Butler says Iraq once produced "sophisticated anthrax." And Saddam Hussein's continuing standoff with the U.S. gives him plenty of incentive to use whatever weapons he might retain.

The quality of the anthrax that's now been found "certainly raises a high level of attention that this wasn't just some weirdo," says Republican Rep. Porter Goss, chairman of the House Intelligence Committee. "When you start seeing professional signs, you start seeing signs of organization. We're dealing with something that was targeted [and] reasoned. The methods were not haphazard and apparently, the quality of the agent was more than just a layman could come up with."

For all the fear the attacks produced, health experts pointed out that the impact has been limited. So far only one person has died, and the handful of others known to have been infected are expected to fully recover. Anthrax isn't contagious, and it isn't easy to be infected. It takes about 10,000 spores to cause an infection in the lungs, the most deadly form. Moreover, anthrax -- at least the kind that's showing up in the U.S. now -- can easily be defeated by antibiotics when treatment is started early.

"The spores are little coated bacteria that are asleep, with their metabolism cut off," says Dr. Frederick Southwick, chief of infectious diseases at the University of Florida's medical school. "When they land in the nose, they don't germinate right away. If you start antibiotics early, it kills them as they germinate."

Still, law-enforcement officials are now scrambling to explain the level of technical sophistication behind the anthrax that reached into Congress. The strain of anthrax found in Sen. Daschle's office apparently isn't particularly exotic. Major Gen. Jon Parker, a commander at Fort Detrick, Md., where the anthrax has been tested, said the sample contained "pure spores" that hadn't been genetically engineered, and said it represents "a common variety." But the strain of anthrax is only one issue in determining its effect on victims. The second is the sophistication with which it is milled into particles. They must be small enough to lodge into the human lung but not so small that they float away.

Dr. Richard Spertzel, a microbiologist who worked at Fort Detrick and oversaw part of the United Nations effort to destroy Iraq's biological and chemical weapons laboratories, said that weapons-grade material is usually milled to get particles between one and five microns in diameter because these microscopic particles have the ability to lodge in the human lung.

The milling also provides lightness. "If you put a pile of weapons-grade anthrax on a table and then wave your hand over it, you would see a white cloud just go into the air and disappear. It would become airborne and stay airborne. At that size it functions more or less like a gas."

Milling machines that can do that are available in the U.S. pharmaceutical industry, but it would take an expert to select the right one. Anthrax cultures also must be chemically treated to prevent the finely ground material from lumping up, to increase their shelf life, and to help them be disseminated.

A terrorist group, Dr. Spertzel says, might develop this expertise and assemble the equipment and materials on its own. But it would take years of trial and error in selecting the right strain and assembling the right machinery. Perhaps hardest of all, the terrorists would have to learn how to avoid killing themselves in the processing and milling.

Jonathan B. Tucker, a chemical and biological weapons expert for the Monterey Institute of International Studies, describes the process of creating anthrax suitable as a weapon as "very dangerous" and difficult. "You would need a hermetically sealed container or room, or use a very high quality gas mask," he says.

No Signature

The finished product, he adds, might have been manufactured overseas, for anthrax has no signature and could easily be smuggled into the U.S. "It wouldn't show up in an X-ray or be detected by a Geiger counter."

One possibility is that either foreign terrorists or domestic hate groups working in the shadows within the U.S. have acquired a capability to manufacture such anthrax within America's borders -- meaning they may be continuing to make and spread the material even as fear spreads.

While that might suggest a more direct anthrax-production threat on American soil than previously feared, the scenario seems plausible, officials say. One intelligence official said that while the anthrax being found "isn't the kind of stuff that a single nut could make in his basement ... it's also not the kind of stuff that three or four folks couldn't make."

Mr. Tucker lists a series of states that have biological-weapons expertise, or the weapons themselves, including Iran, Syria, Libya, Egypt, North Korea, China, Russia and two former Soviet states, Uzbekistan and Kazakhstan. The former Soviet Union had the world's biggest biological-weapons program, and questions about what happened to its materials after the demise of the Soviet Union a decade ago.

Ample Means

So why suspect Iraq? For starters, it has shown it has ample means to manufacture biological weapons. When United Nations weapons inspectors finally reached Iraq's biological-weapons plants in 1995 -- after years of Iraqi denials that it even existed -- they found that the nation had produced more than 22,000 gallons of liquid anthrax and had put the agent into at least five missile warheads.

Iraq also has a motive, say officials: its desire to get revenge on America for its continued bombing of Iraqi targets and its desire to drive the U.S. out of the region.

Skeptics argue that if Saddam Hussein didn't use biological weapons during the Gulf War when his own survival was at stake, he's unlikely to do so now, when U.N. economic sanctions are unraveling and a growing number of countries are eager to end his diplomatic isolation.

But others argue that the risks of being discovered in a covert anthrax attack are low enough that they may have enticed Saddam Hussein to move against the U.S. As a sign of the Iraqi leader's personal malevolence for the Bush family, they point to a 1993 Iraqi plot to kill the first President Bush.

Former Central Intelligence Agency Director James Woolsey has been one of the strongest proponents of such a view. The Iraqi dictator, he says, may have been "deterred from putting biological weapons on a launcher with a return address. But the folks that sent finely ground anthrax to Sen. Daschle's office didn't leave a return address."

Richard Butler, who headed the U.N. team investigating Iraq's chemical weapons program, also sees a strong possibility of Iraqi involvement.

But he says that what he has are suspicions, rather than hard facts, based in part on recent news events. In particular, there are reports that Mohamed Atta, one of the World Trade Center hijackers, met an Iraqi intelligence agent at least once, and perhaps two or more times, in Prague. "We don't have evidence of a transfer from Iraq to al Qaeda," the bin Laden terrorist network, Mr. Butler says. "I'm talking about the possibilities"

Mr. Butler says he is certain that Iraq worked hard to develop the capability to produce the much more sophisticated and dangerous powdered version of anthrax, which unlike a liquid can hover in the air and enter the lungs of its victims. U.N. inspectors found records showing that Iraq had purchased sprayers and dryers necessary to turn liquid anthrax into the requisite fine powder.

Indeed, Mr. Butler says, the Iraqis tried to purchase more such sprayers, even while under U.N. sanctions, by arguing that they were needed for spraying agricultural insecticide. Iraq's main biological weapons plant, Al Hakam, was destroyed by the U.N. team, which then was forced to leave Iraq in late 1998.

What makes the trail more confounding, however, is that the Iraqis are known to have acquired up to nine strains of anthrax from the United States and France -- which will make tracking any sample back to Baghdad extremely difficult.

One strain that investigators appear to be focusing on is known as the Ames strain, which the U.S. may have tried to weaponize during a Cold War bioweapons program that was halted by President Richard Nixon in 1969. That strain is known to have been distributed to labs around the world over the years, but it isn't clear whether Iraq got its hands on it.

However, Iraq did obtain a more virulent form of anthrax, known as the Vollum strain, from the American Type Culture Collection, a nonprofit biologics supply concern based in Manassas, Va., before the Gulf War and before current laws controlling shipment of deadly pathogens were passed by Congress. Iraq used that strain and turned it into weapons, according to U.N. inspectors.

Picking Up Strains

Iraq ordered about seven strains from the ATCC and got two additional strains from the Pasteur Institute in Paris, according to Ray Zilinskas, a former U.N. weapons inspector now with the Monterey Institute of International Studies.

As a result, one senior Bush administration official said evidence of Iraqi involvement isn't likely to come from analyzing the type of anthrax that has turned up in the U.S. in recent weeks.

If clear evidence of an Iraqi involvement appeared, that would provoke an entirely new crisis for Mr. Bush. He undoubtedly would feel compelled to respond by striking out at Iraq.

But rounding up support would be difficult in an Islamic world already unhappy with sporadic American bombing of Iraqi defenses -- and suspicious because some senior Bush aides even before Sept. 11 were arguing that the president should look for a chance to go after Saddam Hussein.

"We understand the need for revenge against bin Laden, a retributive act against the perpetrators" of the Sept. 11 attacks, says Adnan Abu-Odeh, a former minister of information in Jordan. But he said Arabs already are suspicious of the motives for the attacks on Afghanistan, resentful of the attacks and long-running, U.S.-led sanctions against Iraq, and simply wouldn't believe the connection of the anthrax back to Iraq.

"If America moves to Iraq, people would not accept it is [against] terrorism," he said. "People would start to question the motivation even for striking Afghanistan. People will begin to suspect that terrorism is just a pretext."
-- John J. Fialka and Laurie McGinley in Washington contributed to this article.

New York Times

October 18, 2001

Pg. 1

News Analysis

Sense Of Unease Grips Anthrax Preoccupied Washington

By R. W. Apple Jr.

WASHINGTON, Oct. 17 — Anthrax is not contagious, but fear is.

There was ample evidence of that today, the most unsettling day this taut city has seen since Sept. 11. Whoever has made a target of newsrooms and Capitol Hill offices with letters containing white powder or other contaminants has succeeded in sowing confusion and anxiety, verging on terror, among the chattering classes of Washington — the people who set the capital's tone.

"A war of nerves is being fought in Washington," a senior administration official said, "and I fear we're not doing as well as we might be."

As with the first terrorist assaults, in New York and at the Pentagon, the government has been caught completely by surprise by the anthrax attacks. Slow to conclude that terrorism might be involved, the administration has been slower to provide definitive guidance to the public. Congress did no better today.

With word that more than 30 workers on Capitol Hill had tested positive for exposure to anthrax, House and Senate officials were unable to present a united front at a moment of crisis. Speaker J. Dennis Hastert announced that the House would go home until Tuesday; the Senate majority leader, Tom Daschle, said the Senate would stay.

A bleak comedy of contradiction ensued, played out against the swelling fear of a potentially lethal, totally invisible enemy. At day's end, leadership was the clear casualty. Perhaps most damaging was the lack of definitive public information about the source, nature and intensity of the exposure.

Although a veneer of civility was maintained in public, senators of both parties privately sneered at Mr. Hastert's decision, which had been seconded by the House minority leader, Richard A. Gephardt. One Republican said the House's message to the nation was, "Let's close everything down and get out of town, pronto."

Not that all Washington was gripped by panic. For most people, here as elsewhere in the country, life unfolded in its usual, matter-of-fact way. On a crystalline fall day when the city's monuments looked as crisp as the buildings in a Sheeler painting, fallen leaves blew briskly down suburban streets, travelers filled the coffee bars at Union Station, and tens of thousands of bureaucrats hammered away at tens of thousands of computers.

Ordinary folk were no doubt worried. But at 4 o'clock moms and stand-ins picked up children all over town, and numberless office televisions were switched to the broadcast of the American League Championship Series.

On Capitol Hill, where 20,000 people work in the various Congressional buildings, the mood was much tenser.

Hundreds lined up for anthrax tests, and most of the rest exchanged anxious telephone and e-mail messages. Some

offices sent staff members home. Outside the Capitol itself, which has been swept clear of vehicles and most visitors, a weird, wary silence prevailed, and within its corridors a bunker mentality took forceful hold. Likewise, in news offices where bioterrorism squads searched for anthrax spores, talk centered on powders, nasal swabs and antibiotics.

President Bush left the city this morning for California, on his way to a conference in Shanghai. Aides said there had been a lively debate about the trip, with some officials arguing that he should stay here until the anthrax scare was resolved. But the president, the aides said, sided with those who insisted that he must go through with the trip if he expected the country to take seriously his repeated urging to get on with life as usual.

Still, his absence left it to others to try to keep things in perspective as reports of new anthrax exposures rolled in, not only from Mr. Daschle's office, where an anthrax-laced letter was opened on Monday morning, but elsewhere on the Senate side. The secretary of health and human services, Tommy G. Thompson, did his best in testimony on Capitol Hill, but his credibility was undercut days ago when he asserted, with insufficient facts to back his claim, that the first case of anthrax, in Florida, was isolated.

Nor have Mr. Thompson and Tom Ridge, Mr. Bush's new homeland defense czar, worked out a clear division of responsibilities. In office for only a few days, Mr. Ridge has been mostly out of sight as the anthrax scare has developed.

Hobbled by lack of information, other arms of government could do little to provide reassurance. In 10 days, investigative agencies have made almost no progress in pinpointing the origins of the anthrax contamination. For its part, the Congressional leadership was unable to provide much leadership, either to Washington or to the nation as a whole. Mr. Hastert said he was acting out of prudence, but one man's prudence in a situation like the present one can feed others' panic, and he was criticized pitilessly by his peers on the ground that he was setting a poor example.

Senator John McCain of Arizona, the Republican who ran against Mr. Bush in the primaries last year, said he intended to make a series of radio and television appearances in the next few days to try to convince people that for now the anthrax threat had been grossly exaggerated.

"We have had one death from this stuff, and three other confirmed cases," he said. "Two of those three are a milder form of the disease. More people have been struck by lightning in the last 10 days, I'll bet, than have contracted anthrax. The country badly needs to settle down.

"There's nothing wrong with being afraid. What we have to do as leaders is help people to get on top of their fear and channel it into something useful, rather than crossing that narrow line between fear and panic."

But it is not easy to cut through the dense crust of anxiety that has been built up in the last month or so. At the bottom is the general sense of insecurity created by the shocking attacks of Sept. 11. Next came a warning from the F.B.I., without particulars, that more terrorist incidents might be imminent. Official Washington being what it is, that warning was taken by many here to apply with special force to the capital. And then came the anthrax threat in Congress, where many members and their staffs were already jumpy because of a belief that one of the planes hijacked on Sept. 11 — perhaps the one that crashed in Pennsylvania — had been aimed at the Capitol.

Anxiety is grounded in fear, of course, and fear is grounded in ignorance. Until the government is able to develop better information about the anthrax attacks, and provide more comprehensive means to combat them (like cheaper, more readily available stocks of Cipro and other antibiotics), days like today are bound to recur.

Los Angeles Times
October 18, 2001

Iraq In No Hurry To Aid U.S. Anthrax Probe

By Michael Slackman, Times Staff Writer

BAGHDAD -- Iraq played no role in the Sept. 11 terrorist attacks on the United States and has no connection with the rash of anthrax incidents--but has no intention of helping America figure out who was responsible, Deputy Prime Minister Tarik Aziz said Thursday.

Aziz told two U.S. journalists that after more than a decade of being at odds with the United States, he isn't surprised by a rush to judgment against Iraq. But he said that to accuse his country is to misunderstand its ideological foundation, which rejects Islamic fundamentalism as practiced by the United States' top suspect in the attacks, Osama bin Laden, as well as the practical strides it has made in recent years toward improving its position in the world.

"Whatever happens in the United States, someone would raise his finger and point to Iraq," Aziz said as he casually puffed a cigar during his first lengthy interview with the Western media since the attacks. "We don't like this kind of agitation against Iraq. These are cheap, baseless, ridiculous accusations. How can we do these things? Why?"

In the days immediately after the attacks, some analysts and policy-makers speculated that the operation was so massive in scope and so expertly orchestrated that a terror network such as Bin Laden's Al Qaeda, would need the assistance of a state to have pulled it off. And some influential voices in Washington and in London have argued that Iraq must have been that state.

No proof linking Baghdad to the attacks has been presented by the White House or 10 Downing Street. But there has been a lot of speculation, fueled by reports from the Czech Republic that an Iraqi diplomat had met several times with suspected hijacker Mohamed Atta before the diplomat was expelled from Prague.

The bespectacled Aziz, a longtime associate of President Saddam Hussein who became a familiar face to television viewers during the 1991 Persian Gulf War, avoided the kind of hyperbole common in Baghdad either in condemning the United States' "aggression" against Iraq or in defending Iraq's actions over the past decade.

On the issue of Ahmad Khalil Ibrahim Samir Ani, the Iraqi diplomat expelled from Prague, Aziz said the allegation was a fabrication. "This meeting did not take place," Aziz said. "It is a lie. We checked with him: 'Did you ever meet somebody called Atta?'"

When asked if the question was posed more broadly to Ani, such as whether Atta met with him using a different name, Aziz said: "Even if such an incident had taken place, it doesn't mean anything. Any diplomat in any mission might meet people in a restaurant here or there and talk to them, which is meaningless. If that person turned out to be something else, that doesn't mean he had a connection with what that person did later."

From his perspective, the troubles between the United States and Iraq began not with Iraqi troops entering Kuwait in August 1990 but with America's refusal to negotiate a political solution to their differences.

"America chose to be the enemy of Iraq," Aziz said, adding that he tried to bridge the political divide with former presidents Bush and Clinton and was rebuffed without even an answer. "For eight years, the American government refused a meeting even of junior diplomats."

Then, he said, not long after the Sept. 11 attacks, the U.S. broke that silence with a letter to Iraq delivered via its ambassador to the United Nations that warned it not to take advantage of the current crisis. Iraq responded by calling the note "stupid" but maintained that it had no intention of being provocative.

Aziz has been at this tit-for-tat dance with the United States for a long time. But this time, he is in a much stronger position, regionally, than in the recent past. After 10 years of sanctions widely viewed as punishing civilians, not the regime, Iraq is viewed by many as a victim of U.S. aggression.

"Extending the war against another Muslim nation is going to lead to great losses to the American effort in Afghanistan," Aziz said. "There will be wider resentment. Many of those who are now in one way or the other joining the U.S. in this effort, they will stand against her, and they will defect from the so-called coalition."

"The warmongers, many of them who are Jewish and pro-Zionist, are doing that for their own purposes, not for serving the good national American interest." The bottom line, according to Aziz, is that if the U.S. has any interest in resolving issues with Iraq, it should be willing to sit down and talk.

"If the American government is ready for a political solution, we are ready," he said. "For us, enough is enough."

Thursday October 18 1:42 PM ET

Kenya Confirms Presence of Anthrax

By ANDREW ENGLAND, Associated Press Writer

NAIROBI, Kenya (AP) - White powder in a package mailed from Atlanta to a Kenyan doctor has tested positive for anthrax spores, health officials said Thursday, the first proven case of tainted mail outside the United States since the Sept. 11 attacks.

The package was sent by a relative of the doctor, said Dr. Julius Meme of the health ministry. However, when the doctor asked the relative what the substance was, the relative said he knew nothing about any powder, Meme said. The package was also damp.

Health Minister Sam Ongeri told reporters that the unidentified doctor, who lives in Nairobi, and four family members "may have come into contact" with the spores and were being tested, but they are "not in danger." The powder was undergoing further tests at a government lab, he said.

White powder was found in two other letters - one to an official with the U.N. Environment Program in Nairobi and the other to a Kenyan businessman in the central town of Nyeri, Ongeru said. Those letters were also being tested at the state-run Kenya Medical Research Institute, he said.

The package that tested positive for anthrax had been mailed Sept. 8 from Atlanta and was received in Kenya on Oct. 9, Ongeru said. It was opened on Oct. 11.

The package contained samples of cloth and was sent via Express Mail Service, said Meme.

The letter to the U.N. office was in a brown, tatty envelope bearing a Pakistani postage stamp in the upper lefthand corner, said Tore Brevik, a spokesman for the environmental program. It was addressed in blue ink to a UNEP employee, whom he would not identify.

In the upper righthand corner, where the postage stamp should have been, the word "immaculate" was written in blue ink.

UNEP is headquartered in Nairobi, the Kenyan capital.

The Kenyan government set up a task force that included representatives from the health ministry, the postal service and the Atlanta-based U.S. Centers for Disease Control and Prevention ([news - web sites](#)). It is to issue a report on Friday.

"We would like to ask all Kenyans not to panic, but to remain calm. The government has the capacity and capability to deal with the situation," Ongeru said.

Anthrax is not contagious and can be treated with antibiotics. It is endemic in this East African nation, infecting people who come in contact with contaminated meat or hides, Ongeru said.

In the United States, five people are known to have contracted anthrax and dozens more have been exposed. The first confirmed case occurred at a tabloid newspaper in Florida.

The anthrax attacks have caused jitters worldwide. There have been hundreds of scares and hoaxes, but before the announcement in Kenya, no cases outside the United States had tested positive.

In France on Thursday, at least 19 people were hospitalized after white powder turned up at the National Assembly in Paris and at a post office in the eastern city of Nancy. The substances were being tested.

Also Thursday, an envelope containing white powder was received by the U.S. Consulate in Berlin, officials said. Two similar letters were sent to U.S. installations this week, and another was sent to the Environment Ministry; all were being tested, officials said.

In Greece, the health ministry was closed Thursday after an employee opened an envelope containing powder addressed to former U.S. ambassador Nicholas Burns and a note that said "death," police said. It was not immediately clear how the letter ended up at the ministry building.

Burns ended his stint in Athens earlier this year and is now the U.S. ambassador to NATO ([news - web sites](#)).

In Beijing, government health workers disinfected people who came into contact with suspicious substances enclosed in a letter sent to an American firm, China's Foreign Ministry said Thursday. The substance was being tested. The letter contained information about the banned Falun Gong ([news - web sites](#)) spiritual movement.

A car bomb exploded in 1998 outside the U.S. Embassy in Nairobi, almost at the same time as an explosion at the U.S. Embassy in Tanzania. The blasts killed 231 people, including 12 Americans. Osama bin Laden ([news - web sites](#)), the top suspect in the Sept. 11 terror attacks on the United States, has been indicted in the embassy bombings. Three bin Laden followers convicted in those bombings were sentenced Thursday in New York to life in prison without parole.

http://dailynews.yahoo.com/h/ap/20011018/wl/anthrax_overseas_13.html

Thursday October 18 1:46 PM ET

Six Anthrax Infections Confirmed

By JESSE J. HOLLAND, Associated Press Writer

WASHINGTON (AP) - Two new cases of the skin form of anthrax were reported Thursday, one involving an assistant to CBS anchorman Dan Rather and the other a postal worker in New Jersey. That brought to six the total number of confirmed cases of infection.

In addition, up to three more suspected cases were being investigated, according to Dr. Julie Gerberding of the Atlanta-based Centers for Disease Control and Prevention ([news - web sites](#)).

The additional cases "are in large part linked to Florida and New York situations," she said.

``We do have other individuals who are reporting skin lesions or exposure circumstances that are under active investigation," Gerberding said in a telephone conference with reporters. ``We are working around the clock to confirm or rule out" anthrax infection.

http://dailynews.yahoo.com/h/ap/20011018/ts/attacks_anthrax_60.html