

Working Paper Anthrax In America:

A Chronology and Analysis of the Fall 2001 Attacks

November 2002





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Anthrax in America Executive Summary

Introduction

On September 11, 2001, terrorists linked to Osama bin Laden's al-Qaeda terror network hijacked four airliners. Two of the planes crashed into the World Trade Center towers in New York City, and a third into the Pentagon in Washington, DC. A fourth plane crashed in rural Pennsylvania en route to its suspected target, the U.S. Capitol building. The attacks and their dramatic demonstration of American vulnerability created an atmosphere of apprehension and uncertainty. Further attacks were anticipated, although there was a great deal of uncertainty as to when those attacks might occur and what form they might take.

Against this backdrop, on 4 October 2001, health officials in Florida announced that Robert Stevens, a tabloid photo editor at American Media, Inc. (AMI), had been diagnosed with pulmonary anthrax – the first such case in the United States in almost twenty-five years. Initially, the patient's condition was attributed to a natural source. However, after two of the victim's co-workers fell ill and anthrax spores were discovered throughout the building in which they worked, these initial assessments soon gave way to apprehension. Other cases began to appear at media outlets in New York City. These new cases revealed the possible source of the exposure: almost all of those infected in New York had come into direct contact with letters containing a mysterious powder. In mid-October, the crisis reached Washington, DC, when an anthrax-laden letter was opened in the office of Senator Tom Daschle (D-SD). Several workers at the postal facility that processed the letter fell ill with pulmonary anthrax. Congressional office buildings were evacuated and virtually all federal government mail delivery in the nation's capital was halted as a result. An additional letter, addressed to Senator Patrick Leahy (D-VT), was found during a search of quarantined mail, bringing the total number of anthrax-laden letters sent to at least four. With the realization that these infections stemmed from a deliberate act, what originally started out as a public health response increasingly became a law enforcement investigation.

By the end of November 2001, it appeared that the outbreak had run its course, and no additional letters were discovered. The results were sobering: a total of twenty-two people had been infected with either cutaneous or pulmonary anthrax, and five of those infected with the pulmonary form died.² Beyond the toll in human lives, the attacks

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¹ Four letters have been recovered by law enforcement personnel, although some observers suggest that as many as seven were sent in two distinct "waves." The first wave, postmarked on 18 September, may have included the following letters: 1 to AMI (not recovered), 1 to *The New York Post* (recovered), 1 to NBC (recovered), 1 to CBS (not recovered), 1 to ABC (not recovered). The second wave, postmarked on 9 October, consisted of the letters to Senators Leahy and Daschle (both recovered).

² The official total of the Centers for Disease Control and Prevention (CDC) is 22 cases, 18 of which were confirmed and 4 suspected. Some have recently challenged the CDC's official tally of cases, suggesting

also carried a significant cost in terms of disruption and decontamination. Select congressional office buildings were closed for periods of up to several months. More than a year later, postal facilities in Washington, DC, New Jersey, and Connecticut, and the AMI building in Florida remained closed. The costs of decontaminating congressional offices and postal facilities will easily run into the tens of millions, if not higher. In addition to these costs stemming from direct remediation efforts, there are additional (not tabulated) economic costs that resulted from the disruption of the postal system. Finally, the idea of an unknown killer dispensing death through the postal system brought even more fear to a nation that had been profoundly shaken by the tragic events of 11 September.

The first bioterrorist attack on the United States in the 21st century is revealing in many respects. The government's response to the attacks proved to be a difficult undertaking characterized by a significant amount of on-the-job learning by law enforcement and public health personnel, as well as senior government officials. From the unconventional delivery mode and conflicting estimates of exposure to questions over the appropriate timing and nature of treatment, government agencies frequently provided substantially different, sometimes contradictory, information and advice to those potentially exposed, to the media, and to the public as a whole. Law enforcement officials have reported that the attribution process (tracking and identifying the perpetrator) has been a learning experience as well, forcing the Federal Bureau of Investigation (FBI) to develop new investigative techniques and to reach out to expert communities for assistance. Although they had been preparing in theory for a bioterrorist incident for several years, in practice, public health workers faced substantial diagnostic and medical treatment issues. And in several cases, these preparations were found to be lacking – for example, as the high demands for sample testing met with only modest capability to process them clearly suggests. Perhaps the most important issue area, and the one that requires the most improvement, was the importance of effectively and accurately communicating the nature of the threat and the status of the response efforts to the public.

This document provides a one-year snapshot of the attacks and subsequent response. It examines these issues through a chronological listing of the significant events associated with the anthrax attacks and the statements made by government officials, health and law enforcement specialists, and other individuals involved in responding to the attacks. All of the sources used in the preparation of this chronology are publicly available, including major national and international newspapers as well as those from the areas directly affected by the attacks.³

that the total number of cases is higher. See, for example, Aaron Hicklin, "Anthrax Toll May Have Been Higher Than Reported," *The Herald* (Glasgow), 5 October 2002, p. 4. For an explanation of CDC definitions of "confirmed" and "suspected," see: http://www.bt.cdc.gov/documentsapp/faqanthrax.asp or http://www.ph.ucla.edu/epi/bioter/detect/antdetect_definitions.html.

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³ A listing of the sources consulted appears in Appendix C.

Government Response

The announcement of the case in Florida was a wake-up call for local, state, and federal responders. Preparations for dealing with bioterrorism had been a significant issue for several years prior to the attack, with both considerable funding and several exercises being conducted to test responses at various levels. At first the response effort was primarily public health-oriented, since there was apparently only one case, initially

"The good news is that there are many agencies working on all of these issues. The bad news is that there are many federal agencies working on all of these issues."

- Sen. Fred Thompson (R-TN) presumed to have stemmed from natural causes. Law enforcement personnel, while on the scene, were involved only tangentially. The character of the response was soon affected by the realization that the sole known case in Florida was not, as originally hoped, an isolated occurrence; additional cases appeared in Florida, New York, New Jersey, and Washington, DC. Rather than a single case stemming from natural causes, responders were dealing with several cases that increasingly appeared to have resulted from the deliberate spreading of anthrax spores. When this became apparent, what started out as a public health crisis rapidly merged with a nascent law

enforcement investigation, as the FBI began the process of attempting to identify the perpetrator(s) and bringing them to justice. The large number of federal (and state and local) agencies involved in the public health and law enforcement response efforts led to some confusion over who exactly was in charge of which part of the evolving response. Although there were subsequent allegations of strains between the various agencies involved, those agencies nevertheless appeared to improve their ability to work together as the response unfolded over time.

As the character of the response shifted, so too did the actions of responders and officials as they gathered additional information. Clearly, there were some initial gaffes and missteps, including the failure to evacuate and test American Media, Inc. (AMI) employees for several days after contamination was discovered at the AMI building and the initial failure to draw a link between the cases in Florida and New York. A notable miscalculation was the failure to test postal workers at the Brentwood facility in Washington, DC, immediately after investigators had retraced the path of the Daschle letter through the postal system. At the

"People are somewhat surprised we're learning this on a day-to-day basis. That's really no different than any other investigation we've done. You always wish you knew on Day One what you know on Day 20."

> - Dr. Jeffrey Koplan, Former CDC Director

time, investigators did not perceive any threat to the postal workers, as the letters to Senators Daschle and Leahy appeared to be well-sealed with tape. They simply did not know that the anthrax would seep out through microscopic pores in the envelopes.⁵

on 1 September 2001 that indicated that anthrax particles might be small enough to seep out of microscopic

⁴ George Anders, "The Real Biohazards," Fast Company no. 54 (January 2002), p. 100.

⁵ During the course of the outbreak, CDC and other officials were informed of a Canadian study published

However, officials and workers involved clearly learned from these mistakes and sought to correct faulty procedures. Once the risk to the postal workers was better understood, officials were quick to provide testing and preventative antibiotics. Throughout the response effort, public health officials were quite forthcoming about the fact that they were facing a new situation, learning as they went.

The character of the government response to the anthrax attacks should not have come entirely as a surprise. Several exercises conducted in the years preceding the attacks highlighted systemic weaknesses and difficulties that government responders could expect to face. The May 2000 TOPOFF exercise, for instance, featured a plague attack on Denver, CO. The Dark Winter exercise conducted in June 2001 found that the nation was woefully unprepared for a biological attack around a smallpox scenario. Among the shortcomings highlighted by both exercises were the lack of adequate resources and surge capabilities in the U.S. health care system (in both exercises, hospitals filled rapidly and antibiotic/vaccine supplies were exhausted quickly), conflicts between state and federal officials over roles and priorities (especially in the areas of resource allocation and quarantine/disease containment), and a perceived inability to prevent or control the panic factor that would likely arise in such a situation.⁶ Among the lessons drawn from both exercises were the need for active and unambiguous political leadership, the importance of sound expert counsel, the key role of clear and effective communication, and the need for a robust public health system.⁷ Both of these exercises drew attention to issues that would reemerge during the response to the anthrax attacks.

Attribution Process

Even before the public health response to the attacks was completed, law enforcement shifted into high gear, attempting to track down those responsible for the attacks. Early speculation focused on a foreign source, either a state actor, such as Iraq, or a sub national group, especially al-Qaeda, given the close proximity between the 11 September 2001 attacks and the first wave of anthrax letters. However, the task proved elusive; one year after the attack the perpetrator(s) remained at

"The only thing that makes sense is if it's some kind of intentional release. The implications can be anything from a disgruntled individual who has an axe to grind...on up to an inept release by sympathizers of Osama bin Laden or my favorite country, Iraq.

- Richard Spertzel, Former UNSCOM Inspector

pores in envelopes. See B. Kournikakis, S.J. Armour, C.A. Boulet, M. Spence, B. Parsons, "Risk Assessment of Anthrax Threat Letters," DRES-TR-2001-048, Defence Research Establishment Suffield (Canada), 1 September 2001.

⁶ Anders, "The Real Biohazards," p. 101; Tara O'Toole, Michael Mair, and Thomas V. Inglesby, "Shining Light on 'Dark Winter'," *Critical Infectious Diseases*, vol. 34 (1 April 2002), p. 982.

⁷ Thomas V. Inglesby, Rita Grossman, and Tara O'Toole, "A Plague on Your City: Observations from TOPOFF," *Critical Infectious Diseases* vol. 32 (1 February 2001), p. 443; O'Toole et al., "Shining Light on Dark Winter," pp. 981-2; Chris J. Wiant, "Operation Topoff – Lessons on Responding to Bioterrorism," *Environmental Health* vol. 63, no. 3 (October 2000), p. 50.

large. Indeed, the anthrax investigation has even been compared to the Unabomber case, suggesting that the effort to track down the person responsible for the attacks could be long and drawn out. One year into the investigation, the FBI believes it has made some progress in its pursuit of the person(s) responsible for the attacks. The FBI investigation has focused on a domestic source, a single person with the expertise necessary to launch the attacks. Agents have developed a comprehensive profile of the potential perpetrator and distributed it to specific target audiences and nationwide via the Internet and news media. Investigators have questioned personnel associated with government and academic laboratories with access to anthrax, and some individuals were given polygraph tests and had their residences searched. Forensic processes, designed to balance legal evidentiary needs against scientific and public health requirements, have been developed to examine the available evidence.

The FBI asserts that it has proceeded in a comprehensive and deliberate manner; yet others have argued that the investigation has been more aptly characterized by its apparent slowness and missteps by investigators. Agents have been criticized for not consulting the appropriate experts in bioterrorism and biotechnology until the investigation was several months old. There was a delay of several months before the FBI subpoenaed laboratories working with the Ames strain of anthrax, requesting samples for testing and comparison. And there was the controversy surrounding a former

"The perpetrator is an American microbiologist who has access to recently-weaponized anthrax or to the expertise and materials for making it, in a US government or contractor laboratory."

- Barbara Hatch-Rosenberg, Federation of American Scientists government biodefense scientist as an identified "person of interest" to the investigation. Some observers have gone beyond allegations of incompetence, suggesting that the investigators are deliberately "dragging their feet" on the investigation. In addition, the pace of the FBI's activities and the relative absence of solid information or progress reports from the FBI have led to the emergence of a host of "armchair detectives" advancing their own analyses of the publicly available evidence and their own theories of who is responsible for perpetrating the attacks.

While some of these commentators agree with the FBI's focus on a domestic source for the attacks (if not necessarily a lone individual, as the FBI's profile suggests), others continue to assert that a foreign source (ranging from al Qaeda or other terrorists to Iraq) is responsible for the anthrax-laden letters and have criticized the FBI for apparently ruling out such potential sources so quickly.

Diagnostic Issues

Pulmonary anthrax was always rare in the United States, but with the replacement of goat hair by synthetic substitutes the primary source of aerosolized anthrax exposure disappeared and so did cases of pulmonary anthrax. Indeed, there were only 18 reported cases in the United States between 1900 and 1978, and none through the turn of the

century. As a result, very few physicians had any direct experience with anthrax, its identification, and its symptomatology. Cutaneous anthrax is relatively more common than the pulmonary variant, but it is still not a condition often encountered by most emergency room doctors or general practitioners on the East Coast. Thus, there were several instances where physicians misdiagnosed pulmonary and cutaneous anthrax cases following the 2001 letters. For example, Robert Stevens and Ernesto Blanco, the initial cases in Florida, were originally diagnosed with pneumonia. However, the Florida Department of Health laboratory was able to provide a rapid diagnosis of anthrax, thanks to the efforts of technicians who had recently completed a training course as part of the Laboratory Response Network funded with bioterrorism response money. The attacks clearly reinforce the need to increase awareness of the characteristics of potential biological agents among the personnel who would be the first to see and treat such cases.

For several weeks in late 2001, public health workers conducted thousands of tests to determine who may have been exposed and what medical steps would be appropriate. In addition, hundreds of samples were taken at numerous facilities to determine the extent of contamination. The extensive number of individuals and locations that required testing placed a significant burden on the Centers for Disease Control and Prevention (CDC) and local laboratories in the affected states. Complicating this testing requirement, as well as the law enforcement investigation, were a large number of hoaxes and false alarms that followed the actual attacks. Laboratories across the continent were deluged with requests to conduct tests on everything from suspicious-looking white powders to plant seeds to stuffed animals. According to statistics from the CDC, its laboratories and other members of the agency's Laboratory Response Network tested over 125,000 samples during the period following the first reports of the outbreak. 10 In several cases, some state and local laboratories were so overloaded with testing requests that they contemplated setting up triage procedures to prioritize tests. 11 While federal, state, and local laboratories performed admirably under such strains, the reported difficulties in meeting testing demands highlight the need for those laboratories to ensure a surge capability for possible future bioterrorist incidents. Ensuring adequate laboratory

⁸ Thomas V. Inglesby, Donald A. Henderson, John G. Bartlett, Michael S. Ascher, Edward Eitzen, Arthur M. Friedlander, Jerome Hauer, Joseph McDade, Michael T. Osterholm, Tara O'Toole, Gerald Parker, Trish M. Perl, Phillip K. Russell, and Kevin Tonat, "Anthrax as a Biological Weapon: Medical and Public Health Management," *Journal of the American Medical Association*, vol. 281, no. 18 (12 May 1999): 1736-1737.

⁹ "Avoiding a Dark Winter," *The Economist*, vol. 361, no. 8245 (27 October 2001), p. 29.

¹⁰ Bob Dart, "CDC: False Alarms Show System Works," *The Atlanta Journal-Constitution*, 20 September 2002, p. 2B.

¹¹ Deborah L. Shelton, "Testing for Anthrax has Overwhelmed State Labs; Officials in Missouri and Illinois Say They Might Have to Start Denying Requests," *St. Louis Post-Dispatch*, 16 October 2001, p. A3. See also Michael B. Heller, Michel L. Bunning, Martin E.B. France, Debra M. Niemeyer, Leonard Peruski, Tim Naimi, Phillip M. Talboy, Patrick H. Murray, Harald W. Pietz, John Kornblum, William Oleszko, Sara T. Beatrice, Joint Microbiological Rapid Response Team, and New York City Anthrax Investigation Working Group, "Laboratory Response to Anthrax Bioterrorism, New York City, 2001," *Emerging Infectious Diseases*, vol. 8, no. 10 (October 2002), pp. 1096-1102.

capacity was one of the issues raised during a December 2001 meeting convened by the CDC to examine lessons learned from the anthrax response and to chart a research agenda for preparing for future attacks. 12

Medical Treatment Considerations

A key feature of the public health response to the anthrax letters was the widespread use of antibiotic prophylaxis. Shortly after the contamination at AMI was confirmed, the CDC airlifted enough antibiotics for 1,000 people to Florida – part of the National Pharmaceutical Stockpile, a program to rapidly deploy antibiotics and other medical countermeasures. With Congress, major televisions networks and newspapers targets of the attacks, this aspect of the response received considerable attention. The brand name "Cipro" became a household word almost overnight, especially after NBC anchorman Tom Brokaw commented during a broadcast, "In Cipro we trust." In prescribing antibiotics, the CDC identified approximately 10,000 people – including postal workers, congressional staffers, and media employees – as at risk due to potential exposure. However, the number of people on antibiotics extended far beyond the population immediately at risk. At the peak of the outbreak, more than 30,000 people were taking various types of antibiotics. This figure does not include the "worried well" who obtained prescriptions from their private physicians or over the Internet. While specific data are unavailable, some sources of antibiotics reported increases as high as 300 to 600 percent compared to previous sales. 14 Neither do we know the number of individuals who began on Cipro but subsequently opted for treatment with other antibiotics (e.g., penicillin or doxycycline) once lab tests indicated those would also be effective against the agent. In spite of injunctions by federal and state health officials to not "hoard" antibiotics, pharmacies in Florida and later in New York reported skyrocketing demands such, especially the much-reported on ciprofloxacin.

With such a significant number of individuals on "preventative" antibiotics, there were two major concerns for public health officials: compliance and side effects. As part of its ongoing efforts to track the response, the CDC conducted a telephone survey of the approximately 10,000 people who were considered at risk and prescribed antibiotics. Overall, only 44 percent of respondents reported completing at least 60 days of antibiotics. Compliance with the prescribed antibiotic regimen varied considerably on a regional basis. As an example, illustrated in Figure 1, 64 percent of workers at the

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¹² Lawrence K. Altman, "Preparation for Anthrax is Called For," *The New York Times*, 15 December 2001, p. B7.

¹³ "Cipro" is the Bayer AG brand name for the antibiotic ciprofloxacin.

¹⁴ For example, see Kathryn Balint, "Online Pharmacies Flooded with Antibiotic Orders," *The San Diego Union Tribune*, 13 October 2001, p. A-6.

¹⁵ Colin W. Shepard, Montse Soriano-Gabarro, Elizabeth R. Zell, James Hayslett, Susan Lukacs, Susan Goldstein, Stephanie Factor, Joshua Jones, Renee Ridzon, Ian Williams, Nancy Rosenstein, and the CDC Adverse Events Working Group, "Antimicrobial Post exposure Prophylaxis for Anthrax: Adverse Events and Adherence," *Emerging Infectious Diseases*, vol. 8, no. 10 (October 2002), pp. 1126, 1128.

Brentwood facility completed at least 60 days while only 21 percent of those that the NYC Morgan facility completed the regimen. The survey also found that more than half of the respondents (57 percent) reported experiencing some side effects from the antibiotics. The occurrence of side effects (or the fear that they would occur) was apparently a significant factor in determining compliance with the antibiotic regimen. Of those who began taking antibiotics but stopped before completing 60 days, 43 percent did so because of adverse reactions and 7 percent did so out of fear of long-term side effects.

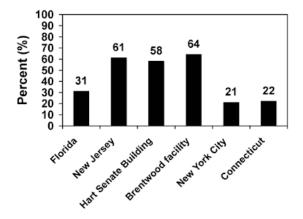


Figure 1 - Percentage of persons completing at least 60 days of antimicrobial prophylaxis, by U.S. site, 2001-2002. Source: Colin W. Shepard, Montse Soriano-Gabarro, Elizabeth R. Zell, James Hayslett, Susan Lukacs, Susan Goldstein, Stephanie Factor, Joshua Jones, Renee Ridzon, Ian Williams, Nancy Rosenstein, and the CDC Adverse Events Working Group, "Antimicrobial Post exposure Prophylaxis for Anthrax: Adverse Events and Adherence," *Emerging Infectious Diseases*, vol. 8, no. 10 (October 2002), p. 1128.

In addition to medication-induced adverse effects, some analysts have expressed concerns over the long-term effects of anthrax infection. Most of the pulmonary anthrax survivors – and several cutaneous anthrax survivors as well – continued to report lingering health problems several months later, such as chronic fatigue, inability to concentrate, and joint pain, that continue to have a significant impact on their daily lives. ¹⁶ Doctors are uncertain as to the cause of these continuing symptoms, although some have suggested that these conditions may be due more to post-traumatic stress related disorders than to the lingering effects of bacterial infection. Whatever the explanation, the ongoing debate illustrates that health officials and practitioners know very little about the long-term effects of anthrax infections. Postal workers at the Brentwood facility have also expressed concerns about the long-term effects of anthrax exposure, suggesting that it may have played a role in the deaths of eight of their colleague in the months following the attacks. Although the CDC does not attribute these deaths to the anthrax letters, this assessment has done little to allay the fears of those who have been exposed. The National Institutes of Health (NIH) has initiated a program to

¹⁶ See, for example, William J. Broad and Denise Grady, "Science Slow to Ponder Ills that Linger in Anthrax Victims," *The New York Times*, 16 September 2002, p. A1; Shelley Emling, "Anthrax Victims Feel Forgotten in 9/11 Honors," *The Atlanta Journal-Constitution*, 29 September 2002, p. 15A; Deborah Sharp, "Survivors Still Wrestle With Pain, Fatigue, and Shortness of Breath," *USA Today*, 1 October 2002, p. 4A.

study the anthrax survivors and their health concerns, although the late start of the study (almost a year after the attacks) may result in missed data.

While it is difficult to assess whether the absence of larger numbers of infected individuals resulted from a lack of exposure or the large-scale treatment with antibiotics, it appears that the treatment measure was at least partly successful. None of the congressional staffers exposed to the anthrax from the Daschle letter became infected, for instance, and only three out of the hundreds potentially exposed at AMI in Florida became infected. Some medical professionals have concluded that the prompt use of antibiotics significantly reduced the likely number of infections and deaths resulting from pulmonary anthrax.¹⁷ On the medical treatment front, the survival rate for victims of pulmonary anthrax was much higher than previously anticipated. Whereas prior to the fall outbreak, estimates forecast a 15 percent survival rate, the outcome of the anthrax attacks showed a survival rate of 60 percent for known infected persons. At the same time, other analysts have expressed concern over the mass issuance of Cipro and related antibiotics, fearing that this will only foster the development of antibiotic-resistant bacterial strains in the years ahead. 18 Another important consideration: the Department of Health and Human Services, DC Department of Public Health, and other medical entities have discussed, but not come to an agreement on, the efficacy or desirability of post-exposure vaccination against anthrax.¹⁹

Adverse events	Day 10		Day 30	
	Ciprofloxacin (%) (n=2,446)	Doxycycline (%) (n=165)	Ciprofloxacin (%) (n=737)	Doxycycline (%) (n=2,050)
≥1 adverse event	45	49	77	71
Gastrointestinal symptoms (nausea, vomiting, diarrhea, abdominal pain, or heartburn)	26	26	42	49
Fainting, dizziness, light-headedness, or seizures	18	11	23	18
Rash, hives, or itchy skin	7	7	14	14
Joint problems	8	7	25	16

Figure 2 - Adverse events at 10 and 30 days, by most recent antimicrobial agent, all sites, 2001-2002. Day 10 data include FL, NJ, DC sites; Day 30 data include FL, NJ, DC, NY sites. Adapted from Colin W. Shepard, et al., "Antimicrobial Post exposure Prophylaxis for Anthrax: Adverse Events and Adherence," Emerging Infectious Diseases, vol. 8, no. 10 (October 2002), p. 1127.

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¹⁷ Ron Brookmeyer and Natalie Blades, "Prevention of Inhalational Anthrax in the U.S. Outbreak," Science, vol. 295, no. 5561 (8 March 2002), p. 1861.

¹⁸ See, for example, Ivan Oransky, "Antibiotic Overuse Can Silence Medicine's Big Guns," USA Today, 15 November 2001, p. 15A; "Sabin Russell, "Antibiotic: Overuse of Cipro Can Breed Lethal Bacteria," The San Francisco Chronicle, 17 October 2001, p. A1; Deborah L. Shelton, "Demand Soars for Cipro, But Doctors Warn That Using Drug as a Preventive Could Backfire," St. Louis Post-Dispatch, 17 October 2001, p. A4; Gina Kolata, "'Cure' for Bioterror May Be Worse Than the Disease," *The New York Times*, 22 October 2001, p. B9.

¹⁹ Food and Drug Administration (FDA) labeling is for pre-exposure use. A postexposure vaccination would an "off label" use, subject to informed consent provisions of Federal law.

The anthrax attacks also revealed that the medical and scientific communities have more to learn about the characteristics and behavior of this bacterium. The victims in the last two reported cases of pulmonary anthrax had no known direct contact with any of the anthrax-filled letters, causing a great deal of concern. These two cases also highlighted the fact – well understood in the biodefense community but widely misunderstood elsewhere – that while the LD50 (the median lethal dosage for 50 percent of exposed, unprotected individuals) for anthrax is 8,000 to 10,000 spores, far lower levels of exposure may be required to trigger an infection, especially in those with weakened immune systems. In these two cases, investigators had extreme difficulty finding a large enough quantity of spores to cause infection, ultimately suggesting that the ages and conditions of the victims almost certainly made them more susceptible to infection through lower numbers of spores.

Informing the Public

Fear and panic may be as important to the terrorist as injury and death. As Thomas Glass and Monica Schoch-Spana suggest, "a bioterrorist attack is likely to produce a climate of grave uncertainty and insecurity. As has been the case in historic epidemics, the general public will try to make sense of the experience of sudden widespread disease." Public uneasiness and fear were very apparent in the weeks following the announcement of the first anthrax case. This was seen in the run on antibiotics that took place particularly in Florida and New York City, a phenomenon that one

"I would give us a government a 'D' on communication – both within the government, and between the government and the public. There was a lot of heroic effort...[but] I think there were a lot of mistakes, a lot of missed connections, a lot of misjudgments."

- Dr. Tara O'Toole Center for Civilian Biodefense Strategies

Florida pharmacist described as "semi-educated panic" and attributed to a lack of understanding by the public. In the years prior to the attacks, the threat of bioterrorism received a great deal of media attention and a considerable volume of information on the subject was disseminated. Not all of this information was sound and some of it was either unrealistic or sensationalistic, especially that coming out of the popular media (e.g., the movie "Outbreak" or the best-selling novel *The Cobra Event*).

Yet during the early stages of the response, there were multiple personnel from several different federal, state, and local agencies providing updates on or interpretations of the situation – at times inconsistent, inaccurate, or contradictory. For example, early in the response to the Florida case, local doctors handling the case reportedly announced that the anthrax found at AMI was resistant to all forms of antibiotics. The very next day, Scott Lillibridge of the Department of Health and Human Services (HHS) stated that the anthrax was in fact sensitive to penicillin and a variety of other drugs. A similar series of statements, corrections, and retractions occurred after the Daschle letter was opened in

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²⁰ Thomas A. Glass and Monica Schoch-Spana, "Bioterrorism and the People: How to Vaccinate a City Against Panic," *Clinical Infectious Diseases*, vol. 34, no. 2 (15 January 2002), p. 221.

mid-October. In this case, administration officials stated that they had withheld some

- "I have no idea where ['person of interest'] came from. I've seen it in the press, but no one in the FBI that I know has ever used that."
 - Christopher Murray, FBI Spokesman 14 August 2002

information from the public in order to prevent panic.²¹ These sorts of exchanges, disclaimers and corrections called into question the credibility of official views on the unfolding set of events. Adding to this problem were the waves of speculation and commentary emanating from the private sector. While such sources are clearly beyond the government's ability to control, steps should have been taken to counter some of the more flawed or inflammatory information spread publicly, and to provide timely, coordinated, and accurate information to the general public. Arguably,

government officials should have immediately implemented a cogent and comprehensive strategy for informing (and regularly updating) the public of the true nature of the unfolding situation and of the government's response effort in order to allay public fear and panic.

Specific groups that were affected by the attacks, postal workers in particular, argued that government officials inadequately communicated critical information. Both during and after the response effort, postal workers and their representatives repeatedly argued that the quality of care and attention they received was inadequate compared to that given to other affected groups, in particular congressional staff. With regard to information concerning the risks from exposure to anthrax spores and medical treatment options, postal workers routinely opined that the information they received from federal

and public health authorities was incomplete, inaccurate or contradictory. This perception of poor communication led to some postal workers suggesting that federal authorities were treating them like "guinea pigs" or "lab rats." This response argues for the creation of targeted communication strategies to deal more effectively with the concerns of affected groups as part of future responses.

"Mr. Hatfill is a person of interest to the Department of Justice, and we continue the investigation."

- Attorney General John Ashcroft, 22 August 2002

Epilogue: After the Fall Attacks

As this publication went to press, one year had passed since the anthrax attacks were conducted. In that time, bioterrorism has received a great deal of attention from the Bush Administration and Congress, in the form of substantial budget increases, notable legislative action, and improved operational procedures at the Federal and other levels of government.

Efforts to combat bioterrorism received a big boost as a part of the supplemental appropriations approved after the 11 September 2001 terror attacks, as Congress

²¹ John Schwartz, "The Truth Hurts; Efforts to Calm the Nation's Fears Spin Out of Control," *The New York Times*, 28 October 2001, p. 1.

approved a White House request for \$40 billion in emergency funds to address homeland security issues, including biodefense. In additional to this supplemental, the President proposed a substantial increase in funding for future efforts to counter bioterrorism. The proposed 2003 budget requests \$5.9 billion for improved biodefense, an increase of more than 300 percent over the previous year, targeted on improvements in three areas: infrastructure, response, and science.²²

However, increased resources alone will not eliminate the threat of bioterrorism. Indeed, further education and training, research and development, coordination and integration of effort must accompany the increased resources to enhance homeland and national security. Among needed improvements are:

A cogent and coordinated public information strategy in the event of a bioterror attack. Such a strategy should seek to facilitate the release of timely and important information to the media and the general public, including a single designated point of contact/spokesperson for all agencies (at all levels) involved.

Continuing education and training for first responders, including emergency room personnel in recognizing the symptoms and characteristics of potential biological warfare agents.

Measures to improve coordination between agencies involved, especially with respect to information and expertise sharing, not only in the public health phase of a bioterror response but also during any subsequent law enforcement investigation, military or other response.

An improved modeling and simulation, epidemiological assessment, or other diagnostic capability to quickly and effectively assess the quantity and locations of potentially exposed individuals.

An improved national laboratory diagnostic capability for larger-scale or more consequential attacks.

An increased stockpile of pre-positioned medical countermeasures, coupled with exercised plans to release appropriate prophylaxis or treatment options on identified warning triggers.

A more comprehensive tracking system to monitor compliance rates, adverse effects, and related issues of medical interest for those individuals prescribed antibiotics or other countermeasures.

A viable strategy and improved tool kit to rapidly and accurately attribute bioterror attacks. Absent a clear, unambiguous ability to determine complicity in

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²² George W. Bush, <u>Securing the Homeland</u>, <u>Strengthening the Nation</u> (Washington, DC: U.S. Government Printing Office, February 2002), p. 12. See also House Report 107-481, <u>Public Health Security and Bioterrorism Preparedness and Response Act of 2002</u>, 21 May 2002.

bioterror events, the nation's ability to effectively deter future perpetrators is in jeopardy.

APPENDIX A: CHRONOLOGY OF EVENTS AND STATEMENTS

June 2000

Events

Alleged hijacker Mohammed Atta supposedly met with Ahmad Samir Al-Ani, an Iraqi diplomat/intelligence officer, in Prague.

Late August 2001

Events

It is reported that two suspected hijackers, Mohammed Atta and Marwan al-Shehhi, visited a Delray Beach, FL pharmacy in late August. Atta complained of a burning sensation in his hands and was evasive about the cause, while al-Shehhi claimed to need cough medicine. Neither inquired about anthrax antibiotics.

2-8 September 2001

Events

A letter addressed to singer/actress Jennifer Lopez arrives at American Media, Inc. (AMI) in FL. The envelope reportedly contains a fan letter, a Star of David, and a bluish powder (reported variously as a soapy, white/powdery substance). It was passed around to several employees, including Bob Stevens.

8 September 2001

Events

Letter is posted from Atlanta, GA to a doctor in Kenya. A powdery substance in the letter later tests positive for anthrax.

17 September 2001

Events

Investigators believe that a mail carrier in Ewing Township (Trenton, NJ suburb) is exposed to anthrax while collecting letters.

18 September 2001

Events

Anthrax tainted letters to NBC anchor Tom Brokaw and the *New York Post* are postmarked in Trenton, NJ.

20 September 2001

Events

A hoax anthrax letter to NBC is mailed from St. Petersburg, FL.

19-25 September 2001

Events

The anthrax-tainted letter from Trenton, NJ to Brokaw is opened at the NY offices of NBC. It was found to contain a threatening letter and a brownish powder. The woman (unidentified) who opened the envelope brushed the powder into a

trashcan and Brokaw aide Erin O'Connor placed the letter in a pile with other threatening mail.

22-25 September 2001

Events

Health officials in FL believe that the anthrax may have entered the AMI building during this period of time, based on the appearance of symptoms in Stevens.

22 September 2001

Events

Johanna Huden, an editorial assistant at the *New York Post*, comes down with symptoms of cutaneous anthrax (diagnosis confirmed on 19 October).

25 September 2001

Events

The St. Petersburg hoax letter arrives at NBC in New York and is found to contain a white "talcum-powder-like substance." NBC employees contact the Federal Bureau of Investigation (FBI) regarding the suspicious letter.

26 September 2001

Events

FBI agents arrive to pick up the St. Petersburg hoax letter (but not the Trenton, NJ letter) for testing, which tests negative for anthrax.

28 September 2001

Events

The 7-month old son of an ABC employee may have been exposed to anthrax while in ABC's New York building.

FBI agents execute a search warrant on a residence in Milwaukee, WI after the occupant told local police officers that he was building an anthrax delivery system in his basement. The man, who had a doctorate in nuclear and environmental chemistry, previously worked as a senior research for the Battelle Memorial Institute in Columbus, OH, where he was fired twice in 1996 and 1999. The man was not charged with anything after the search. Although an FBI spokesperson said no further investigation was planned, this individual does appear later in the anthrax investigation in an ABC news report as a potential suspect (see 19 December 2001).

1 October 2001

Events

AMI mail clerk Ernesto Blanco enters a Miami, FL hospital and is diagnosed with pneumonia.

Dr. Richard Fried in NY examines Erin O'Connor after she reports developing a lesion on her chest from powder in an envelope that spilled on her at work. Although initial culture tests did not show evidence of anthrax, Dr. Fried

nevertheless notified the New York City (NYC) Health Department that a patient might have contracted anthrax.

The 7-month old son of ABC news producer is admitted to New York University hospital with high fever and ulcer on one elbow. A biopsy is conducted and samples are sent to the Centers for Disease Control and Prevention (CDC) in Atlanta for further testing.

2 October 2001

Events

Robert Stevens, photo editor from AMI is admitted to an Atlantis, FL hospital with high fever and disorientation. He is initially diagnosed with meningitis and pneumonia. Dr. Larry Bush, an infectious disease specialist, notices rod-shaped bacteria characteristic of anthrax and notifies the Palm Beach County Health Department.

3 October 2001

Statements

Secretary of Health and Human Services Tommy Thompson, testifying on bioterror response plans before the Senate Subcommittee on Labor, Health and Human Services:

- o "Let me characterize our status this way: We are prepared to respond. But there is more we can do − and must do − to strengthen our response."
- "I'm trying to tell the American public there's no credible evidence that we have of any pending bioterrorism attack or chemical attack. And if there is, we are able to respond. But that doesn't mean categorically that we can handle every situation. We need to strengthen things. We need to strengthen our public health system, our education, we need to strengthen our laboratory systems."
- "I by no means contend that our system is perfect or without weaknesses.
 We have gaps. We can, indeed, make our response stronger, and it's imperative that we do so."

Sen. Robert Byrd (D-WV), questioning Thompson's overall positive assessment of Federal bioterrorism capabilities – "If I say I don't believe it, will you still love me?"

4 October 2001

Events

Dr. John Agwuboni, the Florida Department of Health (FL DOH) Secretary, announces that Bob Stevens, photo editor at AMI, has been diagnosed with the first case of inhalation anthrax in the United States in almost 25 years.

Statements

Tommy Thompson (HHS), discussing the Bob Stevens case, suggests the case may have been natural rather than deliberate:

- "We do know that he drank water out of a stream when he was traveling through North Carolina last week."
- o "There is no evidence of terrorism."

- o "It is an isolated case and it is not contagious. There is no terrorism."
- o "This is an isolated case and it is not contagious.... People need to understand that our public health system is on heightened alert so we may have more public reports of what appears to be isolated cases. We will be responding very aggressively."
- o "Based on what we know at this point, it appears that it's an isolated case."

Dr. Jeffrey Koplan, CDC Director, on the Florida case:

- o "There's no need for people to fear they are at risk, whether in Florida or North Carolina or elsewhere."
- Koplan does state that deliberate release by terrorists is one of several possibilities under investigation: "We have that on the list."
- o "This is an isolated case of one individual who is, unfortunately, very ill. It is under intensive investigation.... We don't know enough about this individual yet to know what his potential sources of exposure were. But this is not an indication of an outbreak. This person does not pose a risk to other people."
- o "We really don't know what the mode of exposure was. All of these investigations start with few or no clues."
- "We will develop a very intense investigation of this case. We are in a period of heightened risk and concern in this country. It's our responsibility to make sure people know what is going on and we control it as quickly as possible."
- o "People should absolutely not panic. There are no grounds for anyone to buy, stockpile or use antibiotics. Vaccination is not necessary."

Dr. John Agwuboni (FL DOH) – "The disease is not contagious. It does not spread from one individual to another. At this point there are no indications that anyone else has contracted this disease. We have not found any other cases." Barbara Reynolds, CDC spokeswoman – "We are actively looking for people who have these symptoms. But hospitals haven't reported any [more]."

Dr. Larry Bush – "We are treating this as an isolated case. We regard the risk to the rest of the community as low."

Rudolph Giuliani, NYC Mayor – "There is no evidence at this point of any anthrax in New York City or this area."

FBI statement – "...there is no preliminary evidence to suggest that the patient's illness is related to criminal activity."

Dr. D.A. Henderson, Director, Center for Civilian Biodefense Studies, Johns Hopkins University (JHU), on the potential of bioterrorism – "It may be that we're picking up something here that we might not have picked up had it not been for the heightened state of alert. We can take some comfort in that amidst the bad news."

Debbie Crane, spokeswoman for the NC Department of Health and Human Services (NC DHHS) – "Anthrax happens. It's happened forever, and it's happened before Sept. 11."

5 October 2001

Events

Tabloid photo editor Robert Stevens dies of inhalation anthrax in a Florida hospital.

A letter with no return address is mailed to a *New York Times* reporter in Rio de Janeiro, Brazil.

Investigators take samples from Stevens' home and begin to track his movements during the period prior to his hospitalization in order to determine where and how he may have been exposed. The working presumption at this point is that he contracted anthrax naturally.

Statements

Frank Penela (FL DOH):

- o "We're following a whole bunch of leads. We're looking at everything. We've got 50 local, state and federal investigators working on this. But there's nothing right now."
- o "They're sampling the soil, talking to people he interacted with; looking at where he went. They're also looking into various hospitals to see if there are other people with the same kind of symptoms. We're going through everything to make sure we're catching every angle. Right now, we're still considering it an isolated case. It's not contagious and we're thankful."

Dr. Steven Wiersma, FL DOH Epidemiologist – "I don't think we want to give anyone the idea that we have even the slightest inkling of an idea what could have caused this disease. We have a team of 50 people – state, local, federal health department officials, as well as C.D.C. – in Atlanta working on the investigation." Dr. Jeffrey Koplan (CDC) on Blanco's symptoms – "The symptoms we are seeing are not those typical of inhalation anthrax, but, nevertheless, we have a variety of tests we are processing to make sure its not anthrax."

Judy Orihuela, FBI spokeswoman – The FBI is assisting health officials in searches, but at this point investigators are conducting a public health probe, not a criminal investigation. "We're out there following them just in case anything is found."

Debbie Crane (NC DHHS) – "We know now specifically that he did drive up Thursday the 27th by car and he went to Charlotte and spent the night there. The next night he went to Chimney Rock and spent the day hiking. On Sunday morning he drove to Duke University, and we were able to determine he was sick when he got to Duke. So we have taken Duke out of the places where he may have been infected."

6 October 2001

Statements

Dr. Steven Wiersma (FL DOH) – "We have a long chronology of common activities we need to pursue. We don't have any really hot leads at this time."

7-13 October 2001

Statements

Spokesman, U.S. embassy in Kazakhstan, in response to allegations that the anthrax used in attacks in the U.S. could have been obtained from Soviet-era facilities on Vozrozhdeniye Island in the Aral Sea – "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"

7 October 2001

Events

AMI offices in Boca Raton, FL are shut down as anthrax spores are discovered on Stevens' keyboard and in the nose of Ernesto Blanco, the mail supervisor. AMI employees are later critical of the delay between Stevens' death and the quarantine of their offices. (See comments on 9 October).

CDC ships enough antibiotics for 1,000 people to Palm Beach County, FL.

Statements

Dr. Steven Wiersma (FL DOH) – "We are still at the beginning. This is a large job...we may never know what happened."

8 October 2001

Statements

John Ashcroft, U.S. Attorney General – "We regard this as an investigation which could become a clear criminal investigation. And we are pursuing this with all the dispatch and care that's appropriate. We don't have enough information to whether this could be related to terrorism or not."

Ari Fleischer, White House Press Secretary – "There is no evidence to suggest anything yet and that's why the FBI is investigating."

Dr. Michael Asher, Director of CA infectious disease laboratory – "Unless this guy was sniffing sheep's wool for a living, and if it is inhalational anthrax, that is enough to raise the alarm. It could be unrelated to the situation with al Qaeda. It could be different group. It could be somebody mad at him."

Kevin Keane, HHS spokesman – "People should be encouraged by what's happening down in Florida. Florida is another example of how we would respond in these incidents."

Ken Alibek, former Soviet bioweaponeer – "We are underprepared. Most doctors and nurses have never seen such cases. They have no idea how to diagnose these infections."

Frank Cilluffo, Center for Strategic and International Studies (CSIS) – "You have to recognize we are at a heightened state of alert throughout the country. We want to make sure we can sustain that capability over the long haul and not have a lull in terms of our readiness."

Sanjay Bhatt, medical correspondent with *The Palm Beach Post* – There is "a quiet sense of dread. People are trying to stay calm, but as each day passes the story only seems to get worse."

Erika Patterson, former contract employee with AMI – "I was a little upset. I don't think we're being given enough information. It's scary."

Dr. Thomas Inglesby, Johns Hopkins University Center for Civilian Biodefense Studies (CCBS), – "It is certainly hard to imagine an easily plausible explanation. The source would be an animal product if this were a natural occurrence – either infected wool or some kind of hide or skin. Certainly, there is no previous natural occurrence of anthrax in a non-animal facility."

William Patrick, consultant and former U.S. bioweaponeer – "It's highly presumptive evidence that we have a bioterrorist attack."

Dr. D.A. Henderson (CCBS) – "It is certainly not an engineered strain, not a strain like the Russians produced and wrote about. They said they had produced an antibiotic-resistant strain."

Anonymous law enforcement official – "The FBI has been unable to find a source or cause of the anthrax, but this kind of situation points to terrorism or criminal intent because it's so rare to have two people working in the same building who have inhaled anthrax bacteria."

Frank Penela (FL DOH) – "We don't know the cause. We're investigating at this time. We're leaving no stone unturned."

9 October 2001

Events

Authorities in FL rule out obvious environmental causes as the source of the anthrax infections in Florida, and a CDC spokesperson confirmed an earlier report suggesting that the anthrax was in powder form.

In New York City, Drs. Richard Fried, Kevin Cahill, and Marc Grossman confirm diagnosis of Erin O'Connor, aide to Tom Brokaw, with cutaneous anthrax. Anthrax-tainted letters to Sen. Tom Daschle (D-SD) and Sen. Patrick Leahy (D-VT) are postmarked in Trenton, NJ.

FBI investigators apparently dismiss the Jennifer Lopez letter to AMI as a potential source of the anthrax – "We are not in the possession of the Jennifer Lopez letter but it does not appear to be a valid lead." It was reported that the substance in the envelope turned out to be detergent.

Doctors in Palm Beach County allegedly state that they believe that the anthrax bacteria found in Bob Stevens is resistant to all forms of antibiotics.

Investigators search apartments in Boca Raton, FL said to have been occupied by several of the hijackers prior to Sept. 11 but find no trace of anthrax.

Postal Inspector Dan Mihalko states that there is no evidence that the anthrax bacteria was contained in a letter or package handled by the United States Postal Service (USPS), although the fact that a mailroom employee picked up the bacterium suggests that something tainted with anthrax came through the mailroom.

A Northern Virginia man who had visited AMI and later developed flu-like symptoms is hospitalized in Manassas, VA. Doctors do not believe that he has anthrax.

Statements

Pres. George W. Bush – "There is a system in place to notify our government...in the case of some kind of potential biological incident or chemical incident. And the system worked...we have in essence gone into the building, cleaned the

building out, taken all samples as possible, and are following any trail – any possible trail. Thus far it looks like it's a very isolated incident."

John Ashcroft – "We take this very seriously. We are relying on the Centers for Disease Control and health authorities to provide expertise which we do not have [at the Justice Department]. Very frankly, we are unable to make a conclusive statement about the nature of this as either an attack or an occurrence, absent more definitive laboratory and other investigative returns."

Sen. Bob Graham (D-FL) – "I asked Dr. Koplan [Dr. Jeffrey Koplan, CDC Director] what would be the likelihood that such a disease could have occurred without human intervention. His words were, 'Nil to none.'" Richard Spertzel, consultant and former UNSCOM inspector

- o "I do not believe that it was accidental. I cannot conceive of any way it could be natural. What it does suggest is a somewhat inept person may have released it into the building and had a mixed bag of small and large particles and did not know what he was doing.... You do not expect to find anthrax floating around the air in buildings in a city or even on a farm it's not a natural event. The only thing that makes sense is if it's some kind of intentional release. The implications can be anything from a disgruntled individual who has an axe to grind against an individual or the building, on up to an inept release by sympathizers of Osama bin Laden or my favorite country, Iraq."
- o "The one thing that's reasonably certain is that the Florida case is intentional."

Dr. Landis Crockett (FL DOH) – "The chances are one in a billion to have two anthrax cases in close proximity. There then would have to be another explanation and that would be that foul play would be suspected." Dr. Neal Cohen, NYC Department of Health (NYC DOH) Commissioner, on NY State epidemiological surveillance efforts – "We have strengthened our surveillance system in order to give us any early warning signs of an illness or a cluster of illnesses that would suggest exposure to a bioterrorist agent." Advisories outlining anthrax symptoms and treatments were faxed to all 65,000 licensed doctors in NYC, and other bioterrorism instructions were sent to doctors throughout the state in accordance with state plans.

Ira Protas, store manager at Community Pharmacy, Boca Raton, FL, on the run on Cipro – "They don't understand the communicability of the disease. I think the problem is semi-uneducated panic."

Joshua Lubitz, FL pharmacist — "Yesterday was, I'd say, out-and-out panic." Bill Lumb, Boca Raton pharmacist — "Things are just getting really whacky [sic]. Doctors are prescribing this [Cipro] for people who aren't even their patients." Tommy Thompson (HHS), on the announcement that the anthrax recovered from Stevens, Blanco, and Stevens' keyboard was identical — "It's a positive identification. It gives us a giant step forward. Now we have to look at that building and see how it got there."

Dr. Jeffrey Koplan (CDC), on the response effort – "From a public health perspective, two people in the same workplace, both exposed to anthrax – we took

swift public health action. Working with local officials, we closed the workplace, brought everyone in to be tested, got them antibiotics."

William Patrick – "It looks like a poor grade of product and poor disseminating efficiency."

Unnamed AMI Employee – "Tommy Thompson can go on the air and say whatever he wants, but we are totally unprepared."

Another unnamed AMI Employee – "It took five days to figure out this anthrax was in the building. If this is how quickly you diagnose something like this, we're in trouble."

Jeanne Guilleman, medical anthropologist and investigator of 1979 Sverdlovsk incident – "If that strain turns out to come from Iraq or is a former Soviet Union strain, all hell is going to break loose."

Dr. Michael Osterholm, Director of University of Minnesota Center for Infectious Disease Research and Policy (CIDRAP), on the announcement that the anthrax was in powder form – "...somebody had anthrax, and they made it work."

10 October 2001

Events

A third employee at AMI, Stephanie Dailey, tests positive for exposure to anthrax. She does not develop symptoms.

CDC approaches Bayer AG, manufacturer of Cipro, and asks the company to increase the output of the antibiotic. Bayer announces that its Connecticut plant will commence 24/7 production and that it will reopen a plant in Germany to boost production by twenty-five percent.

The Miami Herald reported that investigators have linked the FL anthrax strain to a strain that was harvested in Iowa in the 1950s. This report was followed up that evening by an NBC News report suggesting that the FBI is beginning to conclude that the anthrax used in FL was stolen from a Department of Energy (DOE) lab in Ames, IA.

Statements

U.S. Attorney Guy Lewis, based in Miami, FL:

- Although no evidence had turned up to link the FL incident to international bioterrorists, "we are now conducting a criminal investigation of this matter."
- o "It is now a criminal investigation."
- o "We understand that this is a problem and we will bring every resource we have to bear on this problem. And I assure you we will solve it."
- o "We're still looking at it. We've not developed what I'd characterize as conceivable theories about how it got into the building."

Hector Pesquera, FBI Special Agent in Charge (SAC) Miami – "There's no indication at this time that this strain of anthrax was produced or caused by a terrorist group or individual related to the incident on September 11, 2001." Dr. John Agwunobi (FL DOH) – "All the evidence to date indicates that the anthrax issue we face is limited to the AMI building."

Dr. Martin Hugh-Jones, Louisiana State University (LSU) anthrax expert and advisor to scientists trying to identify the FL strain – "The Florida isolate is

similar to an isolate from Haiti, to one from Texas and to one from Iowa. It doesn't exactly match exactly any of those three, but those are the three nearest to it. It's not the Ames strain, far from it."

Dr. Scott Lillibridge, Special Assistant to HHS Secretary for Bioterrorism – The FL strain proved sensitive to penicillin and a variety of other drugs. "This is not the hallmark of an engineered bio-weapon."

Sharon Roskins, CDC spokeswoman – News reports linking the FL anthrax to the Ames strain are "very premature" and testing on the FL strain is "still ongoing." David Pecker, AMI Chief Executive – "I think this is an attack against America. The World Trade Center was attacked, the Pentagon was attacked, and American Media was attacked, and I think this was the first bio-terrorism attack in [the] United States."

Dr. Jeffrey Koplan (CDC) – "It's a good example of a system working at all levels. In this case, the important thing was we were able to take the public health steps to protect the community first."

Jeanne Kwik (CCBS) – "Somebody definitely had to introduce it into the office; it couldn't walk in by itself."

Michael Allswede, University of Pittsburgh – "I think just putting the spores in an envelope would subject them to the normal heat and humidity that the mail goes through, all of which might alter the shape of the particles."

Bola Adelou, Bethesda, MD pharmacist – "Cipro usually doesn't fly off the shelf. What we had on the shelf should have lasted us two weeks. It sold in two days."

11 October 2001

Events

Rep. Patrick Kennedy's (D-RI) Pawtucket, RI office received a letter mailed from India. The aide who opened the letter developed a rash over the weekend.

Statements

John Ashcroft – "We are investigating it with great care. This is not a gardenvariety situation. I have absolutely no evidence to indicate that the anthrax in Florida was stolen from any lab. We don't have any ability to announce any source of the anthrax."

Dr. Martin Hugh-Jones (LSU) – The preliminary DNA tests indicated that the strain appeared to belong to the "western North America" family of anthrax bacteria and closely resembles strains found in Haiti, Texas, and Iowa.

12 October 2001

Events

The anthrax-tainted letter to Sen. Daschle arrives at Hart Office Building, Rm. 509.

Officials in New York City announce that Erin O'Connor, aide to NBC anchor Tom Brokaw, is diagnosed with cutaneous anthrax. NBC workers give the Trenton, NJ letter to FBI agents for testing. Testing at the NBC offices reveals anthrax spores in "certain places" in the building, including an air filter. In addition, 1,500 NBC workers are tested for potential exposure to spores.

A suspicious letter returned from a Microsoft vendor in Malaysia arrives at Microsoft Licensing, Inc. in Reno, NV. The letter is tested three times for anthrax and comes up positive twice. Six exposed employees test negative.

Statements

Vice President Dick Cheney, on possible links between the anthrax incidents and the Sept. 11 hijackers – "We don't have enough evidence to be able to pin down that kind of connection. But, on the other hand, these kinds of activities that we saw in Florida, now perhaps in New York, we have to be suspicious.... The only responsible thing for us to do is proceed on the basis that it could be linked. And obviously that means you've got to spend time as well, as we've known now for some time, focusing on other types of attacks besides the on that we experienced on September 11. We know [bin Laden] has over the years tried to acquire weapons of mass destruction, both biological and chemical weapons...they've... train[ed] people with respect to how to deploy and use these kinds of substances." Dr. Mohammad Akhter, Executive Director of American Public Health Association (APHA), on the government response to the incidents – "The CDC is very good, but it's [lacking] essential capacity to deal with large numbers of cases. Or let's say there are three or four cases that take place elsewhere in the country. They would be stretched very, very, thin."

Pres. George W. Bush:

- o "Our nation is still in danger, but the government is doing everything in our power to protect our citizenry."
- o "As you know, there was a recent incident with anthrax in Florida. And Tommy handled that incident with such calm and such purpose, and got the facts on the table early so that the American people were able to react in a way that did not disrupt their lives and, at the same time, felt comfortable that our government was doing everything we could possibly do to protect the lives of citizens."

Tommy Thompson (HHS):

- There is "no proof whatsoever" that NBC case was terrorism.
- o When asked if it appeared media outlets were being targeted, "I can't speculate on that. I don't know if this is a pattern."
- o Thompson called the sudden appearance of anthrax in such a short time frame an "unusual occurrence."
- o Guidance to reporters: "Don't ignore the dangers, but also report [the government's preparations. Please resist the urge to speculate."
- o Responding to criticism of recent remarks: "I've delivered a two-part message on preparedness. We're prepared to respond to a biological attack, but we have more needs."
- "Our public health system is on a heightened state of alert. We are responding aggressively."

Barry Mawn, NY FBI Office, on the NBC case – "preliminarily, I do not see that [links between FL and NY cases]. This is a criminal matter and we will go from there."

Hector Pesquera (FBI):

- There is "no link whatsoever so far" between cases in Florida and New York. "We have no information to indicate a correlation between [here] and what happened in New York."
- o "There is no indication at this time that this strain of anthrax was produced or created by people related to the September 11 incident. This is not a time for premature conclusions or inaccurate reporting. Our scientific experts have said that no conclusions can be drawn at this time."

Robert Wright, NBC President, in a memo to NBC employees – "We have no reason to believe that this particular incident has spread beyond this particular employee. We have heightened security measures even further after events of Sept. 11."

Ken Newman, Deputy Chief Postal Inspector – This is the first time that "actual biological hazards have been transmitted through the United States mails." Dr. D.A. Henderson (CCBS) – "What was alarming about the 11th of September event was, here's something very carefully planned, with some very intelligent people and planned well in advance and carried out with some skill.... I note a couple of our colleagues in this country have said, 'Well it's so difficult for these people to produce these [biological] weapons, to grow them, disperse them properly and so forth,' they would dismiss this as being a particular problem [sic]. I can only refer to these people as being extraordinarily naïve. The people who flew the airplanes didn't know how to make an airplane, but they could get their hands on an airplane and utilize it. The question is, could they get their hands on a biological weapon and use it? And it's pretty hard to do anything but reach the conclusion, yes, they could. I think [the probability] is high. It is something that we need to be worried about...my feeling is this is very likely, that we're going to have something within the next several months."

David Capitanchik, Robert Gordon University, Aberdeen – Anthrax attacks are reminiscent of methods used by the Unabomber. "It's very mysterious, but I think it's extremely unlikely to be the work of terrorists. They want to target a large number of people and anthrax is not the way to do it.... It's got to be a lone nutter who has just been encouraged by the attacks last month."

Michael B. Kahane, general counsel for AMI, on the government's response to the anthrax incident — "It is incredulous that we learned about the third American Media employee from a televised news conference rather than from appropriate governmental agencies.... There has never be a situation where anyone has called to say, 'These are the results,' or anything like that. Regarding the investigation and our continuing interest in the building, we do not know anything."

Manny Gonzalez-Latimer, U.S. Postal Inspection Service spokesman in Miami – "Mail has been used in the past – on occasion by the Unabomber, for example – to target a specific person, but there have been no cases of mail bombings that have been attributed to terrorists. They have been people who have a particular vendetta against a specific person."

Richard Spertzel – Citing a familiarity with the investigation and acquaintance with one of the scientists working on tracking the spores, Spertzel states that the

DNA of the FL strain is similar to a strain discovered in Haiti, one in Texas and one in Iowa. He also said it was not an identical match to the Ames strain. Tom Brokaw, NBC news anchor – "Tonight we find ourselves in the unusual and unhappy position of reporting on one of our beloved colleagues, a member of my personal staff who has contracted a cutaneous anthrax infection – that's an infection of the skin – that is responding favorably to treatment and her full recovery is expected. Other NBC employees are undergoing preventative measures and health authorities emphasize that the condition is not contagious, that the chances are remote that anyone else was infected.... This is so unfair and so outrageous and so maddening it's beyond my ability to express it in socially acceptable terms. So we'll just reserve our thoughts and our prayers for our friend and her family."

13 October 2001

Events

Five additional AMI employees test positive for anthrax exposure, raising the total to eight, including Stevens. Employees had elevated levels of antibodies in their blood, indicating that a foreign invader stimulated their immune systems. The Trenton, NJ letter sent to Brokaw is tested by the FBI, and tests positive for anthrax.

Newsday (NY) reports that a team of microbiologists at Lawrence Livermore National Laboratory tested the Florida anthrax strain and found that, despite denials from health officials, it was the Ames strain that was developed in Iowa in the 1950s.

Statements

Kenny Guinn, NV Governor, on the letter received in Reno, NV – "All of our health people in Washoe County feel that this is a very, very low risk to public health under the circumstances because there was no residue of any powder is this envelope."

Robert Wright, NBC President, on the discovery of the NJ letter that contained anthrax – "Now we have identified the missing link, so to speak, the actual cause of the anthrax that created this whole situation. So we are no longer dealing with an unknown time, date and place and that is very important."

Barry Mawn, head of the FBI New York office – The cases "that we know are credible and are seriously dealing with is [sic] Trenton and the ongoing one in Florida, they are the only known anthrax positives."

Neal Cohen (NYC DOH), expresses the sentiment that the letter sent to NBC from St. Petersburg will test negative – "Anthrax tends to grow very quickly, and after 20 hours and with our other measures that were done last night, we're very confident that at this point, we're ruling it out."

Jeanne Guilleman, anthrax expert – "Neither the cases in New York nor those in Florida look like full-blown bioterrorism. It looks more like the Unabomber, a disgruntled individual who has it in for people."

Tony Cordesman, Center for Strategic and International Studies (CSIS) – "These events have been horrifying, but you also have to recognize that the lethality levels are extremely low. There is no evidence that we should panic, or that

America is under attack by anthrax. You can't say, looking at these cases, that this will go from limited terrorism – if that is what it is – to mass terrorism, at least as yet. But one thing we need to remember is that we need more data. At this time we just don't know enough."

Robert Ressler, former FBI profiler, helped track the Unabomber – "The first thing I thought when I saw these things happen is that this is just some nut case. I still think that. Terrorists who are doing something as dedicated as flying planes into the trade center – they wouldn't [bother] with American tabloids.... The realities are that when things happen like the attack on the trade center, you're always going to get copycats. You'll spring loose the mentally unstable, like the guy who charged the cockpit of a plane, or like the copycat Tylenol poisonings in Chicago."

Jerry Hauer, former director of the NYC mayor's Office of Emergency Management – "Whoever is doing this does not appear to have real high-grade anthrax and clearly doesn't appear to have a lot of it."

John Ashcroft – "It may be we could see commonality. I'm not saying there are, but it's for those reasons that we're linking the two cases."

Dr. James Hadler, CT Dept. of Public Health (CT DPH) – "One thing about the New York situation is that it is consistent with what you would expect if anthrax had been put in a powdery form and mailed. If there was any disease contracted in that situation, it would a cutaneous infection."

14 October 2001

Events

A New York City Police Department (NYPD) officer and two New York City lab technicians test positive for anthrax exposure after handling the NBC anthrax letter.

Washoe County, NV health officials wonder if the anthrax found on the Microsoft letter was the result of natural contamination from soil rather than a deliberate attempt to harm someone. County officials reported that "very, very little anthrax was found" embedded in the fibers of one of the five pornographic pictures enclosed in the letter. District Health Officer Barbara Hunt – "If this was a deliberate attempt to harm someone, it was not very thorough."

Statements

Tommy Thompson (HHS):

- "It certainly is an act of terrorism to send anthrax through the mail.... We have a lot of chatter out there, but we have no imminent threats of any chemical or biological attack at this time. There are a lot of people in America that are afraid, and understandably so, because bioterrorism has never hit America before." ("Fox News Sunday")
- o "There's no question it's bioterrorism. It's a biological agent. It's terrorism, it's a crime.... But whether or not it's connected to al-Qaida, we can't say conclusively." On federal response: "I know people are afraid. But I want to reassure them that the federal government, working with the state and local governments, [is] able to respond." (CNN)

- o "It could be a domestic source. It could be somebody holding a grudge, it could be somebody saying, 'You know I've waited all this time, now I'm going to be able to do something, you know, really radical'."
- o On government preparations for bioterrorism "We have 7,000 medical professionals throughout this country, divided up in 90 medical assistance teams, ready to go in to any particular state or locality in order to assist state and local health officials. We have 400 tons of medical supplies that we can move that are strategically located throughout the United States in eight sites that we can move into a particular site within 12 hours." (ABC)

John Ashcroft, on possible connections with al-Qaida – "We should consider this potential that it is linked."

Jason Pate, manager of the Weapons of Mass Destruction Terrorism Project at Monterey Institute of International Studies (MIIS) – "Yes, there's a lot of media attention on the anthrax cases, and it has a very ominous, sinister effect psychologically. But it doesn't quite have the boom that has been Al Qaeda's m.o. for the past three years.... I don't think they would write letters. There would be no letters – and people would [mysteriously] be coming down with anthrax."

Randy Larsen, director for homeland security at ANSER – "It's kind of like a great detective story. You get a fingerprint here, a thumbprint there, a couple marks on the bullet. We may eventually get a return address on where this was manufactured."

Judy Orihuela (FBI), on discovery that the wife of the editor of the AMI tabloid the Sun rented an apartment to two of the Sept. 11 hijackers – "There is now a link between the editor's wife and the terrorists. It's just a coincidence right now. I'm sure there will be some sort of follow-up. ... There's nothing to tie the anthrax to the editor, to the wife, or to the terrorists. It's a big leap. We don't have a letter, which makes it a lot harder."

Rob Palladino, Delray Beach, FL pharmacist, on the run on Cipro – "I'm disgusted. It's just fools. Uneducated, uninformed people."

Bard O'Neill, National Defense University (NDU) Middle East terrorism expert – "What's more likely in my mind is this is somehow being encouraged or instigated by bin Laden's people. If this was just a bunch of nuts doing this from around the world, the letters probably wouldn't fall in the same time frame."

15 October 2001 Events

An aide opens the anthrax-tainted letter to Sen. Daschle, releasing the spores throughout the office.

Doctors in Boca Raton, FL confirm that AMI mail supervisor Ernesto Blanco has been diagnosed with inhalation anthrax.

The 7-month old son of an ABC news producer is diagnosed with cutaneous anthrax after attending a birthday party at ABC in New York.

The NYPD begins testing mailrooms at CNN, CBS, the Associated Press, the *Daily News*, Fox, and *The New York Post*.

Health authorities in Boca Raton, FL report "a miniscule amount of anthrax spores has been found in a small, non-public mail-processing area of the Boca Raton main post office... There's no indication that these spores pose a health risk to workers or visitors. As an extraordinary precaution, health officials are asking employees to leave this small portion of the building." The area with the spores was a mail slot that would contain mail for AMI and other locations along that route.

Doctors test two postal workers at the Trenton, NJ facility after they report anthrax-like symptoms. The Trenton facility processed four of the anthrax-tainted letters.

Malaysian authorities report that the alleged anthrax-tainted letter sent to a Microsoft subsidiary in Reno, NV did not originate in Malaysia and had possibly been tampered with at some point.

Statements

Sen. Ted Kennedy (D-MA) – "We ought to assume that there's been some coordination."

Sen. John Kerry (D-MA) – Cautioned against linking the anthrax to September 11 attacks, suggested that the bio-perpetrator could be a homegrown nut.

Sen. Michael Crapo (R-ID) – The letter to Sen. Daschle was "akin to an assassination attempt" on a government leader. "There's no other way to put it: It's an attack on the government."

Sen. Peter Fitzgerald (R-IL), on existing screening procedures in the postal service – "I know that we're working on this. I don't know that we're adequately prepared yet."

Rep. Jim Davis (D-FL) – "There are things you took for granted living in a civilized society that you can't take for granted any more. There are some crazy people out there that will do things that seemed beyond imagination just a few weeks ago."

Christopher Murray, FBI spokesman, on the fact that it took almost a month for the letter to get to Sen. Daschle – "Where has it been all that time? I don't know. I don't know if there's an explanation for that, and that's one thing we'll be looking into."

Judy Johnston, American Postal Workers' Union (APWU) local president – Federal officials "are taking this too lightly."

Tom Brokaw – "In Cipro we trust."

David Fleming, Deputy Director, CDC, on the government response to the anthrax incidents – "What we're seeing here is a pretty good test of the public health system. What we've seen so far is pretty good."

Dr. Larry Bush, on the response to anthrax incidents – "The criticism I hear is that we're not prepared. I think it's just the opposite. Federal, state and local governments have geared up for this. You have to remember, it's a work in progress. There have been no cases of bioterrorism or anthrax like this." Mindy Tucker, Justice Department spokeswoman – "We have taken into account that this is a very scary topic for Americans, and we have taken into account how do we best and most responsibly convey this information."

Amy Smithson, Stimson Center – "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."

16 October 2001

Events

A letter to a *New York Times* reporter in Brazil arrives and later tests positive for "bacteria or spores consistent with anthrax."

The Palm Beach Post reports that alleged Sept. 11 mastermind Mohammed Atta sought treatment for "abnormally red" hands from a Florida pharmacist in the months before the Sept. 11 attacks (See Late August 2001).

Statements

President George W. Bush, on the anthrax attacks – "We have no hard data yet, but it is clear that bin Laden is a man who is an evil man. I wouldn't put it past them. He and his spokesmen are bragging about how they hope to inflict more pain on our country."

Tom Ridge, Office of Homeland Security (OHS) Director, on NBC Nightly News interview – Bioterrorism is "the No. 1 priority this week and for the weeks ahead," he also suggested building up the nation's stockpile of smallpox vaccine and the resumption of smallpox vaccinations for children.

Condoleeza Rice, National Security Advisor – "There isn't any hard evidence of a link of any kind. 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."

Vincent Cannistraro, former Central Intelligence Agency (CIA) counterterrorism official who has studied bin Laden for a decade – "It just doesn't have the fingerprints or the pattern of a bin Laden operation. Al Qaeda wants to inflict mass casualties and kill as many people as they can. Sending individual, targeted mailings is not going to accomplish that...This might turn out to be someone else trying to fly in under the radar."

Senior government official – "Mr. Stevens died of pulmonary anthrax, which is the finely milled anthrax, which is what we believe we see in the Daschle letter. 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."

Deborah Willhite, USPS Senior Vice President for Government Relations and public policy – "They say there was virtually no risk of any anthrax contamination in the [Brentwood] facility, that without the letter being opened at Brentwood, there was no risk of any anthrax escaping, so neither the facility nor the employees needed to be tested."

Patrick Donahue, USPS Chief Operating Officer – Health officials said, "whatever was sealed in the envelope was sealed. There was no evidence anything had opened up. The letter to Daschle had been sealed with tape." David Fleming (CDC) – "There were just no clues, no evidence that indicated to us that people in Brentwood were at risk."

David Maserang, chief of the Illinois Department of Public Health laboratory division, on the demands for testing – "A lot of it has to do with people who aren't doing a very thorough job of evaluating the credibility of the concern. There's going to be a point very quickly – probably next week – when we're going to have to say that if there isn't a credible concern, we can't do it."

17 October 2001 Events

A 51-year old NJ bookkeeper that lives near the Hamilton, NJ mail facility visits a doctor concerning a lesion on her forehead. Initial tests were negative for anthrax, but the infection worsened over the following days.

Rep. Dennis Hastert (R-IL) causes an initial scare by saying that anthrax from the Daschle letter had gotten into the Hart Building ventilation system and in the tunnels that connect Hart with the two other Senate office buildings. He later softened his comments, stating that he was only pointing out the possibility. Building design experts state that it was unlikely that any anthrax spores made it into the Hart Building ventilation system, but the system is nevertheless shut down as a precaution.

All six Senate and House office buildings are shut down for anthrax screening. The House adjourns for the week, while the Senate defiantly remains in session. A "small amount" of anthrax is discovered in a secure room of NY Gov. George Pataki's Manhattan office used by the governor's state police detail. Tests of workers are negative for exposure. Police Commissioner Bernard Kerik suggests that members of the governor's state police detail could have picked up the spores escorting the governor to news offices where anthrax had been found or was suspected to be present.

FBI investigators reveal links between the letters sent to Sen. Daschle and Brokaw, most notably the fact that both envelopes feature almost identical handwriting.

The Kazakhstan government releases a statement denying any connection between "American citizens' infection with anthrax and the possibility of the anthrax breed from there [the former Soviet anthrax plant at Stepnogorsk] falling into the hands of extremists."

Preliminary reports suggest that the anthrax in Florida might be the Ames strain, isolated from infected cattle in Iowa in the 1950s. The Ames strain is particularly robust, and for that reason was commonly used for laboratory tests, including vaccine development. The National Animal Disease Center in Ames, Iowa no longer has any stocks of the strain.

Tommy Thompson announces that the Food and Drug Administration (FDA) will approve the use of doxycycline and penicillin for treatment of anthrax.

Statements

Sen. Tom Daschle (D-SD):

o "We were told that it was a very strong form of anthrax, a very potent form of anthrax that clearly was produced by somebody who knew what he or she was doing. There is a greater degree of concentration in some

- sample that there is in others, and this particular sample had a fairly significant degree of concentration of spores."
- o "I'm not at all sure that all of this is related directly to [bin Laden]. I wouldn't be surprised if others are getting into the act as well."

Sen. Pat Roberts (R-KS) – "Because of the quality involved, I don't think there's any question that it comes from some state-sponsored organization, and it if is state-supported, you have to look at al-Qaida."

Robert Mueller, FBI Director:

- "While organized terrorism has not been ruled out, so far we have found no direct link to organized terrorism. There are, however, certain similarities between letters sent to NBC in New York and to Sen. Daschle's office here in Washington."
- o On testing troubles with the NBC anthrax "I think there were missteps at the outset. I don't think that it in any way affected the investigation."

Tom Ridge (OHS) – "To me, it's just beyond coincidence. It's more than coincidence, and we don't have the credible evidence. It's somewhere in between...as evidence unwinds, there may end up being a formal tie." Sen. Dennis Hastert (R-IL), describing the dispersion of the anthrax from the Daschle letter - a "flume [in the air] unlike anything we've seen to this point." Justice Department officials refer to the Daschle anthrax as "professional grade." Major General John Parker, U.S. Army Medical Research and Materiel Command (USAMRMC) – anthrax in Daschle letter that was tested at Ft. Detrick was "pure spores" but was not genetically engineered and represented "a common variety." It was treatable by "all antibiotics, penicillin all the way to Ciprofloxacin." Caree Vander Linden, spokeswoman for U.S. Army Medical Research Institute for Infectious Diseases (USAMRIID) – "There is no evidence that this is engineered to be more potent that the naturally occurring form of anthrax. The guestion of whether it was genetically modified – there is no evidence of that." Lisa Swenarski, CDC spokesperson – "It is a natural strain responsive to all antibiotics available to treat anthrax."

Dr. Scott Lillibridge, HHS – "There's been some attempt to collect it, perhaps refine it, and perhaps make it more concentrated. That seems certain." John Ashcroft:

- o PBS News Hour interview, on the anthrax sent to Sen. Daschle "Our preliminary analysis indicates that it's a virulent, strong, very serious, but whether it had been treated in any way that would make it especially more dangerous, our tests are not complete."
- o "We believe there may be other envelopes."
- "Any time someone sends anthrax through the mail, it's an act of terrorism. It's terrorism, and we treat it as an act of terror and terrorism. While we have not ruled out linkage to the terrorist attack of September 11 or the perpetrators of that attack, we do not have conclusive evidence that would provide a basis for our conclusion that it is a part of that terrorist endeavor."

Kenneth Moritsugu, Deputy U.S. Surgeon General, on the anthrax in Sen. Daschle's office – The exposure "has been confined to a very specific area" of the Hart Building and "there is no evidence of spores in the ventilation system." Tommy Thompson (HHS):

- O He disputes that the anthrax was weapons grade at a congressional hearing, but does state that the pure form of anthrax needed "significant resources" to concentrate, suggesting at first that a "country" would have sufficient resources but later added that a "well-financed terrorist group" could also have sufficient resources to produce such anthrax.
- o "There's no question that right now we are in a period of the unknown."
- HHS is "the lead federal agency for the public health response to any biological or chemical attack."

Michael D. Brown, general counsel for Federal Emergency Management Agency (FEMA) – "The F.B.I. is always the lead agency for crisis management. FEMA is always the lead agency for consequence management."

David Fleming (CDC), on the NY anthrax – "The strain in New York, on the results of a small number of genetic comparisons, preliminarily appears to match the strain in Florida."

Rep. Porter Goss (R-FL), on the quality of the anthrax – It "certainly raises a high level of attention that this wasn't just some weirdo. 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."

Ari Fleischer – "You know, that's a determination that will be made by the appropriate law enforcement officials. The line between whether this is merely criminal or terrorist is something that often involves whether or not a foreign nation is involved or whether or not cells of any type of foreign nation or terrorist group operating in this country. All that is under investigation right now, and I don't want to get ahead of that story."

Exchange between Sen. Joseph Lieberman (D-CT) and Tommy Thompson, at a Senate hearing where Lieberman criticized the lack of a coordinated federal response:

- Lieberman: "Who's in charge? There may be some coordination, but there's not one person in charge of preparing American for chemical and biological attack, and there's not one person in charge of responding to it."
- Thompson: "You are right. [But the administration is] taking steps to make sure our country is well protected from bioterrorism."

Sen. Fred Thompson (R-TN) – "The good news is that there are many agencies working on all of these issues. The bad news is that there are many federal agencies working on all of these issues."

Sen. Hillary Clinton (D-NY) pushes the networks to simultaneously air a town hall meeting on bioterrorism for officials to talk about their plans – "We need to do a really comprehensive job of public education, to replace fears with facts, to give the public the benefit of the information we have."

Richard Butler, former Chairman of the United Nations Special Commission (UNSCOM), on CNN – "That [anthrax] what went to Senator Daschle's office, for example, was very potent meaning that the size of the particles were small, could become the kind of anthrax that killed Mr. Stevens – float through the air and get in the lungs. That means this wasn't the stuff that some amateur cooked up in a fermenter in his bathroom. That may have been the beginning of the process, but it means it was subsequently dried and milled so that the particle size got down to this small and making potent anthrax.... The two candidates for immediate investigation, I think would be Iraq and Russia – why? The size of their program, in both cases, quite considerable anthrax programs, the sophistication of their equipment. You go back to what I said a moment ago, the equipment that can make the particle size small and make the anthrax more potent, both Iraq and Russia had and have – well Russia had – Iraq I think still has big problems with that degree of sophistication."

18 October 2001

Events

31 people in Sen. Daschle's office test positive for exposure to anthrax (23 members of Sen. Daschle's staff, 3 from Sen. Feingold's staff, and 5 Capitol Police officers).

A mail carrier in Ewing Township (Trenton, NJ) is diagnosed with cutaneous anthrax. FBI begins to focus on her route as a possible source of the anthrax tainted letters.

An assistant to CBS anchor Dan Rather is diagnosed with cutaneous anthrax. The allegedly contaminated letter sent from Malaysia to a Nevada Microsoft Corp. office proves not to be tainted with anthrax after further testing. Two postal facilities that handled mail for AMI tested positive for the presence of anthrax spores. The facilities are cleaned overnight and reopen the next day. A Florida Dept. of Health statement says, "There is no indication that these spores pose a health risk. No workers or visitors have been identified to be at risk at this time."

The CDC issues a warning to physicians nationwide to be alert for cases of smallpox, food poisoning, and deadly viruses such as Ebola. Federal health officials confirm that they are considering calling for a mass smallpox vaccination.

Statements

David Franz, Vice President for chemical and biological defense at the Southern Research Institute (SRI), on the anthrax sent to Sen. Daschle – "It suggests it wasn't a kitchen or garage operation, or if it was, someone who knew how to purify spores. The cleaner the preparation, the more likely it is that it was someone who knew what they were doing."

Richard Spertzel, on the anthrax sent to Sen. Daschle and reports of its refinement – "It tells me that this is not a homegrown terrorist. This indicates a foreign source of knowledge at least."

Dr. Julie Gerberding, Acting Deputy Director of the CDC National Center for Infectious Diseases (NCID), on testing of NY, FL, DC anthrax strains – It was

still too early to tell if the DC anthrax was the same as that in FL and NY, but "There are degrees of similarity, and the more time we have to...characterize the strains, the more we can work to refine our understanding of how similar two strains really are."

Dr. Martin Hugh-Jones (LSU) – "I'd say it's either the same group or closely related groups. Either they all know each other or they both got it from a common third source."

Dean Wilkening, Center for International Security and Cooperation, Stanford University – "It could be a handful of loons that just happened to take advantage of Sept. 11 to release this. That's a possibility. But I think it's becoming clear that this is a more coordinated effort…by a more sophisticated operation. Dried anthrax of this kind of fine particle size is not something that al-Qaida could do in the hills of Afghanistan. This requires a level of training and the level of effort that some states have devoted to this issue. It possibly suggests that a state might have assisted in the supply of the material."

Tom Ridge (OHS), on possible mishandling of information by politicians, health officials and law enforcement officials during early period of crisis and administration steps to remedy that shortfall – "You didn't have a central voice. The decision was made to try and encapsulate the information, get it out and have regular conferences."

John Ashcroft, MSNBC interview – The spate of anthrax infections "might be ...part of a unified organized effort, an effort either by a single individual or else an effort conducted in concert with someone else." Ashcroft also stated that authorities could not state whether the anthrax incidents were linked to the 9/11 hijackings.

Tariq Aziz, Iraqi Foreign Minister – "Whatever happens in the United States, someone would raise his finger and point to Iraq. We don't like this kind of agitation against Iraq. These are cheap, baseless, ridiculous accusations. How can we do these things? Why?"

James Woolsey, former CIA Director, on the possible connection to Iraq, citing Saddam's personal malevolence for the Bush family – Saddam 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, on the possible connection to Iraq, mentioning reports that Mohammed Atta met with an Iraqi intelligence agent in Prague at least once – "We don't have evidence of a transfer from Iraq to al Qaeda. I'm talking about the possibilities."

Jack Williams, terrorism expert/professor at Georgia State University – "I think this is a distraction, a form of disruption. They know us pretty well, how we will react, ...and if Osama bin-Laden is involved, it is part of an overall, long-haul approach."

Raymond Tanter, Mideast expert – "The likelihood of state sponsorship goes up with the purity of the strain. And the inference is, only Iraq and Iran could be the culprit – and Iraq seems to be the top candidate."

Dr. Nwadiuto Esiobu, microbiologist and terrorism expert, Florida Atlantic University, on apparent learning behavior by whoever sent the anthrax – "At first, they saw the results weren't good enough. They probably then did some homework and came out with a new version. Which is what would be worrisome."

Dr. Jacqueline Cattani, director of the Center for Biological Defense at the University of Southern Florida – "I don't think there are multiple sources of people able to produce and distribute weaponized grades of anthrax. It's just not that simple. If it turns out [the anthrax found in New York, Washington, and Florida] have the identical DNA fingerprint, then I think we really have to take seriously the possibility that this is a highly organized event."

Sen. Jim Bunning (R-KY), chastising Hastert for starting a "media frenzy," – "Misinformation is the worst thing we can do."

Sen. Rick Santorum (R-PA) – "My understanding is that this strain of anthrax [found in Sen. Daschle's office] responded to every antibiotic used against it, even 1943 penicillin. Everyone needs to understand that this is a threat we have a response for."

Deborah Willhite (USPS), on learning that four "hot spots" of anthrax contamination had been identified in the Senate mailroom – "That was the first time our concerns that anthrax might be able to escape an unopened envelope were sort of confirmed. That sort of said to us, 'If it got into their mailroom before the letter was opened, why think it couldn't have gotten into Brentwood?"

19 October 2001

Events

A second postal worker is diagnosed with cutaneous anthrax at a regional sorting facility in Hamilton Township (Trenton, NJ).

The NY Post editorial assistant gets confirmed diagnosis of cutaneous anthrax. A second DC postal employee tests positive for anthrax, while a third employee checks into a local hospital with influenza-like symptoms.

The FBI reports finding an unopened anthrax threat letter at the *New York Post* addressed to the editor in chief. The letter, postmarked on 18 September 2001, bears similarities to those sent to NBC anchor Tom Brokaw and Sen. Daschle. FBI and FDA agents reportedly question pharmacists in the Trenton, NJ area to determine if anyone attempted to purchase supplies of Ciprofloxacin or other antibiotics in the period before the letters were mailed.

The number of people who tested positive for exposure to anthrax on Capitol Hill is reduced from 30 to 28 due to more thorough testing.

A *New York Times* spokesman states that a letter sent to one of its reporters in Rio de Janeiro tested positive for spores "consistent with anthrax"

Hector Lombardo, Argentinean Minister of Health, reports that a letter mailed to Buenos Aires from Miami, FL tested positive for anthrax.

Statements

President George W. Bush – "I do not have knowledge of a direct link of the anthrax incidents to the enemy, but I wouldn't put it past them."

Tom Ridge (OHS) states that it appears that in the three cases, the anthrax is from the same source:

- o "...tests to date have concluded that the strains are indistinguishable."
- "The tests have shown that these strains have not been, quote, unquote, weaponized."
- "It does appear that it may have been from the same the same batch. But it may have been distributed to different individuals to infect and to send into different communities."
- o "The FBI has been able to identify the site where the letters were mailed." Tommy Thompson (HHS) "The public health infrastructure, I want you to know full well, is responding extremely well to this threat. Americans should rest assured in knowing that we are responding quickly and effectively both at the federal and local levels." Thompson also announces that HHS will negotiate to procure enough antibiotics to treat 12 million people. "We're not going in and inoculate the people [sic]; we're just going to have it available."

David Satcher, U.S. Surgeon General – tests on the anthrax samples from AMI (FL), NBC (NY), and Sen. Daschle's office (DC) indicate that the bacteria was not produced in a "weaponized" form. 31 genetic markers matched the anthrax samples from NY and FL, and the DC strain appeared to be similar: "there's no evidence of difference in the strain." Particles are of different sizes, but Satcher believes that the strain appeared to be the same. Provides no other details other than that the strain is a "naturally occurring" strain.

David Fleming (CDC) – "There is no evidence that it [the anthrax strain] has been genetically manipulated or bio-engineered in any way."

Dr. Gregory Evans, Director, Centers for the Study of Bioterrorism and Emerging Infections (CSB&EI), Saint Louis University – the findings indicate that the anthrax "was all produced at the same time in the same batch."

Dr. Anthony Fauci, Director, National Institute of Allergy and Infectious Diseases (NIAID) – "The particles were of a size and grade that indicates that it is highly unlikely that they could have been made by someone who is just setting up shop in their basement."

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

20 October 2001

Events

Anthrax contamination is discovered at the Congressional mailroom.

Brazilian authorities report that the letter sent to the New York Times bureau in Rio de Janeiro, which initially tested positive for anthrax, tested negative.

Statements

David Fleming (CDC) – "It didn't make sense. Something different happened at Brentwood. Something there allowed this material to become aerosolized." Steven Block, professor of biological sciences at Stanford University – Statistically, anthrax is "scarcely a blip in the general health of the U.S. You are more likely to be eaten by a shark in Florida than to be killed by anthrax in Florida. The bioterrorists have done a much better job sowing fear than sowing

disease. Bioterrorism is not a weapon of mass destruction, but of mass disruption. The fear is way out of proportion to the threat."

Nick Jewell, professor of biostatistics at the University of California at Berkeley – "Why do people perceive certain things as being more risky than the data support? People are overreacting, way out of proportion to the threat." Jewell believes that this public fear is the result of people "being bombarded and saturated with bad news" about anthrax, beyond all proportion to the actual threat.

Week of 21 October 2001

Events

Anthrax spores are found on four delivery bar code sorting machines in NYC's Morgan Mail Processing and Distributing Center.

The L Street branch post office in Southwest DC is shut down after testing positive for anthrax.

21 October 2001

Events

Brentwood mail center employee Thomas Morris, Jr. dies; the cause of death is later determined to be pulmonary anthrax.

A third DC postal employee (previously exhibiting flu-like symptoms) tests positive for anthrax. Five other workers with suspicious symptoms are being monitored. Anthrax contamination is found at 13 sites in the Trenton, NJ mail center.

A second, unidentified *New York Post* employee is diagnosed with cutaneous anthrax. It is suspected that this employee and a second, Mark Cunningham (see **28 October 2001**) handled the anthrax-tainted letter during the 12-15 October timeframe.

Statements

Senator Joe Lieberman (D-CT) – Anthrax involved in attacks was "significantly refined anthrax." Culprits behind the attacks were "more than a couple guys in a kitchen. It says to me there is either a significant amount of money behind this, or this is state-sponsored, or this is stuff that was stolen from a former Soviet program."

Richard Spertzel – The fact that the anthrax was small enough to remain airborne and be inhaled indicates that it is "weapons grade" "There's no question in my mind [that state sponsorship is involved]. The idea that this is the work of a lone nut, that's wishful thinking."

Senator Bob Graham (D-FL) – "We know that Iraq has played a role in the past in supporting other groups of global terrorists. Iraq will continue to be in our crosshairs. But at this point we don't have the basis on which to pull the trigger." Ambassador L. Paul Bremer, former chairman of the National Commission on Terrorism – Subscribes to the domestic terror theory, but says its too early to rule out Iraq or other rogue nation as a source of the anthrax. "This could be a false flag operation."

Scott Ritter, former UNSCOM inspector – "You can't discount Iraqi involvement, but it doesn't make sense."

Edith Flynn, terrorism specialist at Northeastern Univ. – "...nearly all the evidence that we have now points to this being a case of domestic terrorism."

22 October 2001

Events

Joseph Curseen, Jr., another Brentwood facility worker, dies. He had been diagnosed with flu on 20 October, but the cause of death is later determined to be pulmonary anthrax.

The NJ bookkeeper with suspicious lesions enters the hospital for 5 days and is treated with antibiotics before being released on 27 October.

The Environmental Protection Agency (EPA) announces that Superfund money will be used to decontaminate the AMI offices in Boca Raton, FL.

Health officials announce two possible deaths, two other inhaled anthrax cases, and nine other suspicious cases of illness.

To date, there have been:

- 1 confirmed death
- 2 possible anthrax-related deaths
- 9 confirmed infections
- 28 positive exposures
- 5 preliminary positive exposures.

The Washington Post reports that the FBI said it has found no hard evidence connecting the September 11 attacks, the anthrax letters, and Iraq.

Statements

Tom Ridge (OHS), on the two DC postal workers who died:

- o "It is very clear that their symptoms are suspicious and their deaths are likely due to anthrax."
- The information to date "is consistent with the theory that this one letter could have contaminated the whole system."

Steve Bahrle, postal union official in Trenton, NJ – "These people were reluctant to listen to us. We were subjected to unnecessary risk and exposure."

Dr. Mitch Cohen, Director, Division of Bacterial and Mycotics Diseases (CDC) –

- o "This is really a new phenomenon. At first, we had no evidence that any of the mail handlers were at risk."
- "Previous investigations in Florida and New York did not identify that postal workers were at risk. This is really a new phenomenon. How it's occurring isn't clear."

Dr. Steven Wiersma (FL DOH) – "Before the event [at AMI] is over, we'll probably have additional numbers of people we believe were exposed. The numbers will grow as we go into the final phase of the investigation."

Richard Spertzel – "Once there was an opening in that letter of any kind, then the fact that workers...became infected is not a surprise."

David Franz (SRI) – "If it's in an envelope...a lot of bending and fast movement of the envelope could puff a little bit out those openings, I'm guessing." Phillip Brachman, Emory University Rollins School of Public Health epidemiologist – "Mail that went through the same facility and has now been

delivered...it's hard to conceive that that would be infectious. It's so unlikely that average mail is going to be contaminated."

Michael Powers, Chemical and Biological Arms Control Institute – "I don't think we can close the door on the question: Are there more packages?"

Phyllis West, Brentwood postal clerk – "They know where it came from and we are the only official mail section. They should have been on this like white on rice."

Keith Beckett, Brentwood postal employee – "The postal management only cares about moving mail, not about its employees. They dropped the ball."

23 October 2001

Events

A "trace amount" of anthrax spores are found on a mail-slitting machine at a mail center that services the White House, located on property shared by Anacostia Naval Air Station and Bolling Air Force Base (AFB). According to press reports, the "trace amount" was approximately 20 to 500 spores. E-mail from the White House Office of Management and Administration stated, "Environmental tests of multiple specific areas throughout the White House complex have all been negative, including all tests within the 18 acres and associated downtown facilities." President Bush states three times during a press conference that he does not have anthrax.

Medical tests confirm that two DC postal workers at the Brentwood mail facility died as a result of inhalational anthrax, and a Trenton, NJ postal worker contracted inhalational anthrax. Two additional DC postal workers are hospitalized with anthrax infections.

The New York Times reports that federal law enforcement officials believe that the New York Post, NBC, and Daschle letters were all written by the same person and that other anthrax-contaminated letters could still be moving through the postal system.

In addition to two deaths and two confirmed cases of inhalational anthrax, health officials in DC and NJ were investigating up to 20 possible additional cases. Law enforcement officials believe that the Daschle letter was responsible for contaminating the Brentwood facility. They say that the letter left a trail of spores as it passed through automated, high-speed mail sorting equipment, and tests consistently found spores along the precise path taken by the Daschle letter and others in the same ZIP code.

Statements

Ari Fleischer – "There is a suspicion that this is connected to international terrorists.... [A link to the Sept. 11 terrorists has been] the operating suspicion of the White House for a considerable period of time."

Rep. Richard Gephardt (D-MO), on possible links to the Sept. 11 hijackers – "I don't think there's a way to prove that [link], but I think we all suspect that." On the anthrax sent to Sen. Daschle's office, he described it as "weapons grade," saying that the small size of the particles indicated that it had been "milled." "This is highly sophisticated material. It is small in size, and it aerosolizes."

John Ashcroft – "We are not able to rule out an association with the terrorist acts of September the 11th, but neither are we able to draw a conclusive link at this time."

Dan Mihalko, USPIS spokesman – "I can't say we have narrowed the focus. This has the potential to be a long investigation."

Dr. David Satcher, Surgeon General of the United States – In hindsight, "we were wrong" not having considered that a sealed envelope containing anthrax might pose a hazard as it passed through a post office. "Until a week ago, I think all of the experts would have said 'no.' The fact of the matter is, we were wrong, because we haven't been here before and we're learning together."

John E. Potter, Post Master General of the United States – Although risks from opening the mail were slim, the safety of the mail cannot be guaranteed.

24 October 2001

Events

Tom Ridge holds a closed meeting of public health and law enforcement officials to review the government handling of anthrax incidents to date and to devise a strategy for handling future incidents.

The State Department mail processing facility in Sterling, VA is shut down due to anthrax contamination.

FBI and Postal Inspection Service officials reportedly say that they were not convinced of the validity of tests conducted by the Secret Service on mail handling equipment that handled White House mail at Bolling AFB.

Statements

Dr. Anthony S. Fauci (NIAID), on the Daschle anthrax – "When I saw that [the fact that the Daschle anthrax was especially dangerous], I said to myself, this is material that is quite formidable, that is infecting people with inhalation anthrax, infecting them in the absence of direct contact. You can call it whatever you want to call it with regard to grade and size or weaponized or not weaponized. The fact is, it is acting like a highly efficient bioterrorist agent. If it walks like a duck and quacks like a duck, then it is a duck."

John Collingwood, FBI spokesman — "On the same evening after the letter was opened, the Army laboratory described to the F.B.I. along with all other appropriate agencies, law enforcement and public health alike, the extremely virulent nature of the anthrax. Thanks to their quick work the seriousness of the situation was unmistakable and was widely broadcast. We have nothing but the highest praise for both the Army laboratory and C.D.C."

Dr. Jeffrey Koplan (CDC) – The Daschle letter and possibly others "contained anthrax in a form that permits it to permeate the letter or escape through the letter in some way."

25 October 2001

Events

A State Department mailroom worker at the agency's off-site mail handling facility in Sterling, VA is diagnosed with pulmonary anthrax. The mailroom

worker had never visited the contaminated Brentwood Road post office, raising questions of how the worker may have been exposed.

The CIA announces that trace amounts of anthrax were discovered in the mailroom of the agency's Langley, VA headquarters.

The Russell Senate Office Building reopens. Five other House and Senate office buildings remain closed for testing and cleaning.

Tom Ridge convenes a meeting of federal agencies to discuss the government's handling of the anthrax incidents, which had received criticism, and to continue to push for coordination of efforts between agencies (*The Washington Post* reported that most of Ridge's time since taking office has been spent refereeing squabbles between federal agencies). Ridge stated that the meeting of FBI investigators, public health officials, and scientific advisors was convened "to consolidate whatever information we have and to see if we can further accelerate the process of answering the questions that America seeks from the administration."

Tom Ridge reveals that the anthrax used in all three cases (DC, FL, NY) belongs to the Ames strain isolated in the 1950s. Experts state that this fact does not assist in tracking the perpetrators, as the Ames strain has been widely distributed around the world. Ridge also confirmed that the anthrax sent to Sen. Daschle was very small, highly concentrated, and of highly quality, unlike that sent to the New York

Tom Ridge reveals that anthrax tests are being conducted at East Coast post offices as well as randomly selected facilities across the country.

Investigators in Trenton, NJ failed to find evidence of anthrax along the route of the NJ mail carrier that contracted cutaneous anthrax.

The London Times, citing testimony by Egyptian Islamic Jihad member Ahamd Ibrahim al-Najjar, reports that Osama bin Laden and his associates purchased a total of \$10,000 worth of anthrax bacterium from factories in Eastern Europe and "from a factory that supplied it to the Indonesian-based Islamic Moro Front."

Statements

Post.

Tom Ridge (OHS):

- The new case of anthrax "shows how potent this anthrax really is, how pure it is and how easily it can be disseminated."
- On the anthrax in the Daschle letter "It is pure and the spores are smaller. Therefore they're more dangerous, because they can be more easily absorbed in a person's respiratory system." Ridge went on to state that the anthrax found in the letter to the *New York Post* was clumpy.
- o "It is clear that the terrorists responsible for these attacks intended to use this anthrax as a weapon. Clearly, we are up against a shadow enemy, shadow soldiers, people who have no regard for human life. They are determined to murder innocent people."
- "Every day we are looking for ways to improve our deterrence and rapid response efforts."

Dr. Jeffrey Koplan (CDC):

On the anthrax letter sent to Sen. Daschle – "They were described to us as well taped, meaning the seals along the letter were taped in a way that minimized, if not eliminated, the ability of powder to seep out through the

- openings. We were still operating on the assumption that in order for a letter to convey anthrax, it had to be opened or torn or disrupted. That construct obviously changed markedly with the report of inhalation anthrax of mail workers in Brentwood Road."
- On the CDC response to the anthrax incidents "People are somewhat surprised we're learning this on a day-to-day basis. That's really no different than any other investigation we've done. You always wish you knew on Day One what you know on Day 20."

Major General John Parker, USAMRMC – NY Post Anthrax was "clumpy and rugged," and one of Parker's scientists described it as "looking like Purina Dog Chow." The Daschle anthrax was, according to Parker, "fine and floaty." John Nolan, Deputy Postmaster General – "The mail that's going to you and I, at this point, there's no indication whatsoever of any ongoing problem. We're looking at...mail going to certain locations where you're more likely to have a risk of someone doing something stupid, whether it's mail going to Congress or the White House or Planned Parenthood."

Sen. Bob Graham (D-FL), on the source of the anthrax — "It's really up in the air.... I know that there has been a great deal of speculation about the Iraqi involvement. I can just say that, as of this point, there has not been a clear identification of an Iraqi role either in the Sept. 11 attacks or in the anthrax issue." William Patrick, on a possible source of the anthrax — "A disgruntled professor who didn't get tenure, he could do it. He wouldn't provide the ultimate, like we did. But he'd do all right."

Alan Zelicoff, physician and biological weapons expert at Sandia National Laboratory (SNL) – "It takes lots of money, facilities, and lots of physics and engineering. It takes money, money, money, and that translates into state, state, state."

The administration official privy to 10/25 briefings on the anthrax hunt – "The material suggests a high degree of sophistication. But that can be achieved by a small, well-equipped lab by the Ph.D. biologist. And the techniques to do it can be found on the Internet. The good news is that it's not necessarily a foreign nation behind these attacks. The bad news is that there is a broader universe of people who could have done this."

Deborah Willhite (USPS) on whether or not the anthrax terrorist may have employed more than one letter – "I have no idea."

Dr. Julie Gerberding (CDC) – "This is frightening. This is a biological attack and we have no experience with this."

Ari Fleischer:

- o "I think you'll see the government continue to make every effort possible to share information among agencies, to continue the cooperation."
- "I can't speak for every single person in the government to say whether every official in every agency is satisfied with every official in every agency. I can speak for the president. And in the president's conversations with the attorney general, with the Cabinet secretaries, he is satisfied with the sharing of information."

26 October 2001

Events

Traces of anthrax are discovered at the following locations:

- A Supreme Court mail center in suburban Maryland, and later that day in the Supreme Court building itself.
- The mail sites for Walter Reed Army Medical Center and its research laboratory.
- The State Department headquarters.

BBC Online reports that the alleged anthrax letter in Kenya turned up negative in tests

The Washington Post reports that "Top FBI and CIA officials" believe that the anthrax attacks in DC, FL, and NY may be the work of a domestic extremist group rather than overseas terrorists. A senior official stated, "Everything seems to lean toward a domestic source. Nothing seems to fit with an overseas terrorist type operation."

Statements

Rep. Richard Gephardt (D-MO), sometime during this week — "...in my view, the federal government might not have lived up fully to its responsibility." Ari Fleischer — "The quality anthrax sent to Senator Daschle's office could be produced by a Ph.D. microbiologist and a sophisticated laboratory." Dr. Jeffrey Koplan (CDC) — The "working hypothesis would be that this is not cross-contamination. There is not enough infectious material from cross-contamination to do that.... We all think that [the Daschle letter being responsible for all contamination within the DC area mail system] would be highly unlikely to virtually impossible."

27 October 2001

Statements

Richard Spertzel, interview with the *London Sunday Telegraph* – "It has to be someone with an existing biological programme. These are Russia, Syria, Iran, and Libya. Top of my list, though, is Iraq. There are known associations with intelligence personnel and al-Qaeda. Also they have the capability, and the knowhow"

Tim Trevan, former UNSCOM inspector, on reports that bentonite, a chemical additive Iraq was known to have used in its anthrax program, was found in the Daschle anthrax - "It says to me that Iraq becomes the prime suspect as the source of anthrax used in these letters."

28 October 2001

Events

Mark Cunningham, an employee at *The New York Post*, is diagnosed with cutaneous anthrax. It is suspected that Cunningham and another *New York Post* employee (**see 21 October**) handled the anthrax-tainted letter during the 12-15 October timeframe.

A Landover, MD postal facility that processes mail for the Justice Department tests positive for anthrax. The Landover facility receives mail from the Brentwood Road facility.

New Jersey officials announce that a mail handler at the Hamilton facility, who had been on a watch list for potential exposure, has come down with pulmonary anthrax. Just hours prior to this announcement, Anthony Fauci of the NIAID stated, "There have been no documented cases at all of an individual getting a letter personally from [a contaminated] facility and winding up getting the disease."

FBI Director Robert Mueller reports to a group of the country's mayors that 7,000 of the agency's 11,000 agents and support personnel are involved in investigations relating to the September 11 attacks and the anthrax incidents.

Statements

Scott Stanzel, White House spokesman, disputing media reports that bentonite (an additive Iraq used in its anthrax program) was found in the Daschle anthrax – "Based on the test results we have, no bentonite has been found. As always, there will be continuing tests."

Dr. David Franz (SRI), on the fact that even if bentonite is present it does not indicate Iraqi involvement — "Bentonite was used by the Iraqis in producing the anthrax that they produced. However, bentonite is found throughout the world. Bentonite is found in the United States. It's found wherever there was ever an active volcano. Bentonite is available from chemical companies, a number of them in the United States and throughout the world. ... There are some interesting characteristics of bentonite. It's typically made up of silicon dioxide and some metal oxides. And they're in various formulations and various ratios in bentonite from various parts of the world. So there's possibly another clue.... Even if we have definitive proof that we have bentonite in a sample from the Daschle letter, in my mind, that's just another piece of the puzzle. It's not the final piece of the puzzle."

Andrew Card, White House Chief of Staff:

- "The one thing I can say: It's not naturally occurring. This anthrax has been milled. It may have additives to it. It is not something that you would find in a normal veterinarian's office, where they deal with anthrax more regularly. And we don't know the source of this. All of our scientists are working trying to find out what it is. But we've only had two very, very small samples that we have for analysis. And I just don't think we have all the answers yet."
- o "There may be other letters that are stuck in the system. But we are working hard to make sure that any contamination is confined and that we can deal with it."

Sen. Richard Shelby (R-AL), expressing concern over the current burden on law enforcement investigators – "This could be a ploy, a diversion, to scare us to make us panic – while they get ready to do something else."

Rep. Saxby Chambliss (R-GA), on the stretching of FBI and CIA resources – "We are just stretching law enforcement thin and we are just exposing us" to possible attacks. Chambliss believes that groups may try to attack sites where

anthrax scares have broken out, stating, "This may mean that they know they are taxing law enforcement and they may go there."

29 October 2001 Events

Tests reveal the presence of anthrax spores in the mailrooms of the Supreme Court, the main State Department building, a federal building that houses HHS and Voice of America offices, and at a building housing FDA offices.

New Jersey officials announce that a 51-year old woman who lives near the Hamilton mail facility has contracted cutaneous anthrax.

The *New York Post* states that a third employee from the paper was showing symptoms of cutaneous anthrax (See also 28 October).

Preliminary tests indicate that a diplomatic pouch destined for the U.S. embassy in Lima, Peru contained anthrax spores.

The Postal Service announces that 30 mail facilities in NY, NJ, PA, and DE will be tested for anthrax, and testing may be extended to an additional 200 other facilities.

Florida postal workers file a lawsuit against the USPS demanding anthrax testing for all employees who worked at facilities that may have been contaminated by anthrax. The Miami local of the American Postal Workers Union also demanded that four major postal facilities in Miami and all post offices in Boca Raton be closed for anthrax screening, and that the Federal Government develop a uniform policy on how it responds to possible anthrax contamination in postal facilities. The NY Metro local of the APWU filed a lawsuit to force the USPS to close the Morgan General Mail facility and any other facilities found to be contaminated with anthrax.

Microscopic examination of the Daschle anthrax revealed a brownish halo surrounding the spores, which resembled a bentonite coating. However, MG John Parker reports that high-energy x-ray studies of the Daschle anthrax found no evidence of aluminum, a key component of bentonite, but did find the presence of silica. Allegedly, the U.S. "recipe" for anthrax involved the use of silica as an anti-static/clumping agent.

FBI agents in Florida test apartments and cars rented by the 9/11 hijackers for traces of anthrax. Two of the cars tested negative and the FBI was preparing to test a third.

30 October 2001 Events

The Friendship Heights branch post office in Northwest DC and a branch post office near Dulles International Airport are closed after testing positive for anthrax

Environmental tests are conducted at a Manhattan, NY outpatient hospital after a delivery employee contracts pulmonary anthrax. The employee, Kathy Nguyen, worked in a sterile supply room located next to the mailroom. Initial tests disclose no presence of anthrax spores at the hospital.

Tommy Thompson requests access to the stock of anthrax vaccine held by the BioPort Corporation, seeking enough doses for one million people. The stock cannot currently be used, pending the completion of FDA inspection of the vaccine lots and the manufacturing plant.

Statements

Cedric Dumont, head of the State Department medical unit told assembled employees that anthrax spores were "probably all over" the building but not in concentrations strong enough to cause pulmonary anthrax infections. "Your office areas probably have some contamination. We've got envelopes probably throughout the system that may have very few…spores on them."

Steven Ostroff, NCID Chief Epidemiologist and CDC lead official on the latest NYC and NJ cases – "There is no clear linkage with the mail. We don't suppose that we know what the source was."

David Walker, infectious disease specialist at University of Texas Medical Branch, on the possibility that the terrorists may have switched to a new delivery system – "We shouldn't assume they're going to continue to do this in the same way. If they have a good supply of these spores they can distribute them in a lot of different ways. To focus on the mail...may not follow the way they're thinking."

Dr. Michael Osterholm (CIDRAP) – "Letters may not be the only vehicle by which anthrax can be transmitted to a population. We have to keep an open mind.... They [the terrorists] have a high quality bullet, but they're delivering it with a very ineffective gun."

Rudolph Giuliani, on the new NY anthrax case – "There's no question there's a possibility she got it somewhere else."

Dr. Jeffrey Koplan (CDC), on scientists' understanding of the anthrax bacteria – "We know that if you have a large number of these spores, whether it's 5,000 or 10,000 or 50,000, that they clearly pose significant human danger. And I think we can be pretty assured that if you have 1 or 2 or 5 or 10 spores, that they pose very little danger. It's what's in between" that remains unclear.

Tommy Thompson (HHS), acknowledging new uncertainties in the cases – "Before we discuss what we know, I want to remind everyone that this information we have is what we know at this time. Information is developing that will likely alter these facts…because this is an ongoing investigation."

Patrick Meehan, director of emergency and environmental health services for CDC, on the post office tests in DC – "The post offices that have been tested are almost uniformly negative, and the ones that are positive have very, very low levels of contamination."

Rep. Dan Burton (R-IN) and Rep. Henry Waxman (D-CA), in a letter to the FBI, USPS, and CDC on the government response – "Currently we are learning about potential cross contamination by investigating the potential exposures of citizens who fall ill with symptoms of anthrax. But this approach is reactive and encourages fear."

Rep. Mike Pence (R-IN), on the Daschle anthrax and Capitol Police suspicions that more than one letter exists – "There were two grams of anthrax in the Daschle letter, containing billions of spores.... There's a lot of evidence that

we're dealing with cross-contamination. Somewhere in the system our mail got friendly with mail that got compromised, a letter that was exuding this material." Dr. Anthony Fauci (NIAID) – "Up to [Monday], there was no evidence at all that there could be – or is – an individual in which there might be the reasonable question, 'Did they get infected from a piece of mail that went to their home?' That is being intensively investigated right now."

31 October 2001

Events

Kathy Nguyen, employee of the Manhattan Eye, Ear and Throat Hospital, succumbs to pulmonary anthrax. She is the fourth person to die from the condition, and the NYC medical examiner ruled her death a homicide. She had no obvious connection to the mail and media incidents in NY, raising the possibility of cross-contamination. Investigators reportedly pulled some anthrax spores off of her clothes. A second worker at the hospital was tested for cutaneous anthrax, after complaining about a lesion.

The U.S. consulate in Lahore, Pakistan receives a suspicious letter "in the public local mail." The letter is bagged and isolated for testing.

A postal worker from the Bellmawr Mail Distribution Center in Camden County, NJ is being treated for suspected cutaneous anthrax.

Indiana governor Frank O'Bannon reports that postal equipment sent to a company in the state to be repaired tested positive for a small amount of anthrax spores.

The USPS Stamp Fulfillment Services Facility in Kansas City, MO reports that traces of anthrax were found on garbage bags that had been put around trays of mail received from Washington's Brentwood postal center.

The State Department announces that initial tests indicate that anthrax spores were in two mailbags delivered to the U.S. embassy in Vilnius, Lithuania.

Statements

Rudolph Giuliani, on the Nguyen case – "At this point, people should not jump to conclusions about a second case. There is no quick easy thing to attribute it to." Dr. Anthony Fauci (NIAID) – "The cutaneous anthrax part of it is compatible with cross contamination. The case in New York City is clearly much more perplexing, because at this point, there really is no apparent connection. And the inhalation component of it makes it even more perplexing."

Alan Zelicoff (SNL) – "We didn't think that anybody could come up with the appropriate coatings for anthrax spores to make them float through the air with the greatest of ease." Exposing 28 people with a single opened envelope "is no mean trick."

Dr. Mohammad Akhter (APHA) – "In hindsight, this has been an escalating event. We will continue to see new cases of anthrax disease. We do not have a complete handle on who was exposed."

Dr. David Satcher, U.S. Surgeon General – "We're used to dealing with infectious diseases, but we don't have a lot of experience dealing with terrorists. We don't know what the attacker is doing or what the attacker is going to do next in terms of strategy."

Sen. Fred Thompson (R-TN), on the government handling of the anthrax attacks – "We've been briefed in great secrecy, on the 'real' story – totally wrong, in many cases."

Dr. Tara O'Toole, Deputy Director, Johns Hopkins University Center for Civilian Biodefense Strategies (CCBS), on the government response – The "government is doing a terrible job of communicating what is going on," and the "tendency to shield people from bad news underestimates the ability of the public to rationally respond to disturbing information."

Sen. Tom Daschle (D-SD), on the government response – "Those who are saying in the last couple days that we're learning as we're going are certainly right. We are learning. We have not experienced this before.... We've got to adapt and respond and change as the information and the facts change, and I think that's what we're trying to do."

Dr. Steven Calderwood, director of infectious diseases at Massachusetts General Hospital, on a possible positive facet of the anthrax attacks – "We never really had any significant clinical data on patients. The small positive about these cases is that we're learning, in a short period of time, much more about [inhalation] anthrax."

Ivan C.A. Walks, DC Department of Health (DC DOH) Director, testifying to the Senate Governmental Affairs Committee on the CDC response to anthrax at Brentwood – "It was becoming clear that what were sound CDC recommendations based on prior knowledge and science had left the Brentwood workers unprotected.... There was not a neglect on the part of the CDC of the postal workers of our community." The CDC assessment of the risks to Brentwood was based on "the best science," science later found "not to be compatible with this form of anthrax."

Exchange between Sen. Joseph Lieberman (D-CT) and Major General John Parker (USAMRMC):

Sen. Lieberman: ...General Parker, do you have an opinion on the question I just asked about looking back, whether Brentwood and the other mail facilities should have been closed after traces were found in the Dirksen mailroom?

MG Parker: ...but the way the envelope was prepared by that terrorist would give you the impression that the terrorist didn't even believe that it would get out of that envelope and that it would arrive on Senator Daschle's desk. So the fact that the spores did, in fact, pass through porous areas in that envelope and create an aerosol that caused harm in this particular case was maybe a fact too far for most of us, sir.

1 November 2001

Events:

Preliminary lab tests indicate that the strain of anthrax that killed Kathy Nguyen is the same strain as that found in DC and NY. Dr. Julie Gerberding (CDC), stated, "We haven't identified anything about this strain that's different from the strains in the other areas."

The Bellmawr postal worker under observation for suspected cutaneous anthrax tests positive for the infection.

A contaminated mailbox in NJ is believed to be the source of infection for a 51-year old NJ accountant stricken with cutaneous anthrax.

Tests conducted at the Lithuanian Public Health Center in Vilnius confirm the presence of anthrax in at least one mailbag sent to the U.S. embassy in Lithuania. Kazimiera Rutiene, chief of microbiology, states that she is "100 percent" certain that scientists at the center found anthrax. "This [test] is real proof that there were traces of anthrax there."

The New York Post reports on a series of 19 anthrax hoax letters that were mailed from Indianapolis, IN prior to the September 11, 2001, attacks. According to law enforcement sources, the handwriting on the hoax letters virtually matched that used on the anthrax letters. The Post was allowed to view copies of several of the letters, and the article notes, "Each line of the printed address clearly sloped downward to the right an the handwriting eerily resembled that on the anthrax letters."

Statements:

Arvydas Pocius, State Security Department chief, Vilnius, Lithuania – "This news of anthrax cases in Lithuania is shocking. This proves that no place on the planet is safe from the threat of bioterrorism."

Michael Boyle, spokesman for the U.S. embassy in Vilnius – "Common sense leads me to believe that this is part of the same contamination that has been documented at the State Department." Boyle also reported that mail from the five bags sent for test had been recovered and no embassy employees were showing any symptoms of infection.

Mark Potok, Southern Poverty Law Center spokesman – "It seems clear that the anthrax production is at least somewhat sophisticated. We've seen no evidence that any group on the American radical right has those kinds of possibilities." Brian Levin, Center for the Study of Hate and Extremism at California State University – San Bernadino – "...the people committing these acts are foreign-based or have foreign sympathies. It would seem to me to be improbable that a domestic extremist would be able to put together such an attack in such a short period of time."

Rabbi Abraham Cooper, Simon Wiesenthal Center – The timing of the anthrax letters suggest a link between them and the Sept. 11 events, which means "we're looking at three possible sources: Osama bin Laden, individuals and extremists living here who are from that part of the world, and subcontracting to the lunatic fringe here."

2 November 2001

Events:

MG John Parker (USAMRMC) reports that the anthrax used in the Daschle letter was treated with silica, a drying agent used by the U.S. offensive BW program.

Statements:

Robert Mueller (FBI), on the FBI's difficulty in determining the source of the anthrax attacks – "We have not said it's domestic, we have not said it's international. We have not precluded any possibility."

3 November 2001

Events:

According to New Jersey State public health officials the Bellmawr Mail Distribution Center tests positive for the presence of anthrax. A mailroom in the Department of Veterans' Affairs Medical Center in Washington, DC tests positive for anthrax.

Statements:

Pres. George W. Bush, radio address to the nation – "As all Americans know, recent weeks have brought a second wave of terrorist attacks upon our country. There's no precedent for this type of biological attack. And as we deal with this new threat, we are learning new information everyday."

Week of 4 November 2001

Statements:

Dr. Michael Osterholm (CIDRAP) – "I don't think people really get it yet. Catastrophic terrorism is here. They've got a hell of a 'bullet.' All they need is a better 'gun.' The 'gun' used in the incidents so far was low-tech delivery through the mail."

4 November 2001

Events:

The Longworth House Building, closed since 26 October, reopens.

Statements:

Dr. Tara O'Toole (CCBS), on the government response – "We have spent, in the last three years, one dollar per year per American on bioterrorism preparedness. We are basically getting what we paid for."

Rep. Robert Menendez (D-NJ) – "The administration is way behind the curve. They may be very aggressive in their war on Afghanistan. But in my view, and in the view of many people, they are not as aggressive on the homeland part of this issue."

5 November 2001

Events:

To Date: 17 confirmed infections: 10 pulmonary, 7 cutaneous; 4 deaths. A videotape sent from NBC in NYC to the NY mayor's office tests positive for small traces of anthrax. NYC Health Department spokesperson Sandra Mulling states, "We feel pretty confident that it was cross-contaminated. This is not a new contamination."

The FDA announces that tests of mailrooms in a downtown DC mailroom, four mailrooms in agency buildings in Montgomery County, MD, and in the Cohen building (HHS and Voice Of America offices) were negative.

Pentagon officials announce that anthrax spores were discovered at two postal rental boxes at a branch post office in the Pentagon. The postal branch does not handle mail for DoD.

U.S. officials at the consulate in Yekaterinburg, Russia announced that a negligible amount of anthrax had been discovered on one of six mailbags delivered to the consulate on 10/25 from Washington, DC. A consulate statement read: "The State Centre for Medical-Epidemiological Control in Yekaterinburg informed the consulate this morning that one of six unclassified diplomatic mailbags received from Washington, DC and opened on October 25 had tested positive for anthrax spores. The source of the anthrax is not established, although the centre told us the spores were found in the bag."

Statements:

Dr. Anthony Fauci (NIAID) – Suggests that the Nguyen case could possibly be a "sentinel case in a new and evolving pattern," but is uncertain as no new similar cases have appeared.

6 November 2001

Events:

State Department spokesman Richard Boucher announces that preliminary testing of the suspicious letter received on 10/31 in Lahore, Pakistan was positive for anthrax. Samples arrived at Fort Detrick on 11/4 for additional testing. Pakistani authorities report that there were three confirmed cases of anthrax contamination in the country prior to the arrival of the letter at the U.S. consulate: one at a bank, one at a computer factory, and a third at a newspaper.

Statements:

Exchange between Sen. John Edwards (D-NC) and Deputy Assistant Director James Caruso of the FBI Counterterrorism Division

- Edwards: "But the bottom line is this: As of now, you don't know where the anthrax came from and you have not been able to identify all the people who may have access to it. Is that fair?"
- o Caruso: "That's correct."

7 November 2001

Events:

NYC Department of Health officials announce that anthrax had been found in two spots in a mailroom at ABC headquarters in Manhattan. Tests came back positive on 30 October.

Government scientists in Vietnam confirm that anthrax was found in the office of BP Petco in Ho Chi Minh City. The powder was discovered on 31 October.

Statements:

Tom Ridge (OHS) – "I'm hopeful, like the rest of America, that the anthrax has stopped permanently.... We haven't included or excluded either a domestic or an international source for the anthrax. We have not ruled out whether this was an act of an individual or a collective act."

Dr. Tara O'Toole (CCBS), on the government response to the anthrax incidents – "I would give us as a government a 'D' on communication – both within the

government, and between the government and the public. There was a lot of heroic effort on the part of the health departments, [but] I think there were a lot of mistakes, a lot of missed connections, a lot of misjudgments. I think what we see reflected is the total disengagement of the medical community from any biopreparedness planning or exercises to date."

Lev Fyodorev, Russian weapons analyst, on suspicions that the anthrax used in the attacks may have come from Russia – "Everyone in the capital would have been dead within a week [if it had been a Russian/Soviet strain]. No one would have walked out on their own. I'm not protecting our government. I have a lot of grudges against them, believe me. I just don't see how it can be stolen, how it could be given to Iraq or anyone. This was so classified."

8 November 2001

Events:

The CDC reports that approximately 32,000 people have been prescribed antibiotics to guard against anthrax infection. However, the CDC believes that only 5,000 people actually need such drugs and that one in five people on the antibiotic Ciprofloxacin have reported non-lethal side effects.

Three pallets of stamps delivered on 19 October to a USPS processing center in Raleigh, NC are tested for anthrax. The pallets passed through the Brentwood Road facility in DC on their way to Raleigh.

9 November 2001

Events:

FBI releases linguistic and behavioral profiles of the person believed to be responsible for mailing the anthrax letters. According to the FBI profile, the offender:

- o Is likely an adult male.
- o If employed, is likely to be in a position requiring little contact with the public, or other employees. He may work in a laboratory. He is apparently comfortable working with an extremely hazardous material. He probably has a scientific background, or at least a strong interest in science
- Has likely taken appropriate protective steps to ensure his own safety, which may include the use of an Anthrax vaccination or antibiotics.
- Has access to a source of Anthrax and possesses knowledge and expertise to refine it.
- Possesses or has access to some laboratory equipment; i.e. microscope, glassware, centrifuge, etc.
- Has exhibited an organized, rational thought process in furtherance of his criminal behavior.
- Has a familiarity, direct or indirect, with the Trenton, NJ, metropolitan area; however, this does not necessary mean he currently lives in the Trenton, NJ, area. He is comfortable traveling in and around this locale.
- o Did not select victims randomly. He made an effort to identify the correct address, including zip code, of each victim and used sufficient postage to

ensure proper delivery of the letters. The offender deliberately "selected" NBC News, the New York Post, and the office of Senator Tom Daschle as the targeted victims (and possibly AMI in Florida). These targets are probably very important to the offender. They may have been the focus of previous expressions of contempt which may have been communicated to others, or observed by others.

- O Is a non-confrontational person, at least in his public life. He lacks the personal skill necessary to confront others. He chooses to confront his problems "long distance" and not face-to-face. He may hold grudges for a long time, vowing that he will get even with "them" one day. There are probably other, earlier examples of this type of behavior. While these earlier incidents were not actual mailings, he may have chosen to anonymously harass other individuals or entities that he perceived as having wronged him. He may also have chosen to utilize the mail on those occasions.
- Prefers being by himself more often than not. If he is involved in a personal relationship it will likely be of a self-serving nature.

CDC *Morbidity and Mortality Weekly Report* summarizes the anthrax cases to date:

- o 22 total confirmed and suspected anthrax cases:
 - 10 confirmed inhalational anthrax (2 FL, 1 NYC, 5 DC, 2 NJ)
 - 7 confirmed cutaneous anthrax (4 NYC, 3 NJ)
 - 5 suspected cutaneous anthrax (3 NYC, 2 NJ)

10 November 2001

Events:

Traces of anthrax are discovered in three additional offices in the Hart Senate Office building.

11 November 2001

Events:

Capitol Police announce that trace of anthrax have been discovered in five additional offices in the Hart Senate Office Building. Investigators believe that the contamination is linked to the letter received by Sen. Daschle on 15 October.

Statements:

Lt. Dan Nichols, U.S. Capitol Police (USCP), on the new contamination discoveries – "These findings are not unexpected because investigators are continuing to follow the downstream flow of mail within the Senate and it is believed that letters delivered to these offices were cross-contaminated by the Daschle letter.... The environmental and criminal investigation is continuing and the possibility of another letter [having been] delivered to the Capitol complex has not yet been ruled out."

12 November 2001

Events:

Traces of anthrax are discovered in the offices of Sen. Dick Lugar and Sen. Jon Corzine in the Hart Senate Office building, bringing the total number of contaminated offices to eleven.

Statements:

David Satcher, U.S. Surgeon General – "Some of us thought we were bioterrorism experts. We have learned how little we know."

13 November 2001

Events:

Three sorting machines at the State Department's Sterling, VA mail handling facility test positive for anthrax spores. Officials believe that a fourth contaminated letter may be contained in the mailbags that have been isolated when the facility was closed on 24 October. Richard Boucher, State Department spokesman – "There is a good possibility that we may have a letter containing spores in our system in one of these sealed mailrooms or sealed mailbags.... We presume that...if the letter had reached is intended recipient, that it would have been reported by now, either as a white-powder letter or somebody getting sick. So because it has been three weeks, we have to assume that we stopped it...we have to presume that we will be able to find whatever it is as we go through the mail in our system.... We are now proceeding to look at all the mail that we had held up, frozen, sealed off in mail rooms in this building, in annexes and around the world."

Howard University officials close eight mail sorting facilities on the campus after the mailing room tested positive for traces of anthrax. Howard University receives mail from the Brentwood Road facility. CDC spokeswoman Cynthia Glocker – "They are following CDC regular guidelines. This is considered a low-risk event." Nonetheless, DC Health and Postal Service officials acknowledge that this is the first concrete case that cross-contamination at Brentwood was not restricted to government mail.

According to the Chester, PA health commissioner, FBI agents searched two houses in Chester, PA, seized several items, and interviewed one of the owners – Irshad Shaikh. No other details released. FBI spokeswoman Linda Vizi stated, "We have made no connection between this and agents of mass destruction." CDC scientists will test a blood sample from Jerry Weisfogel, a NJ cardiologist, who believed he might have contracted anthrax in early September. At that time, Weisfogel developed a lesion that he originally diagnosed as a spider bite. The last inhalation anthrax survivor, postal worker Leroy Richmond, is released from the hospital in Fairfax, VA.

Statements:

Tom Ridge (OHS) – "I don't think they've excluded any theory, but right now I think their focus is based on the profile that they've suggested publicly, looking more internally than externally. I think, early on in the discussion about weaponized anthrax, there was a feeling that this could have very well been a foreign country or a terrorist state.... I think now, based on all of the analysis that

they've done with this, that they can no longer exclude the possibility of a sophisticated microbiologist with equipment available in this country."

Dr. Gregory Evans (CSB&EI) – "I think we have very few clues of what is actually going on here, and that is what scares me as much as anything. We don't know if this is a lone person with access to lab facilities" or whether the anthrax was obtained from abroad."

Larry Siegel, Deputy Director, DC DOH, expressing no alarm over the findings at Howard University – "We are going to find these all over the place. The mail was contaminated at Brentwood, and from time to time we're going to find positive sites."

William Patrick – Believes that the person sending the anthrax does not appear to have the ability to produce large amounts. "I believe the material is high quality, small quantity."

Dr. Luciana Borio, (CCBS) – "There is so little that is known about modern-age anthrax."

Dr. Steven Ostroff (CDC) – "We have said for quite a while that one of the potential explanations for the inhalation anthrax case in that [State Department] employee was that there was an unrecognized additional letter that went through that system. We think that based on the bulk of the evidence that's available to us the first explanation is more likely."

14 November 2002

Statements

Dr. Julie Gerberding (CDC) – "...it's very important to set the record straight on this issue. These strains in the various regions of the country that we're dealing with are indistinguishable on the basis of their antibiotic susceptibility as well as their typing using more sophisticated molecular tools, and they have some characteristics in common with several of the naturally acquired strains of anthrax that have been seen in animals in the United States and in the United Kingdom and elsewhere.... But they're not identical."

15 November 2001

Events:

Investigators discover anthrax spores throughout all three levels of the AMI building in Boca Raton, FL, casting doubt on the theory that one letter was responsible for contamination at the building. Tim O'Connor of the Palm Beach County Health Department stated that evidence of spores on all three floors "would indicate that there's more than one letter."

CDC publishes a list of people who should be taking antibiotics because of the potential exposure to anthrax spores:

- Employees who worked on the 2nd and 3rd floors of the south section of the Morgan Central Postal Facility in Manhattan from 9 Oct to 26 Oct.
- Workers and visitors who were in the USPS Route 130 Processing and Distribution Center in Hamilton, NJ from 18 Sept to 18 Oct.
- o People who were on the 5th and 6th floors of the southeast wing of the Hart Senate Office building from 9 a.m. to 7 p.m. on 15 Oct.

- Employees and visitors who were in the nonpublic mailroom of the USPS Brentwood center from 12 Oct to 21 Oct.
- o Mailroom employees and visitors who were at the State Department's Annex 32 mailroom in Sterling, VA from 12 Oct to 21 Oct.

Statements:

Kenneth Newman, USPS Deputy Chief Inspector for Investigations – "We're all thinking that there may be other letters."

16 November 2001

Events:

FBI investigators discover a fourth letter that appears to contain anthrax spores during a search of barrels of quarantined mail. The letter is addressed to Sen. Patrick Leahy (D-VT), but bears the same return address, a Trenton, NJ postmark (9 October 2001), and handwriting as the other three letters. FBI officials said the letter "appears in every respect to be similar to the other anthrax-laced letters," and that it was sent to Fort Detrick for testing. "Further testing will be conducted in an effort to confirm the presence of anthrax and examine its contents to compare it with...the other letters," the FBI said.

NYC officials will report on 17 November 2001 whether tests on the No. 6 subway line are positive for anthrax. Inhalation anthrax victim Kathy Nguyen rode the line on her way to work and officials tested four stations.

NC State health officials state that the traces of anthrax found on three pallets of stamps that passed through the Brentwood facility were insignificant and posed no threat to workers. Acting state health director Dr. Leah Devlin stated, "This is a medically insignificant situation." Additional tests will be conducted to determine exactly which of the three pallets is contaminated.

NJ State Health officials announce that Dr. Gerald Weisfogel tested negative for cutaneous anthrax. (See 13 November 2001)

94-year old Oxford, CT resident Ottilie Lundgren is admitted to a Derby, CT hospital. Doctors initially suspect she has pneumonia.

Statements:

Dan Mihalko (USPIS), on the finding of the fourth letter – "That's what we hope for. An additional piece of mail...could be useful in the overall investigation." Lt. Dan Nichols (USCP), on the decision to close and test the Dirksen and Russell Building mailrooms after the discovery of the letter – "We don't know how far the letter went into the mail system. We feel it is a reasonable and prudent precaution to take. We just want to give peace of mind to the people here."

17 November 2001

Events:

Griffin Hospital doctors in Derby, CT run a series of blood tests on Ottilie Lundgren. The results for bacteria came back positive and matched the properties of anthrax. The doctors forward the test results and blood samples to CT state health authorities for additional testing.

NYC health officials report that anthrax tests on the NYC Subway No. 6 line returned negative results. Mayor Giuliani reports that the city might be testing the subways "again and again."

Statements:

Sen. Patrick Leahy (D-VT), on the letter – "Without any specialized knowledge, I tend to agree with the estimation that the FBI and the police have made – that this is the action of somebody within this country who is acting out."

Neal Cohen (NYC DOH), on the results of anthrax tests on the subway:

- o "There is no growth that's suspicious of anthrax, but as we know, the subway system is not a sterile environment. So there is a lot of biomass, or a lot of other things are growing."
- "We believe that whatever findings we may find in the subway will guide us with respect to tracking the source of the exposure, but not have any impact on public health." Health officials continue to "look at the pathways that might lead us to where it [Nguyen's exposure] occurred, but to this point we have not found anthrax."
- On the fact that no new cases have appeared in NYC since the Nguyen case three weeks ago "We don't believe that, statistically, it's going to be very likely that any other individual was going to come forward who may have shared that exposure and manifested any illness."

Van Harp, FBI Washington Field Office chief:

- o On the testing of the Leahy letter at Fort Detrick "At this juncture we do not know if it's anthrax."
- o "This is a cold-blooded murderer. There are four individuals dead as a result of this, none of them the intended targets, and we are working aggressively and furiously around the clock trying to resolve this."

Rep. James Moran (D-VA), speculating that the selection of Sen. Leahy as a target could indicate that the letters had a domestic source – "Why would they choose the new Senate majority leader and the Senate Judiciary Committee chairman?" An anonymous senior federal law enforcement official made a similar statement – "No disrespect to Senator Leahy, but I don't know how many foreign terrorists would want to single out the chairman of a Congressional committee. They would have other targets."

Dan Mihalko (USPIS), on the Leahy letter – "It leans a little more toward the idea that it's domestic as opposed to someone affiliated with the [Sept. 11] tragedy. It would seem to indicate something domestic as opposed to foreign, but nobody is willing to discount anything at this point."

19 November 2001 Events:

Investigators report that the letter to Sen. Leahy was the only suspicious letter found among 280 barrels of quarantined mail that were searched.

CT state health officials receive Lundgren's test results and blood samples from Griffin Hospital and conduct three more sophisticated tests on the samples, each of which comes back positive for anthrax.

Ivan Walks (DC DOH) stated that if medical officials had known more about the threat of anthrax in DC, they could have possibly saved the lives of the two DC postal workers who died. If medical officials had known a few weeks ago what they know now, they could have done more "to help the medical detectives – the doctors in the emergency room – identify what is a suspicious patient. We did some of that, I think we saved some lives, [but] knowing what we know now I think we probably could have saved the two gentlemen who unfortunately died." FBI officials announce that they have not yet opened the Leahy letter, but had worked with the Army and CDC to develop a "strategy to maximize the forensic value" of the letter. "FBI and Centers for Disease Control investigators hope this careful, scientifically agreed upon approach will yield clues that will help identify the source," said an FBI statement.

Dan Mihalko (USPIS), reports that the ZIP code on the Leahy letter was written in such a way that postal optical character readers misdirected it to the State Department, possibly explaining the contamination in that agency's mail system and the case of pulmonary anthrax. "The one [Capitol ZIP code in 20510] was made in such a way with a serif on the bottom that it was read by the optical character reader as a 2 [State Dept. ZIP code is 20520]." "That's the exact change needed to forward something to the State Department. It raises an interesting possibility that the letter to Leahy could have been misdirected through the State Department mail system initially, which might explain how that system got contaminated."

Two areas of a Bureau of Prisons (BOP) headquarters mailroom tested positive for trace amounts of anthrax. According to a Department of Justice statement, "The Centers for Disease Control and Prevention has characterized the positive results as 'scant contamination' with a minimal risk of inhalation anthrax disease. We are in the process of consulting with the CDC regarding appropriate medical recommendations for affected BOP personnel, and expect to so advise BOP personnel tomorrow."

Tom Skinner, spokesman for CDC, announced that the agency was planning to test a substance found in a suspicious letter found by the Chilean government. According to Chilean authorities, the letter originated in Switzerland. (See also 26 November)

The Washington Post reports that the DC inhalation anthrax patients who died were treated primarily with Levaquin (levofloxacin), an antibiotic in the same family as ciprofloxacin. The Post reports that most doctors it interviewed found that this fact was not statistically meaningful. A JHU bioterrorism expert and a specialist who treated one of the anthrax survivors both feel that Levaquin and Cipro are probably equivalent in treating anthrax, but believe that further testing on Levaquin is needed before any conclusions are drawn.

Statements:

Tommy Thompson (HHS), reporting on the anthrax investigation — "Hopefully we will be able to bring this nightmare to an end, but at this point in time we do not know if it's connected with al Qaeda. It's appearing...more and more likely that it's an individual in America, or individuals."

Robert Blitzer, former head of the FBI Domestic Counterterrorism section – "It's certainly a very difficult investigation. Until this person strikes again, or unless, as in the Ted Kaczynski [Unabomber] case, someone comes forward and says, 'Hey, I think I know this guy,' it's going to be very difficult."

20 November 2001

Events:

CT Gov. John Rowland announces that a 94-year old woman in the New Haven area tested positive for pulmonary anthrax. CT health authorities conducted a series of blood tests that confirmed a "strong suspicion of inhalational anthrax." Samples were sent to CDC in Atlanta for final confirmation. According to CT DPH Commissioner Joxel Garcia, "If the confirmation tests are positive, the F.B.I. is going to be working with the people from our state on a criminal investigation."

Authorities announce that traces of anthrax were found in the Russell Senate Office building in the office mailrooms of Senators Ted Kennedy (D-MA) and Christopher Dodd (D-CT) after tests were conducted over the weekend. Authorities believe this resulted of cross-contamination from one of the anthrax letters. This was the first time anthrax traces were found in the Russell building and the building was to be shut down at the close of business Tuesday for further testing and decontamination. According to a statement from Sen. Kennedy, the Capitol physician stated, "the amount is negligible and that it poses no public safety or health risk."

An anonymous source reported to CNN that investigators believed the anthrax contained in the letter to Sen. Leahy was "as lethal as that found in [the] Daschle letter."

FBI authorities estimated that the Leahy letter was laced with billions of spores, based on the tests of the mailbag containing the letter. A two-minute air sampling test of the bag detected over 23,000 spores.

Statements:

Rudolph Giuliani, reported the final results of anthrax testing on the No. 6 subway line – "The subway is clean of anthrax. There are no indications of anthrax on the 6 line and all the tests are now back." NYC DOH Commissioner Neal Cohen reported that the investigation was on going and that he believed that Nguyen was exposed to the anthrax "roughly two weeks prior to her onset of symptoms which is Oct. 26."

John Ashcroft, on the anthrax investigation – "We certainly have some better leads than we had a few days ago when the FBI first put out its profile. And we will have to wait and see and measure the extent to which these leads turn out to be either productive or non productive."

Gov. John Rowland, on the new Oxford, CT pulmonary anthrax case – "It's difficult at this time for anyone to explain how the patient may have contracted anthrax. We have no evidence at this time that anyone sent the patient anything containing anthrax. And we have no evidence that the patient contracted the disease as a result of a criminal act."

Dan Mihalko (USPIS), on the CT case – "Obviously, as with the [New York case], we will want to test to see if there are any traces [of anthrax] where she lives. But it's too early to figure out what the heck's going on here.... From what we understand, she's 94 and she doesn't get out of the house very much." If the woman does have inhalational anthrax, "it would be as puzzling as the Nguyen case."

21 November 2001

Events:

Gov. John Rowland reports that CDC tests have confirmed Lundgren contracted pulmonary anthrax. Gov. Rowland referred to the case as an "anomaly." During the morning of the 21st, Lundgren dies from pulmonary anthrax. There are numerous comments on the similarity between her case and that of Kathy Nguyen – both lived alone, were known but not well known by their neighbors, and had certain routines that they kept faithfully.

Decontamination specialists swabbed down postal facilities in Wallingford and Seymour, the facilities that would have handled Lundgren's mail. 1,100 Wallingford and 45 Seymour workers were offered Cipro. Jim Cari, USPS spokesman, stated that the Wallingford processing center had been tested recently and showed no sign of anthrax.

On the evening of the 21st, CDC officials announced that the strain of anthrax that killed Lundgren was indistinguishable from that seen in the FL, NY, and DC cases.

Traces of anthrax are found in the main mailroom of the Department of Education. Investigators characterized the traces as a "small amount" and believed that they were the result of cross contamination with one of the contaminated letters.

Traces of anthrax are found in an inbox at National Aeronautics and Space Administration (NASA).

News reports point out the fact that nine out of the eleven pulmonary anthrax cases that have occurred have been in adults over the age of 55, a fact not lost on health investigators.

Statements:

William Burrus, president of the APWU, said that the union would back any postal workers who chose not to enter or work in a contaminated postal facility. He also charged that government officials were using postal workers as guinea pigs to test the side effects of Cipro.

- o "It's a continuing concern that so much uncertainty continues to exist regarding the source of these infections."
- o "The medical community isn't clear at this point what level of contamination could cause serious injury or death. I'm unwilling for the employees to be used as guinea pigs."
- "It has become a condition of employment. The option is you take Cipro or we believe you might die. That's not much choice. I would much rather the employees vacate the building than take Cipro."

- o I'm telling my members we will not work in contaminated facilities. We will leave the building until it's tested clean."
- o "Testing is imperfect at best.... If there's something on a wall or the lights and if it becomes airborne, there's a risk of exposure."

Dr. Jeffrey Koplan (CDC), on the Lundgren investigation:

- "We've made list of every possible route that we can think of how anthrax might have been acquired by a 94-year old woman who largely lived at home. Anything that entered the home is certainly a prime suspect.... Until we have a better idea of what the exposure is, it's hard to place it in context of what's to come."
- "Could one find anthrax spores in a garden in that area? I'm sure one could. Is it likely to be a source of inhalation anthrax? Very unlikely." Thus, "we have to pursue this vigorously as potentially related to these other criminal acts."

Gov. John Rowland:

- "Unfortunately we got a response from CDC early this morning and it confirmed what our public health officials and the hospital already confirmed and that is that she has tested positive for inhalation anthrax."
- o "They're trying to trace the whereabouts of this woman over the last several weeks. Granted, at her age, she did not travel a great deal. So that's why the suspicions lead directly to the mail. Some sort of crosscontamination."
- "There's no question this is a crime. No question this is a homicide.
 Anthrax is not an accident." Gov. Rowland suggested that it was a result of "domestic terrorism."
- o "It's the best guess. We're guessing it's the mail."
- o "We have no other cases. We've got no other reports of people with the [symptoms]."

Dr. Luciana Borio (CCBS) – "The cases in New York and Connecticut are a little disconcerting because we don't know what put them [Lundgren and Nguyen] at risk. There's no way to identify other persons who may be at risk..."

Tommy Thompson (HHS), on the Lundgren case – "There is a mystery to this case. We do not know the cause or the source of the anthrax."

Dr. Greg Poland, anthrax expert at the Mayo Clinic, addressing the possibility that pulmonary anthrax could actually be more common than thought and that doctors could just have missed many past cases – "The odd case, perhaps, could escape notice. But any appreciable number, I couldn't believe it." Poland said that during an autopsy, pulmonary anthrax "would be pretty hard to miss."

Lisa Bull, FBI spokeswoman, on the Lundgren case – "We're not focused on any one thing, although the mail is certainly an obvious issue. But we're really trying to keep an open mind about any possibility."

Dr. Anthony Fauci (NIAID), on the Lundgren investigation – "Do we have any insight where her anthrax came from? No. But the possible light at the end of the tunnel is that unlike Kathy Nguyen, about whose movements we know very little, Mrs. Lundgren was housebound and when she did go out, she always went with one or two friends. So under those circumstances it might be easier for law

enforcement authorities and epidemiologists to really track every place she has been over recent weeks. If there is a clue there, hopefully they will find it." Dr. D.A. Henderson, Director, Office of Public Health Preparedness (OPHP) – "There are many questions. One does find in many outbreaks an unusual case that really is a puzzle, and the work done to solve a puzzle can often be very revealing. This case and the one in New York, for that reason, have special importance."

Dr. Michael Osterholm (CIDRAP), on the possibility that the CT strain may be similar to the one used in FL, NY, and DC – "We have to wait for the actual characteristics of the organism to see if it matches up with those involved in the letters. One would assume that they would match up, but we don't know. There could have been some other source that had nothing to do with those letters. But that's very unlikely."

Barbara Hatch Rosenberg, chairwoman of the Federation of American Scientists (FAS) working group on biological weapons, told the members of the conference in Geneva, Switzerland aimed at strengthening the BWC that the anthrax used in letters sent to addresses in New York, DC, and Florida "was derived, almost certainly, from a U.S. defense laboratory." She stated earlier in her presentation, "I am a New Yorker. My city has been attacked, first by foreign terrorists, then by an American using a weaponized biological agent."

22 November 2001

Events:

Chilean authorities state that U.S. health officials have confirmed that a letter sent from Switzerland was tainted with anthrax. The letter was apparently addressed to a Dr. Antonio Barfi, a pediatrician at Calvo Mackenna Hospital in Santiago. The letter was postmarked in Zurich but had a return address in Florida. Barfi, who opened the envelope, and 12 others who were in the area have not tested positive for exposure to spores. This is reportedly the first confirmed case of anthrax-tainted mail outside of the United States in the post-September 11 time period.

Investigators in CT conduct an "inch by inch" search of Lundgren's house in an effort to determine the source of the anthrax in the case. In addition, FBI investigators conducted extensive interviews with Lundgren's family and friends to determine her activities over the last 30 days.

23 November 2001

Events:

Gov. John Rowland announces that dozens of samples from the postal facilities that handled Lundgren's mail, samples from her mailbox, and 18 samples taken from her house and garbage all turned up negative for the presence of anthrax. Gov. Rowland said that investigators were now taking soil samples from the neighborhood for testing. Investigators were allegedly focusing on Fritz's Snack Bar, where Lundgren frequently dined. The restaurant was built near the site of a dairy farm and some residents had vague recollections of an anthrax outbreak

over 50 years ago. However, logs kept by health officials from 1897 to 1950 make no mention of anthrax.

Investigators in CT asked the state's hospitals to review their records for deaths of any patients with influenza-like symptoms since September 11 to see if any anthrax cases might have inadvertently been overlooked. Also, investigators were reexamining a 1968 case of cutaneous anthrax in Glenville, CT, 55 miles west of Oxford.

Officials confirm that the anthrax spores in a letter received by Santiago, Chile pediatrician Antonio Barfi were indistinguishable from those sent to address in DC and NY. Contrary to earlier reports, Barfi did not open the envelope but instead placed it in a plastic bag when he noticed that it was postmarked from Zurich but had a return address in FL. Barfi and several associates were taking antibiotics as a precaution. (Not sure if the officials were CDC or not – see 26 November)

Statements:

Gov. John Rowland, on the tests taken from the postal facilities and Lundgren's house – "Testing was focused on the so-called mail trail. Samples were taken from the house, the garbage, the mailbox; all samples have tested negative for anthrax.... You probably can rule out the mail coming from either Seymour or Wallingford because those tests have proved negative, but this is not a perfect science, and perhaps there's other venues that need to be investigated." Dr. Jeffrey Koplan (CDC), on the Lundgren case – "It behooves us to keep an open mind as to the source of exposure.... We will not eliminate the possibility that this was a natural occurrence, but I think it is a very, very [slight] possibility." Dan Mihalko (USPIS), on the Lundgren case – "We don't have anything right now to indicate the mail was used. It is possible that the amount was so small that we will not be able to find it."

Nicole Coffin, CDC, on the possible connection between the Lundgren and 1968 Glenville case – "I will say this: We're considering all possibilities based on the information gathered from our interviews with her friends and neighbors."

Dr. Anthony Fauci (NIAID) – "Something, someone put anthrax in the vicinity of this women to allow her to inhale the spores that gave her inhalation anthrax."

Dr. Michael Allswede, associate professor of emergency medicine at University of Pittsburgh and advisor on biological/chemical threats – "That's the pinch point for bioterrorism. Anthrax has to be milled to a fine particle size [to be deadly], and there are only a couple hundred people in the world with the skill to do that." Allswede appears to support the theory that the individual who sent the anthrax was a "Ted Kaczynski type, using his knowledge in a malignant fashion.... This is a narcissistic person who is angry. I think he or she feels he is not treated with the respect or adulation he deserves, and he doesn't have a better way of expressing his anger."

25 November 2001

Statements:

Sen. Patrick Leahy (D-VT), on the letter sent to him containing anthrax – "It appears that the letter sent to me may contain enough spores to kill well over a

100,000 people, but it may well have evidence, fingerprints or anything else. And I think that the law enforcement people want to be really careful about opening it – one, so they don't kill somebody, but secondly, so they're able to retain the evidence that might be there. This may be one of the better clues that we have, and I'm in no hurry for them to get it opened, if it will help them get more clues."

26 November 2001

Events:

Officials with the Miami-Dade County Health Department confirm that the suspicious letter received in Santiago, Chile tested positive for anthrax. CDC labs are overwhelmed and Miami-Dade County was asked to handle testing on all suspect packages from abroad. CDC announced that it would conduct its own test in its laboratories.

Statements:

John Ashcroft, on the overall anthrax investigation — "In specifics, the anthrax situation has been the subject of some progress that I think is important. That is, the FBI has determined that they believe all four of the anthrax letters have come from a single individual. They have developed a profile, which I won't belabor at this point. But it's an individual accustomed to working with toxic and dangerous chemistry. It's an individual who has certain technical skills and capacities and a variety of other things. And the FBI is following leads, in that respect, which we believe are constructive."

27 November 2001

Events:

Although not publicly admitted by the FBI, media reports allege that the agency has assembled a "red team" to review forensic and investigative work on the Nguyen and Lundgren cases to see if any clues were missed.

Gov. John Rowland announces that an 84-year old Seymour, CT man who died several weeks ago did not succumb to anthrax. Tissue samples were sent to CDC for testing because of the man's proximity to Lundgren. Seymour is also the site of one of the postal facilities tested by investigators.

CT DPH officials announce that they, in conjunction with federal health officials, have reviewed medical records for fifteen people whose illnesses resembled the early stages of anthrax. Tests on eleven of the fifteen people were negative and results on the remaining four were not yet available.

Statements:

Gov. John Rowland, on the Lundgren case – "We're really not any closer to solving the mystery. I would liken it to the 61-year-old woman in New York who contracted anthrax and died, and it's been a dead end."

Tom Skinner, CDC spokesman, on the Chilean letter – "We're pretty confident in what the folks in Miami have done, but we're going to copy what they did and do further testing to determine the strain."

Dan Mihalko (USPIS), on the Chilean letter – "It's very difficult to move forward with any conclusions. Without the envelope to examine, there's no place to go on this one."

28 November 2001

Events

CT DPH workers announce that they will conduct more tests at the Wallingford and Seymour postal facilities to determine whether anthrax is present and to determine if any mail was cross contaminated by passing through the Trenton, NJ postal facility

Federal officials confirm that a letter received by a Chilean pediatrician was tainted with anthrax, but state that it was not the same strain found in the U.S. attacks and may have originated in Chile. Chilean health officials stated that the strain was similar to strains that had been found in Turkey.

CDC officials state they cannot say with certainty that the current U.S. anthrax vaccine will be effective in protecting people against the strain used in the current anthrax attacks.

Statements

Craig Smith, Infectious Disease Society of American, on the anthrax attacks — "A lone person might produce enough for a small number of letters. But, to develop enough high-quality spore concentration milled to the right size would require more equipment and much more expertise.... There is no doubt, if you were vaccinated or didn't care about your life, you could acquire and produce a spore product if you had the correct shopping list and recipe. Remember, around the world, many of these dual-use items (whether for producing medicines or dangerous microbes) are totally unregulated.... The 2 grams [in the Daschle letter] may only represent a small pilot plant operation. Or, it may also represent a 'testing of the waters,' with more to come in the future. Remember, the goal of the terrorists is not necessarily to kill many people, but to get everyone to watch it on TV and change their patterns of daily living. They have been successful." Dr. Martin Hugh-Jones (LSU) — "It came from someone with extensive microbiological experience."

William Patrick – The bioterrorists "must have had a hell of a short learning curve. Or maybe there's two groups." Patrick also thinks that the use of letters to spread the anthrax indicates that they have only been able to make small amounts of the aerosolized spores – "Little lab processes can make good products, but that does not scale up to doing it on an industrial scale."

29 November 2001

Events

The Stockholm International Peace Research Institute distributes a paper by Dr. Barbara Hatch Rosenberg (FAS), which asserts that the anthrax used in the attacks had a domestic source. The key points of her paper are:

- o "All the available evidence indicates that the source of the mailed anthrax, or the information and materials to make it, is a US government program."
- o "The perpetrator is an American microbiologist who has access to recently-weaponized anthrax or to the expertise and materials for making it, in a US government or contractor laboratory. He does not live in or near Trenton...Trenton is probably accessible to him, however."

- o "The anthrax in the letters was made and weaponized in a US government or contractor lab. It may have been made recently rather than in the US BW program before Nixon terminated the program in 1969."
- o "The motive of the perpetrator was not necessarily to kill but to create public fear, thereby raising the profile of BW. He simply took advantage of Sept 11 to throw suspicion elsewhere."
- o "The US government has known for some time that the anthrax terrorism was an inside job. They may be reluctant to admit this. They may also not yet have adequate hard evidence to convict the perpetrator."

Statements

Rep. Christopher Shays (R-CT), on the government response to anthrax – "If the people with expertise are not allowed to speak, then I get a bit worried about what is being hidden from me. The experts have to be able to answer questions." Bill Pierce, HHS spokesman – "In the beginning, when this was brand spanking new and none of us had ever seen this before [there was a policy of] speaking with a very consistent voice. Given all that we knew and the reality of the world, I think we did a pretty good job of communicating to the public."

Dr. Kenneth Shine, National Academy of Sciences Institute of Medicine – "We

Dr. Kenneth Shine, National Academy of Sciences Institute of Medicine – "We did not do a good job of communicating with the American people. It is understandable that political leaders and administration officials wish to be the spokespersons for their departments or agencies [but such officials often lack credibility about medical matters]."

Richard H. Ebright, Rutgers University microbiologist, on the Rosenberg paper – "This is one extreme in the theorizing. There are elements that are reasonable, but elements that are not. I'm confident that she started with the insider conclusion and then selected the facts.... Every state that's hostile to the United States is going to pick up on this. They'll say it was an orchestrated government attack, which I don't believe for a second. But you can see people believing it."

30 November 2001

Events

Scientists at Fort Detrick begin the process of opening the Leahy letter after two weeks of planning and rehearsals. In charge is John Ezzell, a man described by the *Weekend Australian* as having "been vaccinated against anthrax so many times he can wear a surgical mask rather than a complete protective suit." Postal Service and health officials announce that they have discovered a letter in Seymour, CT that passed through the Trenton, NJ postal facility. The letter tested positive for a "very small colony of anthrax." Officials suspected that this letter might have contaminated mail to Lundgren.

Postal officials announce that using bar code data printed on envelopes, investigators have identified about 300 envelopes that passed through high speed sorting machines within 15 seconds of the Daschle and Leahy letters.

Statements

Dr. Jeffrey Koplan (CDC) on the discovery of the letter in CT:

- o "This kind of evidence makes people nervous, and I would love to be able to say definitively one way or the other [that it is not a danger], but we just don't have the information that makes [us] able to do that."
- o "We've been learning a lot more about the Postal Service, and that there is cross-linkage, obviously, with every post office in the country at some level, and every one of our homes and businesses."

Dr. D.A. Henderson (OPHP), on the discovery of the Seymour letter – "The significance is that after all this search, this tremendous amount of search, there has at long last been a trace of anthrax found on something, which is really quite remarkable. Does it really have anything to do with this case? We're not certain. But the significant thing is that there is evidence of anthrax on a letter." Dr. Anthony Fauci (NIAID):

- Although unlikely, it is "biologically very possible" for someone very old
 or in a weakened state to be infected with trace amounts of anything.
 "Those two things compounding each other could be an explanation for
 what you're talking about now."
- "At the end of the day, we're still not sure why this woman got infected." The risks of getting inhalational anthrax in the mail, even for an elderly or immune-compromised person "would probably be one in several million."

Dr. Eddy Bresnitz, NJ Department of Health – "It is worrisome if that's the mechanism, because you're talking about perhaps just a few spores affecting someone who, because of her age, perhaps, was more susceptible."

Llelwyn Grant, CDC spokesman – "The Centers for Disease Control tracked and tested the specific letter as part of our investigation in this particular case and currently is evaluating if any other tracking of mail is necessary. Once we make that decision, we will definitely go forward."

Dean Pagani, spokesman for Gov. John Rowland – "It certainly shows it's possible to have cross-contamination. But we don't know anything for sure." Gov. John Rowland:

- "It [the contamination found on the envelope] was so insignificant that no one in contact with the letter could have gotten anthrax or even become ill.... Supposition on my part is that Mrs. Lundgren, at age 94, had an immune system far less than yours or mine, and that you and I could have handled her same piece of mail and not gotten sick.... It's been almost two months, and we haven't found anyone besides Mrs. Lundgren that even has symptoms. As time goes on, the possibility of anyone contracting anthrax becomes less and less and less."
- On the Seymour Letter "It continues to support the theory we've had all along that mail can be cross-contaminated by other mail that's laced with anthrax."

Dr. Stephen Ostroff (CDC), on the spore infection threshold – "There isn't any magic lower limit that I'm aware of."

William Patrick – "I would never have thought that a letter contaminated on the outside would contain sufficient spores to cause inhalational anthrax. It defies everything we ever learned. I'm absolutely flabbergasted."

COL Arthur Friedlander, senior research scientist at USAMRIID, on FBI investigations of personnel at the base – "They've asked us about personnel who had access. They didn't talk to me about my personal experience. They asked me about other personnel." Friedlander dismissed the insider idea as improbable, but conceded that whoever made the anthrax "clearly knew what they were doing. But to make the leap that this came out of a government lab is somewhat large."

1 December 2001

Events

EPA and private contractors fumigate Sen. Daschle's office with chlorine dioxide gas in an attempt to kill anthrax spores contaminating the Hart Office Building. The *New York Times* reports that the FBI has expanded its investigation into the source of the anthrax used in the attacks to include government and contractor laboratories.

2 December 2001

Events

Investigators find trace amounts of anthrax on machinery at the Southern Connecticut Processing and Distribution Center in Wallingford, CT, the center that processes mail for Oxford, CT.

Investigators in New York City attempted to track down a letter sent to a Bronx address that passed through sorting machinery within seconds of the Leahy letter. The letter – one of 300 such letters tracked by investigators – was sent to an address near Kathy Nguyen's apartment.

Statements

Ken Alibek, on the terror anthrax – "I don't think they're manufacturing this in caves. It's coming from another source."

Jon Steele, USPS Vice President for Northeast Area Operations, on the discovery of anthrax spores in Wallingford – "This finding is not a complete surprise. The public should not be panicked by trace elements occurring nearly 60 days ago." Joxel Garcia (CT DPH), on the discovery of anthrax at Wallingford – "This is a very small amount of anthrax. The people of Connecticut should not be concerned about opening their mail."

Sandra Mullin, NYC Health Dept. Spokesperson, on the hunt for the Bronx letter – "I wouldn't call this a break in the [Nguyen] investigation. It's not clear if there was a letter and it's not clear if it was received by anyone in the Bronx. This may be another dead end."

Dan Mihalko (USPIS), on the hunt for the Bronx letter – "We're looking at a letter that went to the Bronx, but even that would be a bit like what we found in the Connecticut case. Both would have required third-hand contamination to be an explanation."

Dr. Jeffrey Koplan (CDC):

o "There seems to be the potential for not just hundreds and not just thousands, but tens of thousands and maybe more letters to be potentially at risk for some level of cross-contamination.... It's an uncomfortable

- situation. But with each passing day, the lack of further cases occurring is grounds for diminished risk."
- o "We don't have all of the answers and people would like to have some reassurances that we know exactly what's going on and we don't."

3 December 2001 Statements

Nick Manetto, spokesman for Rep. Christopher Smith (R-NJ), on the Representative's efforts to get the FBI to release a list of Central NJ residents who may have received contaminated mail – "The FBI told us that there's no value to telling the recipients.... They think cross-contamination has been well-documented enough that people are taking precautions. But we are saying that if they have the list, why not use it to its fullest advantage – not to be alarmist, but so that people know to be on the lookout, especially if they have lung ailments that make them susceptible? Their view is that enough time has passed that there should be no more exposures. What if someone picks up a letter tomorrow that's been sitting unopened since October 11th? We're not as comfortable that the window of danger has been closed."

4 December 2001 Statements

John Nolan, Postmaster General, downplaying Koplan's 12/2/01 statement – "There is no evidence [that many pieces of mail have been contaminated]. There have been some letters that have been cross-contaminated. But the numbers we have seen are extremely small.... To indicate that there are tens of thousands of letters that were contaminated is pure speculation."

Azeezaly Jaffer, USPS Vice President for Public Affairs – "Does cross-contamination exist? The answer is yes. Is it tens of thousands of letters? We have no idea. Is there any threat to the mail? No."

Rep. Christopher Smith (R-NJ), letter to FBI Director Robert Mueller – "It is possible that other letters could have been cross-contaminated and that other postal customers may be exposed to the bacteria. It may be in everyone's best interest that [ZIP codes be disclosed] so people are cautioned of this possible danger, however small the chances may be."

Helen Schauffler, director of University of California Berkeley Center of Health and Public Policy Studies, on repeated and often recanted government safety assurances – "There are rules in public health about dealing with these kinds of things, and they seem to have broken everyone of them. You don't speculate about what might be happening. You don't falsely reassure. It only undermines people's confidence.... It undermines the public's confidence. Public health can't be effective without the public trust. If we have another major crisis, the public may not believe what they are hearing or may not respond appropriately."

5 December 2001

Events

Scientists at Fort Detrick open the Leahy letter using newly developed techniques to preserve any useable evidence.

Tests from two firms in New York City that might have received cross-contaminated mail come back negative.

The New York Times reports on the results of EPA tests on the American Media, Inc. building in Boca Raton, FL. The results show that the anthrax contamination in the building was much more pervasive than originally believed. A total of 84 contaminated places were found.

The Los Angeles Times reports that the CDC was slow in diagnosing four cases of West Nile Virus in Georgia due to the back up caused by anthrax testing.

Statements

Richard Spertzel, testimony before the House International Relations Committee, commenting on the FBI profile – "That's a lot of hokum. I don't believe that material was made by some nut.... This is not the work of a graduate student in microbiology. I don't think that an individual is capable of doing it.... It's not the kind of thing you mess with in a university laboratory unless you don't like your fellow students.... The level of knowledge, expertise and experience required...to make such a quality product takes time and experimentation to develop." Ken Alibek, testimony before the House International Relations Committee, on the possible source of the anthrax – "I would say, preliminarily, that they are not very highly trained professionals. It could be homegrown or foreign. I cannot answer this question.... It could be a technician working at one of the hospitals or one of the companies or somebody who worked many years in the field." Bill Carter, FBI spokesman, defending the FBI's profile – "Based on "the analysis of the letters, done in consultation with the investigators, this is the ongoing belief of who the person might be."

Rep. Tom Lantos (D-CA), commenting on the possibility of a connection between Sept. 11 and the anthrax attacks – It would take "an unbelievable degree of naïveté to believe that these two events just happened to coincide."

FBI Official, commenting on the opening of the Leahy letter and the beginning of tests on the anthrax – "Testing will not be completed in the next few days. We expect it to be weeks before all the results of testing are in."

Statement concerning tests on the Leahy letter posted on the FBI website – "Investigators are hopeful that the results of those tests – expected in the coming days and weeks – will yield clues which will bring us closer to identifying who is responsible for the anthrax attacks."

6 December 2001

Events

The FBI announces that the letter to Sen. Leahy appears to be a photocopy of the letter sent to Sen. Daschle.

A routine test of mail at a Federal Reserve mail processing facility in DC turns up traces of anthrax on a mail bin. A statement from the Federal Reserve Board said

that additional tests would be run on Friday and the FBI would send any contaminated mail to a military facility for analysis.

Statements

Dan Mihalko (USPIS), on the discovery of anthrax at the Federal Reserve – "We've been down this road quite a few times with the preliminary test. Let's hope this is a false alarm."

Azeezaly Jaffer (USPS), on the possibility that the anthrax at the Federal Reserve Board could have been rendered inert by irradiation – "We have a high degree of confidence that the spores found here, while they may be anthrax spores, having gone through the sanitization process…they cannot cause infection."

Dr. Scott Lillibridge (HHS), commenting on CDC's role in the anthrax response – "One thing that strikes me as the unwritten story of this man-made epidemic was the lives saved by CDC. They prevented hundreds of illnesses, perhaps more, with good disease detective work. They stepped up the identification of people at risk and got them onto medication.... What they did, rising to the occasion, is testimony to their preparedness efforts and their work with the public health infrastructure. You'll never know how many lives they saved, because, of course, you wouldn't want to replay it."

Jeffrey Koplan (CDC), commenting on the risk from cross-contaminated mail – "The risk to any one individual is very, very low, but it's not zero."

FBI official, commenting on the similarities between the letters sent to Senators Daschle and Leahy – "They appear to be identical. They are both photocopies of the same original."

7 December 2001

Events

Additional tests at the Federal Reserve find no evidence of anthrax contamination inside the Federal Reserve building or in the courtyard around the Federal Reserve's mail processing facility.

NY members of the postal workers' union rallied outside NYC's main post office demanding the closure and complete decontamination of the Morgan mail processing facility.

Harcourt, an educational publisher, reports that no anthrax was found at the company's building in Orlando, FL. Harcourt was listed as the return address on the anthrax letter received by Dr. Barfi in Chile.

Richard Spertzel reportedly states that the Daschle anthrax exceeded the purity of any anthrax previously known, with a concentration of 1 trillion spores per gram. According to Spertzel, the U.S., Soviet, or Iraqi BW programs never achieved that standard.

Statements

William Smith, president of the New York Metro Area Postal Union (NYMAPU) – "It is wrong for the U.S. Postal Service and the CDC to have postal workers exposed to this bacteria, while they are closing down" legislative and judicial offices in Washington.

8 December 2001

Statements

Sen. Tom Daschle, commenting on his belief that the person responsible for sending the anthrax is someone with military training – "I think as we look at all the possibilities, that one has the greatest degree of credibility right now.

10 December 2001

Events

Tests conducted at Fort Detrick on the Leahy anthrax confirm that it is the same as that used in the Daschle letter.

The Washington Post reports that a substantial number of postal workers from the Brentwood facility have stopped taking antibiotics, rejecting the CDC 60-day recommendations. The main reason cited for ceasing treatment was strong reactions (or fear of) to ciprofloxacin and doxycycline, the two main antibiotics prescribed to postal workers. Estimates of the number of postal works who have stopped taking antibiotics range from 25% (CDC) to 75% (American Postal Workers Union).

USA Today reports signs of strain between federal investigators and scientists over the lack of solid evidence from the analysis of the anthrax letters. The article reports that competing scientific theories and delays in analyses of the anthrax discovered so far are coming close to hindering the investigation.

Statements

Betty Primes, Brentwood mail handler – "It's more like they're guessing – they don't know exactly either. When I wanted to know the long-term side effects of these drugs, they couldn't answer.... I thought they were using us as guinea pigs, like we're being experimented on."

11 December 2001

Events

Investigators in Connecticut wrap up their investigation into the Lundgren case. Capital officials reports that the clean up of the Hart Senate Office Building was not completely effective and that more steps would have to be taken.

Testifying before Congress, NYC Police Commissioner Bernard Kerik criticized the lack of information sharing between federal and state authorities, asserting that maintaining "walls between federal and state authorities...represents the worst kind of dysfunctional thinking in government." Kerik pointed out that NYPD did not find out about the NBC anthrax letter until a week after the FBI received a tip, and only then through an investigation into a different anthrax letter.

CT Rep. Themis Klarides (R-Derby) sent a letter to Gov. John Rowland requesting that the list of addresses that might have received cross-contaminated mail be released.

The CDC convenes a two-day conference to encourage research into various aspects of anthrax in an attempt to answer some of the questions that have dogged investigators of the attacks. CDC officials also report at the meeting that they will

continue to monitor people exposed to anthrax long after the 60-day antibiotic regimens, a course of action motivated by concerns over possible side effects.

Statements

Sgt. J. Paul Vance, spokesman for the CT state police – "Nothing was discovered, and it was concluded that no more evidence was to be found in the house." Lisa Bull, FBI spokeswoman – "We are winding down the investigation that relates to Mrs. Lundgren's death, but we are continuing the national initiative that may in fact resolve the issues surrounding Mrs. Lundgren's death. In Connecticut, we've exhausted all leads. However, if additional leads arrive, we will pursue them aggressively."

Sen. Charles Schumer (D-NY), commenting on the lack of information sharing between the FBI and NYPD – "This problem was never clearer and never more threatening than when anthrax was discovered at the NBC studios in New York. The F.B.I. knew about it for days. But they failed to tell the N.Y.P.D. And it's quite possible that because of that lack of communication, steps that could have been taken to protect the public weren't. It's possible that countless New Yorkers were unnecessarily put at risk simply because the law and culture makes information-sharing taboo. That's a risk that none of us should ever be forced to take"

12 December 2001

Events

The Baltimore Sun reports that the anthrax used in the attacks is "virtually identical" to anthrax in liquid paste form produced by Army scientists at the Dugway Proving Ground over the last decade.

U.S. Army scientists disclose that they have also produced powdered anthrax at Dugway Proving Grounds in 1998 in order to test ways to defend against biological weapon attacks. A Dugway spokeswoman stated that the strain used to produce this powder was different from that used in the anthrax letters. *The Washington Post* reports on a Canadian military study that examined the effects of opening an anthrax-filled letter. The study was conducted several months before the anthrax attacks in the U.S., and the results suggest, "There was a very great risk of someone getting massive concentrations of spores from just opening a letter." The researchers also estimated the LD-50 for such a release to be between 2,500 and 55,000 spores.

CDC officials acquire 220,000 units of anthrax vaccine from the Department of Defense and receive preliminary approval from the FDA to use it as an experimental treatment if antibiotics fail.

Statements

Army statement concerning anthrax production at Dugway and concern that it could be connected to the attacks. – "All anthrax used at Dugway has been accounted for. There is a rigorous tracking and inventory program to follow the production, receipt and destruction of all select agents. The facility is well-protected with robust physical and personnel security systems.... [Shipments met] stringent federal regulations governing the transfer of hazardous materials.... Anthrax in paste form cannot be the source of contamination for the anthrax

letters mailed after Sept. 11, and Dugway has never shipped any dry anthrax by commercial carrier."

Barbara Hatch Rosenberg (FAS), on the Army's disclosure – "This is very significant. There's never been an acknowledgement that any U.S. facility had weaponized anthrax. The question is, could someone have gotten hold of a very small amount and used it in the letters?"

13 December 2001

Events

A State Department mailbag destined for the U.S. Embassy in Austria tests positive for traces of anthrax. No contaminated letter had been found so far. Up to this point, anthrax traces have appeared in State Department mailbags sent to U.S. Embassies in Lima, Peru and Vilnius, Lithuania.

Newsday (New York, NY) reports that a statewide survey found that over 32,000 New Yorkers received prescriptions for ciprofloxacin during the height of the anthrax scare (survey covered 12 September to 31 October). Cipro prescriptions were 43% higher than the year before, and in Manhattan, the number of short-term (less than 2 weeks) prescriptions rose 60% and long-term (2 weeks +) rose 434 percent.

The FBI announces that it will send fliers out to the public in hopes of generating new leads in the anthrax investigations.

The CDC holds a meeting in Atlanta to assess the government's response to the anthrax incidents. Failures to adequately prepare for communication needs and to accurately convey information were among the chief criticisms voiced at the conference.

Statements

Elisa Harris, Senior Research Scholar at the Center for International and Security Studies at Maryland, on the Army's disclosures – "If it turns out that this material did in fact originate in the U.S. program, it's actually a terrific outcome because it means the primary actors we need to be focusing on are national programs and nation-states. In terms of the bioterror threat, the worst outcome would be that there is a biological Unabomber out there who was able to get vaccinated and get the material and the equipment to process it and them mail it out. That would be a really scary scenario."

C.J. Peters, Center for Biodefense at the University of Texas Medical Branch, commenting after the Army's disclosures – "I remain open about whether anything's been proven about where this stuff comes from."

14 December 2001

Events

Authorities find traces of anthrax in the Hart Senate Office Building two weeks after the latest decontamination efforts. Traces turned up in 9 of 377 samples taken from Sen. Daschle's office. Officials described the test results as encouraging.

Participants at the CDC meeting evaluating the response to the anthrax attacks state that the public health system worked well in containing the present outbreak

but is ill-prepared for a larger one. Participants identified shortfalls in testing ability, storage of potential evidence in criminal investigations, and communication. On the positive side, the widespread collaboration between laboratories in handling testing demands was cited.

15 December 2001

Statements

Tommy Thompson (HHS) is reportedly considering a proposal to make the DoD anthrax vaccine available to people who may have been exposed to large numbers of anthrax spores. If the decision were made to go ahead, the vaccine – on an experimental basis requiring informed consent – would be offered to those people considered to be high-risk, including up to 3,000 postal workers and 71 Capitol Hill staffers.

A CIA spokesman states that the Agency did work with small amounts of the Ames strain as part of its own biodefense program, but stated that the CIA's anthrax was not milled into powder form and has all been accounted for.

Events

Larry Siegel, DC Deputy Health Director, on the plan to offer the anthrax vaccine to high-risk people – "I am personally unconvinced that I would recommend vaccines to an individual on antibiotics knowing there is not a great risk of getting inhalation anthrax."

D.A. Henderson (OPHP), on the consideration of the proposal to make the anthrax vaccine available to high-risk individuals – "We are concerned with people who may have had a very heavy dose."

Week of 16 December 2001

Statement

Tom Ridge (OHS), in a letter to Sen. Tom Daschle, on reports that the terrorist anthrax strain matched that in U.S. Army labs – "There are multiple agencies within government that have for many years, for many reasons had access to this strain of anthrax. That connection [allegedly to a U.S. military laboratory] could very well exist. The fact is we have multiple leads."

16 December 2001

Events

The Washington Post reports that the strain of anthrax used in the letter attacks was genetically identical to the strain maintained by the Army. Five laboratories possessing the Ames strain have been found to have spores that are perfect genetic matches with the terrorist anthrax: USAMRIID, Dugway Proving Ground, Porton Down (UK), Louisiana State University, and Northern Arizona University.

Statements

Jennie Hunter-Cevera, University of Maryland Biotechnology Institute, on the reports of the genetic fingerprinting – "That's good detective work in determining the origins; this will narrow the search for the people who had access to the strain.... If there's also a telltale piece or trace of nutrients or chemicals that show

the process, that's even better. You start adding the pieces and go from tentative to confirmative."

Richard Spertzel, on the reports of the genetic fingerprinting – "It's an important finding but it's not one of those things that says, 'Aha!""

Chuck Dasey, USAMRIID spokesman, on the reports of the genetic fingerprinting – "I'm not sure it tells us anything about who the perpetrator is. You can't say it all came from USAMRIID. We got it from another lab in the first place and so presumably USAMRIID is not the only lab that got it from the Department of Agriculture."

Bill Pierce, HHS spokesman, on consideration of the proposal to make the anthrax vaccine available to high-risk individuals – "They're looking at just those who were most highly infected. Ultimately, it will be up to each individual to choose in consultation with appropriate medical personnel."

Mark Mansfield, CIA spokesman – "The anthrax contained in the letters under investigation absolutely did not come from CIA labs."

17 December 2001

Events

USA Today contradicts the Washington Post story from 16 December concerning the genetic fingerprinting of the anthrax used in the letter attacks. USA Today cited information from scientific and investigative sources that stated that they could not confirm the match between the terror anthrax and the USAMRIID anthrax because the genetic fingerprinting was not yet complete.

Federal health officials began urging exposed staffers on Capitol Hill to take the anthrax vaccine.

The office of Deputy Secretary of State Richard Armitage is closed for over two hours when a staffer opens an envelope containing a white powder. The letter is dismissed as a hoax, because the granules of powder were irregular in size and because the letter had been irradiated in Ohio.

FBI investigators questioned employees of the Battelle Memorial Institute, a contractor involved in chemical and biological defense for the government, as part of their investigations into federal and contractor laboratories.

Statements

Ari Fleischer – "The evidence is increasingly looking like it was a domestic source. But again, this remains something that is not final nor totally conclusive yet.... I can't give you the scientific reasons behind it, but you can assume they're based on investigative and scientific means.... There's a big difference between the source of it [the anthrax] and who sent it, because the two do not have to be tied."

Pres. George W. Bush, on the possibility of a domestic source for the anthrax attacks – "Well, we're still looking on that. We've all got different feelings about it. We're gathering as much information. As soon as we make definitive conclusions, we'll share it with the American people."

Chuck Dasey, USAMRIID spokesman – "I'm not sure that a genetic match strengthens the case. We didn't invent the stuff. We got it from the U.S.

Department of Agriculture. Other labs could have obtained samples from the USDA as well."

Nancy Ray, Army spokeswoman, on the possibility that the government was the source of the anthrax used in the attacks – "The Ames strain was shared among researchers in several countries. I would say that source would have come from any one of a number of places and that's why the FBI is conducting an investigation. I would not even consider us a likely source."

Katy Delaney, Battelle spokeswoman – "The authorities have been here talking to people. We have no indications of security or safety breaches but that's all we're comfortable in saying at this point."

18 December 2001

Events

Federal health officials, acting "out of an abundance of concern," release the anthrax vaccine as an experimental treatment for people exposed to anthrax. Nearly 10,000 people – 3,000 of whom are believed to be at high-risk – are eligible to receive the vaccine. According to HHS Secretary Tommy Thompson, "The decision to use this vaccine is at the discretion of the individual."

Statements

D.A. Henderson (OPHP), on the decision to release the vaccine and concern over negative side effects – "We are often faced with difficult decisions based on really inadequate information. If this were a vaccine which...had no associated reactions [and] would work very well, that would be one thing, but this vaccine does have reactions associated with it, so there's a negative side to it.... The vaccine used in this way would represent a new way of using vaccine than it has been used before."

Philip Brachman, on the decision to release the anthrax vaccine – "These people, if they were exposed almost two months ago, I would think they would not need the vaccine if they have been on antibiotics."

John Collier, Harvard Medical School anthrax expert, on the decision to release the anthrax vaccine — "It is a difficult call. The history on inhalation anthrax is there are not many cases to go by. These spores can persist for some weeks and germinate later and give you delayed disease. There is not enough experience, so the safe way to go would be to offer them a choice of taking the vaccine. Another way to go is to have these people at risk watch themselves or be watched very closely for any sign of symptoms."

Dr. Ivan Walks (DC DOH), on the decision to make the anthrax vaccine available — "There are a lot of people saying publicly that these spores can exist for up to 100 days and that they are concerned about what that means. I'm not sure it means anything. No one is sure it means anything. If there were folks who were sure of a significant risk, they would be recommending vaccination.... The best and the brightest scientists in the country have studied this, and I've got all those studies on my desk. If I can't figure out whether you should take the vaccine or not, how can I expect you to figure out on your own whether to take the vaccine?" Kristin Krathwohl, USPS spokeswoman, on the decision to make the anthrax vaccine available — "The Food and Drug Administration has not even approved a

protocol for dispensing the vaccine yet. If they're going to start vaccinating tomorrow, it seems to me that they might need a protocol.... A lot of things are unanswered at this point."

Olander Williams, USPS truck driver and union shop steward, on the vaccine — "A lot of people think they are experimenting on us and are a little paranoid about the whole ordeal. The vaccine is out for me. No way with the vaccine." Anonymous federal official, attempting to explain HHS reluctance to give an explicit recommendation on the anthrax vaccine — "They're right in the middle of a firestorm. You've got people in the Postal Service saying they are just guinea pigs being experimented upon by an unsafe vaccine. And you've got people in Daschle's office saying, 'The military can get it. Why can't we get it?'"

19 December 2001

Events

ABC News reports that the FBI is investigating a senior research scientist who was twice fired from Battelle. ABC cited federal sources that stated the scientist made anthrax threats in the days after the September 11 attacks.

Statements

Willard Tucker, USPS worker at the Brentwood facility – "First it was Cipro, then it was the other pill. Now it's this. Why do we have to be guinea pigs for them? They don't even know what's going on."

DC Mayor Anthony Williams, statement released in the evening – "After discussing this issue at several scientific meetings, and the careful review of the scientific data, and absent a recommendation from the CDC, the District...affirms its previous public health advisory which recommends strict compliance with the 60-day course of antibiotics. As such the District Department of Health does not recommend investigational post-exposure prophylactics with anthrax vaccine at this time."

Dr. Ivan Walks (DC DOH) – "No one has recommended the vaccination yet. We're not ready to do so."

Rep. Chris Shays (R-NJ) – "It appears that once again federal officials do not have a comprehensive plan of action. In the first go-round we tried to exercise some patience as the experts found their way. This time there is no excuse." Dr. Anthony Fauci (NIAID) – "The actual data show that in animals there is in fact no difference between vaccine and antibiotics versus antibiotics alone. The only consideration is purely theoretical."

Azeezaly S. Jaffer (USPS) – "I am disappointed and frustrated. I don't know what is best for me and my health. If I cannot come to a resolution on what is best for me, you can guess how frustrated my employees are."

21 December 2001

Events

Federal officials meet with postal workers to discuss and offer guidance concerning the experimental use of the anthrax vaccine by people who are deemed high-risk due to anthrax exposure. Also, two CDC physicians began

meeting with groups of postal workers to address individual concerns about the vaccine.

The FBI reports this week that about 40 people face federal charges in connection with anthrax hoaxes. The FBI also reported that it has investigated over 2,300 reports of suspected anthrax incidents, most of which were practical jokes or other false alarms. The postal service reported having received over 15,800 anthrax reports.

The Washington Post reports that the CDC rushed to finish its consent forms for the anthrax vaccine, completing the final version the day before 48 congressional staffers received the vaccine. The consent forms, changed four times since the initial version was created on 5 October, states that the Department of Health and Human Services is not "making a recommendation whether you should not take this vaccine" and that "you should not consider the vaccine as treatment for anthrax."

FBI investigators begin checking government workers and contractors who have received the anthrax vaccine, based on speculation that the perpetrator of the attacks may have been vaccinated or had access to the vaccine. Investigators focused on a group of approximately 200 lab workers and scientists at government facilities and government contractors.

Statements

Azeezaly Jaffer (USPS):

- "We are hoping they will be more conclusive and make a recommendation. We're not medical experts here; we just know how to move the mail."
- o "I hope we get to a point here where our employees will be treated the same way Capitol Hill staffers were, with individual meetings for counseling."

Dr. Jeffrey Koplan (CDC) – "We fully understand that it's frustrating for those who've been exposed and the people who take care of them that the government can't make a strong recommendation about who should receive vaccine. The reasons for that are, as has been the case with many aspects of this bioterrorism event, that we have inadequate science upon which to base such a strong directive recommendation."

Dr. Julie Gerberding (CDC) on the rationale for recommending that postal workers at the Brentwood facility should consider getting vaccine shots – "Our environmental tests there show widespread contamination in all corners of the facility. At some point in time, lots of anthrax spores were airborne and the people who were working there were at risk of inhaling spores."

Grace Piontek, postal worker, commenting on the anthrax vaccine — "I'm not going to do anything. They don't know how the vaccine works with people who have been exposed. They can't guarantee us our safety with it."

Kim Brennen Root, spokeswoman for BioPort, on FBI investigations of its employees – "They've looked at...the appropriate names of employees and former employees who've been inoculated."

Katy Delaney, Battelle spokeswoman, on FBI investigations of its employees – "As part of the investigation, we have provided information and material that has been requested by law enforcement."

22 December 2001

Events

The New York Times reports that, early in the anthrax investigation, the government tried extensively to find a link between Iraq and the anthrax attacks. However, no evidence was found to support initial administration suspicions.

Statements

Tom Ridge (OHS) – "Like many people, when the case of anthrax emerged so close to Sept. 11, I couldn't believe that it was a coincidence. But now, based on the investigative work of many agencies, we're all more inclined to think that the perpetrator is domestic."

Larry Powell, DC postal worker, on the vaccine offer – "I figure 98 percent of people are not taking the shot."

23 December 2001

Statements

Dr. Jeffrey Koplan (CDC):

- On the fact that in spite of all that investigators and scientists have learned about anthrax over the last four months, the perpetrator still remains unknown "It's humbling. And it's unsettling."
- o "Scientifically, we've learned things that were absolutely 180 degrees different from the dogma when all this started."

Elisa Harris, Senior Research Scholar at the Center for International and Security Studies at Maryland – "I am skeptical that anyone can do this on their own. Once the letter to Daschle was opened, a number of us in bioproliferation said we think material of this quality would have to have been produced by a national program or by a person with expertise from a national program."

Jonathan Tucker (MIIS) – "The FBI seems to have prematurely ruled out the possibility of international involvement."

Dr. Michael Osterholm (CIDRAP), on how the match between the terrorist anthrax and the USAMRIID strain does not contribute too much to the investigation – "We just don't know how many hands it went through before it got to the ultimate user."

William Patrick – "...it doesn't surprise me that someone out there has produced a very good anthrax powder. My fear is that he's sitting back now working madly to get the next supply."

Alan Zelicoff (SNL), on the possibility that a security breach at a government program could have allowed anthrax to slip into a terrorist's hands – "I think this is a gigantic nonissue."

Philip Brachman, on the same possibility – "Could someone have stolen some? We'd like to think it was top security, but we all know that no matter how tight that security is, there's often a way. That has to be of concern."

Dr. Paul Mead, lead CDC investigator on the Lundgren case – "Our investigation has told us a lot of things that it wasn't and leaves us with the main hypothesis that she got anthrax through cross-contaminated mail."

William M. Smith (NYMAPU), on the vaccine offer – "They want to experiment on our people. Those vaccinations can cause all kind of harm. Until I see the Supreme Court and the Congress taking those vaccinations, I don't want them to be giving it to us."

24 December 2001

Statements

Dr. Ivan Walks (DC DOH) – "There was a public perception that people on Capitol Hill got treated quickly and effectively and lost no one, while the perception at Brentwood was that people were ignored and lost two co-workers. The most egregious error of all, especially in light of what happened two months ago, is that vaccine is available on the Hill and if you don't work on Capitol Hill, we'll get back to you."

Del. Eleanor Holmes-Norton (D-DC):

- "I don't fault them for the still-developing science. Scientists aren't God. But I don't see how people can make informed decisions with contradictory advice."
- "This has incited concern among postal workers again that the people on the Hill are getting a forthright recommendation to take this vaccine and the people in the environment where anthrax actually killed somebody are not"

Sen. Bill Frist (R-TN) – "It is very important it doesn't look like the standard of care is different for Congress than it is for postal workers. To the best of my knowledge it's not."

25 December 2001

Events

The New York Times reported on the government's anthrax vaccine program, outlining the three options available to workers on Capitol Hill and in postal facilities:

- o Stop antibiotics after 60 days
- Extend antibiotic therapy for an additional 40 days to cover the possibility that anthrax spores may remain in the lungs for more than 60 days
- o Take the additional antibiotics and the vaccine

26 December 2001

Statements

Reginald Thomas, postal maintenance worker, on the vaccine offer – "I'll take my chances. It's like you're being used – like we're laboratory rats.... I think they want to see how the vaccine is going to work on you."

William Matthews, postal worker, on the vaccine offer – "It hasn't been tested and proven. They don't know what it's going to do.... No one is saying to take it. It's at your own risk."

27 December 2001

Events

Federal health officials begin dispensing the anthrax vaccine to those postal workers who wished to take it. CDC officials stated that postal workers have until 7 January 2002 to decide to take the vaccine. The shots are provided free of charge, but workers and their insurance companies will be responsible for any medical treatment required afterwards. By 5 p.m., only four postal workers had shown up for vaccinations.

Statements

Dr. Cecil Fox, head of Molecular Histology (a private microbiology firm), on the FBI investigation of the anthrax incidents – "They are obscuring the facts. And I don't see how anybody can shed light on this. And there may be people out there in the public who would have valuable information if they knew what they were supposed to look for. So far the FBI has painted a picture of a Unabomber-type guy in a starched white lab coat skulking around government labs, which doesn't tell us anything."

D.A. Henderson (OPHP) – "That we don't have all the definitive answers is frustrating for all of us."

28 December 2001

Events

Decontamination workers at the Hart Senate Office Building began their third attempt to clean contaminated areas of the building.

By 5 p.m. today, a total of 15 postal workers opted to receive the anthrax vaccine in additional to more antibiotics.

29 December 2001

Events

More traces of anthrax are found inside a mail sorting machine at NYC's Morgan Processing and Distribution Center. The president of the local postal union stated that he was advising workers not to return to work until the extent of the contamination was made clear.

Statements

Neal Cohen (NYC DOH), on the anthrax discovery — "We were notified late last evening [Friday] by the state Department of Health that there were some findings of anthrax at the Morgan facility which appeared to be near sorting machines that previously were known to be contaminated that had been cleaned. The findings appear to be that there were only trace amounts of anthrax spores that were detected at one sorting machine and the feeling of the CDC is that this doesn't pose any public health threat. I think we can be comforted with the fact that no postal workers in New York City have previously become ill…and it appears to be a carryover of the original contamination."

William Smith (NYMAPU), on the discovery of anthrax spores:

"I'm going to advise the workers to look out for their own safety because it's clear the Postal Service is not looking out for it."

- "It's obvious that building is still not safe. I am advising workers not to go back inside that building. We cannot believe the Postal Service anymore."
- o "The building needs to be closed. It needs to be thoroughly cleaned."
- o "They want to treat us like sacrificial lambs and guinea pigs."

31 December 2001

Events

Federal health officials report that fewer than 100 people have opted to take the experimental anthrax vaccine. However, more than 700 are taking additional antibiotics.

Decontamination workers complete another round of fumigation at the Hart Senate Office Building in an attempt to kill trace amounts of anthrax spores.

Statements

William Smith (NYMAPU) – "My orders are very clear. I understand folks have to make a living, but the reality is that they have to pay a sacrifice up front or somebody's going to pay it down the line. They can stay out of work and force the Postal Service to clean that building, or the building will stay dirty and eventually someone will come down sick and lose their life."

1 January 2002

Events

EPA officials stated that efforts to decontaminate the Hart Senate Office Building appear to have been successful.

Statements

Richard Rupert, EPA project coordinator for the Hart decontamination — "We met all the criteria that would indicate a successful kill of anthrax spores. We had the right humidity, the right temperature and the right concentration of chlorine dioxide gas. But the proof isn't in until all the strips are in." Cheryl Loeb, Monterrey Institute for International Studies: "I am absolutely convinced that [this] will spawn more incidents. The longer the perpetrators go free the more likely it will be to inspire more attacks, as people see they can get away with it."

3 January 2002

Events

An envelope containing a suspicious powder is delivered to the office of Sen. Daschle. Preliminary tests indicated that the powder was not harmful and authorities suspected that the letter was a hoax. According to FBI investigators, the letter was postmarked in London, England, but the date was indecipherable. The substance was sent to Ft. Detrick for further testing. Nevertheless, there was concern about how the letter slipped through security and screening procedures. Officials do not release any details of the letter, but Sen. Daschle states in an interview that the letter was a "copycat" of the one his office received in October 2001. Nicholas Kristof later suggests that this hoax might be the work of his anthrax suspect, "Mr. Z," based on allegations that the letter was mailed in

November, during a period where Mr. Z was allegedly in England attending training for UN weapons inspections.

Postal union officials in NYC advised Manhattan postal workers against taking the anthrax vaccine and instead reiterated calls for cleaning the Morgan facility.

Statements

Lt. Dan Nichols (USCP), on the latest Daschle letter: "While we do not know what the substance is, we do know that the substance is not hazardous." Sen. Tom Daschle (D-SD), on the letter: "It said this was anthrax, death to America, something to that effect, and 'Stop the bombing' was the only phrase that was new."

Dan Mihalko (USPIS), on the new Daschle letter: "From every indication, it does not appear to be anything other than a harmless powder. We don't have anything to indicate that there is any danger. From the standpoint of it being threatening, we will investigate."

William Smith (NYMAPU):

- o "We don't want a vaccine. We want the building clean."
- o "CDC doctors claim they know what they're doing. But they're guessing."

Bill Bachmann, USPS electronics technician – "People are worried. The vaccine I think would be better off not to be offered at all."

Federal law enforcement official, on the anthrax investigation – "We've had a lot of theories and a lot of trails we've looked at, but nothing has panned out."

4 January 2002

Events

Police in Fremont, NH arrested Elijah Wallace on burglary charges. Wallace tells police that he sent anthrax letters to Sen. Daschle, in addition to other addresses. A search of Wallace's home turned up several letters, one of which was spilling out a white powder. Police believe that Wallace's claim is a bogus.

A federal judge in NYC will rule on a lawsuit to have sorting machinery in the Morgan processing facility re-inspected and decontaminated, after requesting written arguments from both sides in the lawsuit. Postal union lawyers want the facility closed, the machines retested, and decontaminated.

Nicholas Kristof publishes a column in *The New York Times* where he speculates on the identity of the anthrax killer. His profile bears a strong resemblance to the one generated by Barbara Hatch-Rosenberg, postulating a domestic source for the attacks.

Statements

Nicholas Kristof – "He is an American insider, a man working in the military bioweapons field. He's a skilled microbiologist who did not aim to kill anybody or even to disrupt the postal system. Rather, he wanted to sow terror. Like many in the bio-warfare field, he felt that the government was not sufficiently attuned to the risks of anthrax, so he seized up the opportunity presented by Sept. 11 to get more attention and funding for bio-terror programs like those that have been his career. How do I know all this? Well, I don't exactly.... It's not a certainty, but an educated guess, circulating among many who know their business."

"One man with long experience in the shadows of the United States bio-defense program," on the potential perpetrator: "I think there are on the order of 100 people who could have done it, who have the access to the spores and the technical expertise to have done it. I've got to admit that I could be a suspect. I've been interviewed by the F.B.I."

Barbara Hatch-Rosenberg (FAS), on the perpetrator: "I don't think that he was trying to kill anybody. I think the motive was to create public fear, to raise the profile of biological warfare."

5 January 2002 Statements

D.A. Henderson (OPHP), on the anthrax response:

- "Everything we knew about the disease just did not fit with what was going on. We were totally baffled."
- "There is just so much to do that we have not sat down to look at this outbreak day by day and say, 'What did we decide on Day X and what was done and what might have been done, how could you have been doing it earlier?' We plan to do that and sort it out and figure out what we might have done differently."
- "We felt very strongly about the need to be available and to communicate, and there was just no way in the world you could. We were just paralyzed."
- o "There is a lot of feeling that we didn't know what we were doing as scientists in giving advice. But, sorry, we haven't had a lot of anthrax around to know just how it's going to behave."

Dr. Julie Gerberding (CDC), on the anthrax response:

- "Early on we were under the Federal Emergency Management Act and the decisions were made that C.D.C. should not be a locus of communication, in part because it was a criminal investigation and we were not really clear what the appropriate message was to put out. Soon thereafter it became clear that C.D.C. was desperately need as a spokesperson for this outbreak, but by that time we were in a reactive state."
- "In retrospect, we were certainly not prepared for layers and levels of collaboration that would be required to be efficient and successful."

Dr. Lou Turner, NC DHHS, on the volume of samples requiring testing: "You could never have prepared for the volume that you had to process."

Dr. John O. Agwunobi, FL DOH: "We still do not know who put anthrax in the mail, we still do not know if they used all they had, and we still do not know how to make all the mail safe. So the question becomes how quickly can we apply what we have learned so far to the next event."

Barbara Hatch-Rosenberg (FAS) – "If news coverage and public awareness just fade away because they never catch the person responsible, I think that would be regrettable."

7 January 2002

Events

The New York Times reported that of 10,000 people who may have been exposed to anthrax during the outbreak, fewer that 2 percent have opted to take the anthrax vaccine.

According to CDC statistics, of the 10,000 people eligible for the vaccine:

- o 4,500 took part in a vaccine education program, of whom:
 - 130-152 actually took the vaccine (one reported side effects, a headache and swelling at the injection site)
 - 1,168 enrolled in the program to take the vaccine, but instead opted for extra antibiotics

Statements

Dr. Ben Schwartz, CDC official, on postal workers' refusal to take the vaccine: "There are some who look at this as the government experimenting on their members. Because of some of those concerns, we were hesitant to initiate another study, which would require further consent." Schwartz is referring to a proposed but cancelled CDC study that would have explored postal workers' reasons for refusing the vaccine.

Dr. Bradley Perkins, CDC chief anthrax expert, on the low enrollment: "Given the context in which the vaccine was offered, and the way it was presented, I can understand the relatively low uptake."

Dr. Ivan Walks (DC DOH), on the low turnout for vaccine among DC postal workers: "The absence of a clear recommendation from CDC about who should take the vaccine, coupled with the absence of any follow-up care, made it very difficult for the postal workers to say 'we'll take it."

Philip Brachman – "We've not done the proper informational job to acquaint people with its safety and efficacy. That's a major problem."

9 **January 2002**

Events

The Journal of the American Osteopathic Association reports that postal inspector William Paliscak, Jr. appears to have the symptoms of inhalational anthrax although blood tests have failed to confirm any infection. He was possibly exposed at the Brentwood Facility before the extent of contamination was known. Paliscak's case is not counted as part of the total number of cases because of the lack of confirming blood tests.

Trace amounts of anthrax are found at the mailroom of the Office of Personnel Management headquarters

11 January 2002

Events

FBI agents examine several photocopiers at the Waksman Institute of Microbiology, a Rutgers University affiliate, and other buildings on campus as part of the ongoing investigation.

13 January 2002

Statements:

Barbara Hatch-Rosenberg (FAS) – "He had to be an insider in the U.S. biological defense program."

15 January 2002

Events

U.S. postal and law enforcement officials announce that the reward for information on the perpetrator(s) of the anthrax attacks will be increased to \$2 million.

17 January 2002

Events

A bag containing gloves and a protective suit is found above a hallway ceiling in the Hart Office Building, delaying the building's reopening and prompting new sampling tests.

CDC officials report that of the 10,000 people put on 60-day antibiotic regimens because of possible anthrax exposure, 1,467 opted for an additional 40 days of antibiotics while only 182 opted for Cipro plus the anthrax vaccine.

Statements

Dr. Bradley Perkins (CDC) on the turnout for additional antibiotics or vaccine – "It is lower than I would have liked to have seen."

18 January 2002

Events

Federal investigators report that they have interviewed over 300 current and former employees of laboratories capable of producing anthrax similar to that used in the fall attacks.

A new round of sampling tests at the Hart Office building turns up negative for additional traces of anthrax.

Statements

Barbara Hatch-Rosenberg (FAS), on the anthrax investigation – "The FBI has gotten short lists of suspects from several people over two months ago." (The FBI confirmed the receipt and investigation of several such lists.)

Sen. Charles Grassley (R-IA), in a letter to EPA Administrator Christine Todd Whitman on the possibility of cost overruns in the Hart decontamination – "I grant that this is a massive undertaking on your part. And while I'm confident that you take our safety seriously, I am concerned about the fiscal integrity of this operation."

20 January 2002

Events

The Hartford Courant ran a feature article on USAMRIID and Fort Detrick, highlighting a 1992 inquiry of the facility that found that anthrax spores and several other pathogens were missing from the facility as well as evidence that

apparently indicated someone at the facility was conducting unauthorized afterhours research, possibly involving anthrax."

21 January 2002

Events

An Army spokesman states that the anthrax spores that were missing from USAMRIID in 1991 were sterilized and could not have played a role in the fall 2001 anthrax attacks.

Several news articles made mention of the case of Ayaad Assaad, an Egyptian-American scientist who formerly worked at USAMRIID and who was suing the Army for harassment. A note postmarked in late September was sent to the FBI alleging that Assaad was a potential bioterrorist. FBI officials cleared Assaad, stating that the arrival of the letter shortly before the announcement of the first anthrax case was coincidental and probably not connected to the anthrax mailings.

Statements

Ayaad Assaad, on the letter sent to the FBI denouncing him as a potential bioterrorist – "Whoever sent the anthrax letters did this to divert attention. They knew the attacks would be eventually traced back to USAMRIID, and they used me as a scapegoat. Who better than an Arab American scientist who used to work there"

22 January 2002

Events

Official announcement of the increase in the reward for information. In addition, postal and law enforcement officials announce that they will send out 500,000 fliers targeting central New Jersey and Bucks County, PA in a search for additional information.

The Hart Office Building officially reopens after 96 days of quarantine and decontamination. The EPA estimates that it alone has spend \$13.3 million on clean up operations, and expects the total cost to rise to \$20 million.

Greg Martin, Bethesda Naval Hospital doctor responsible for treating Senate aides exposed to anthrax, reports that Sen. Daschle's aides could have been exposed to extraordinary levels of anthrax, anywhere from several hundred to 3,000 times the lethal dose.

Researchers at The Institute for Genomic Research (TIGR) report that they have uncovered a small number of genetic differences between the Ames strain of anthrax that killed FL photo editor Bob Stevens and a reference sample of the Ames strain obtained from Porton Down, UK. Researchers cautiously stated that these findings could possibly aid the ongoing investigation.

Statements

FBI Official, on the investigation's focus on Central New Jersey – "This is a targeted effort toward central New Jersey. Investigators and others associated with the case continue to believe that whoever did this has a relationship with central New Jersey, whether they lived there, worked there, or just spend a lot of time there. The key to the case could be there."

Kevin Donovan, Special Agent in Charge, Newark FBI Office, on the suspect — "It's a wide universe of people who may have done this: people who may have access to anthrax, who have access to the laboratories to do work. You can clearly see that there's a wide area that we're continuing to focus on." Kevin J. Burke, Inspector in charge of the USPIS division responsible for Northern New Jersey, on the suspect — "One thing our behavioral people have told us is that the targets of the letters — The Post, the senators, Tom Brokaw — that tells you it's personal. It raises the question: 'Why these people? Why these people and not others?' I think the public needs to keep an open mind about who's responsible. Maybe this is someone who has espoused other views and may have just seen this as an opportunity. But what an opportunity for someone to push their venom."

27 January 2002

Events

In an article following up on the status of AMI, Inc. and its employees, *The Washington Post* reports that some AMI personnel taking the antibiotic ciprofloxacin experienced adverse reactions: "Side effects ranged from mental confusion and joint pain to at least one life-threatening toxic reaction."

28 January 2002 Statements

Laurie Mylroie, American Enterprise Institute – "Sept. 11 marked the most lethal terrorist attacks in human history, the most lethal day for civilians in the history of this country. It's followed shortly thereafter by another major attack. Anthrax is major because it can be used to kill many people." Mylroie believes the attacks are "probably foreign.... The more the FBI says it's a domestic source, the more it invites the party behind the attack to keep at it."

James R. Fitzgerald, head of the FBI Behavioral Analysis Unit – "The attacker appears to be an opportunist [who] took advantage [of the terrorist attacks].... The rhetoric [in the letters] is made to sound like what a nonterrorist thinks a terrorist sounds like.... The perpetrator was probably a right-winger with an ax to grind. It's no secret that they [the intended recipients] are Democrats. People, including the Unabomber, have used representational targets for years."

Yossef Bodansky, director of the U.S. House Task Force on Terrorism and Unconventional Warfare, on letters sent to AMI in July 2001 from Baghdad requesting price information and samples – "The letter was definitely sent by someone working in Saddam [Hussein's] government. The only people in Iraq who have access to U.S. dollars to pay for a subscription are in the Iraqi government.... Asking for return mail was a way of gathering more information about the physical location and corporate structure [of AMI]. The letters were likely a test to determine how to use the mail system to deliver a weapon of mass destruction. ... We know from our own intelligence gathering in Congress that Saddam Hussein does have the best anthrax-producing laboratories in the world." *Christian Science Monitor* report – "Thousands of anthrax claims [have been] reported in France, Germany and Britain alone. ... While it's uncertain if there is

any connection between the anthrax scares and the Sept. 11 suicide attacks on the World Trade Center and the Pentagon, one point is clear: America's allies have become targets."

Gean Atkinson, author, on the perpetrator(s) – "I think there probably is some connection to a foreign power, but I don't think it was a foreign power inserting someone in here."

29 January 2002

Events

The FBI sends out e-mails to the 40,000+ members of the American Society for Microbiology requesting any information that may be relevant to the ongoing investigation.

The letter reads in part: "A review of the information to date in this matter leads investigators to believe that a single person is most likely responsible for these mailing. This person is experienced working in a laboratory. ... I would like to appeal to the talented men and women of the American Society of Microbiology to assist the FBI in identifying the person who mailed these letters. It is very likely that one or more of you know this individual"

30 January 2002

Events

Investigators discovered that the Ames strain of anthrax in fact originated in Texas and not Iowa as previously thought. A clerical error led to the strain being associated with Ames. The strain was isolated from a cow that died in an anthrax outbreak in South Texas in 1981. Based on this revelation, FBI agents questioned workers at the Texas A&M University lab that originally isolated the strain.

31 January 2002

Events

USAMRIID officials reported that they have been able to account for 26 of the 27 specimens reported missing in a 1992 internal inquiry. The missing specimen is one of two anthrax specimens reported missing. A USAMRIID spokesman asserted that the bacteria had been killed with radiation in preparation for lab work.

Traces of anthrax are found at a Capitol Heights mail facility that handles mail for the Federal Communications Commission. The amount found was not judged to pose a health threat.

2 February 2002

Statements

Osama bin Laden, in an unaired interview with the al-Jazeera television channel – "These diseases are a punishment from God and a response to oppressed mothers' prayers in Lebanon, Iraq, Palestine and everywhere."

3 February 2002 Statements

Dr. Bradley Perkins (CDC):

- "We don't have strong proof for the leading hypothesis. It is extremely circumstantial. And it is hard to explain even in the circumstantial realm. We know, for instance, that a large volume of cross-contaminated mail went out to a very large number of people in the Washington metro area, and there was not a single case of disease."
- o "Even if this person, or group of people, is caught, we now know that the technical sophistication is out there."
- o "I think Pandora is out of the box. I don't see any approach that is going to let the CDC feel comfortable about letting down its guard. The only scientifically and politically responsible track is to be prepared for the next event to happen imminently."

4 February 2002

Events

The Bush Administration announces that it will seek \$11 billion over two years to fund programs to protect against biological terrorism. This budget request is in addition to \$1.4 billion approved for FY02 and a \$3.7 billion supplemental request for bioterrorism that Congress also approved.

Statements

Dr. Lorraine Hoffman, Iowa State University veterinary microbiologist, on the clearing up of the Ames strain confusion – "We have closure, but there are still things unanswered. Whoever got it, got it from somewhere."

Dr. Tom Bunn, Chief of Diagnostic Bacteriology at the U.S. Department of Agriculture (USDA) lab in Ames, IA, on the same subject – "Many people were concerned that someone had stolen this from us. Now we can say that they couldn't have stolen it from us, because we never had it."

Senior administration official, on the threat of bioterrorism – "The anthrax letters showed us that even a relatively unsophisticated, small-scale attack can cause enormous disruption since our toolbox for countering such strikes is fairly bare. And compared to the full destructive potential of biological warfare, the anthrax letters were a slingshot."

Washington-based FBI agent, on the perpetrator(s) of the anthrax attacks – "Were these letters sent to us by Osama bin Laden? I don't think so. If this were Al Qaeda, they would have sent a thousand letters."

5 February 2002

Events

Barbara Hatch-Rosenberg (FAS) releases an updated version of her assessment of the anthrax attacks. In it, she suggests that the FBI "for more than three months now…has known that the perpetrator is American" and connected with the U.S. biodefense program. With regard to the perpetrator's motives, Rosenberg posits the following: "He must be angry at some biodefense agency or component, and he is driven to demonstrate, in a spectacular way, his capabilities and the

government's inability to respond. He is cocksure that he can get away with it. Does he know something that he believes to be sufficiently damaging to the United States to make him untouchable by the FBI?"

12 February 2002

Events

FBI officials are reported to be focusing their investigations on U.S. military laboratories known to have stored and processed anthrax.

17 February 2002

Statements

Dr. David Franz (SRI), at a meeting of the American Association for the Advancement of Science – "Whoever produced the formula that we saw in the Daschle letter was someone who knew what they were doing – a craftsman, who didn't start with a page form the internet in one hand and a large spoon in the other."

18 February 2002

Statements

Steven Salzberg, TIGR, on the genetic 'fingerprinting' of the Ames strain – "It won't prove who did it, but it can tell the FBI, 'This is a lab you should look at. The bacteria probably came from this lab.""

22 February 2002

Statements

Richard Spertzel – "There's nothing concrete at all pointing to a domestic source."

Tracey Silberling, FBI spokesperson, refuting Rosenberg's assertion that the FBI has identified a suspect – "It is not accurate that the FBI has identified a prime suspect in the case."

25 February 2002

Events

The Washington Times reports that investigators have focused their attention on a former scientist who worked at a government lab. "Law enforcement authorities and leading biochemical experts familiar with the FBI's five-month investigation said agents targeted the unidentified scientist after extensive interviews with more than 300 persons associated with the government's anthrax program, although no charges have yet been filed."

A law enforcement officials states that "it is not accurate...that the FBI has identified a prime suspect in this case." The official dismissed the *Times* story as "overplayed" and "laughable."

26 February 2002

Events

Several news articles report that the FBI has not identified a prime suspect in the anthrax case, but that the agency does maintain a short list of 18 to 20 people who authorities believe may have had the means, motive, and opportunity to conduct the attacks.

A federal grand jury in Washington, DC begins issuing subpoenas to microbiology laboratories across the country requesting samples of the Ames strain of anthrax.

Statements

Ari Fleischer – "I wish it was that easy and that simple right now, but unfortunately, there are still several suspects." The FBI has not "narrowed it down to just one. They are continuing their investigation."

Bill Carter, FBI spokesman – "There is no prime suspect in this case at this time." Law enforcement official, on 'conspiracy theories' such as Rosenberg's, which suggest that the FBI is dragging its feet on the investigation – "We keep knocking that down, but the same conspiracy theory keeps popping up in different forms."

1 March 2002

Statements

Robert Mueller (FBI), on criticism of the pace of the FBI's investigation:

- o "I don't think in any way, shape or form that we have been dragging our feet. Because of the unique nature and form [of the anthrax probe], it takes some time."
- "Somebody has indicated that we have a suspect and that we have been dragging our feet because...that person was somehow employed by the federal government at one point. That is totally inaccurate. We have moved as fast as I think can be expected under the circumstances in all avenues in the investigation. ... It is not a simple matter to pull together the requisite expertise to wholly identify and characterize a particular strain of anthrax. It takes a number of individuals at different laboratories with different areas of expertise."
- "We are not focusing on just one facility or even a series of facilities. We are open to any possibilities. I would be reluctant to specify where we think ultimately we will find the individual."
- o "Down the road, we hope to be in a position to prosecute somebody. And when we are in a position to prosecute the individual responsible for this, we are going to have to come into court and explain to the jury exactly the process we went through to identify this individual."

4 March 2002

Statements

Van Harp, Washington FBI field office director – "We have a very broad but focused, deliberate and aggressive investigative effort. ... We're focused that it may be an individual, possibly with an accomplice, but we're not excluding a group, either domestically or internationally."

6 March 2002

Events

In response to a request by Sen. Charles Grassley (R-IA), the EPA reports that the cost to clean the Capitol Hill anthrax site (which includes Hart and 29 other buildings) has reached \$23 million, nearly twice the initial EPA estimates and \$2 million more than the amount appropriated by Congress for the task.

8 March 2002

Events

A study published in the journal *Science* suggested that quick use of antibiotics reduced the number of infections resulting from the fall anthrax attacks. According to the study, without prompt use of antibiotics at least 17 and as many as 50 people could have become ill with inhalational anthrax.

Statements

Ron Brookmeyer, lead author of the study, Johns Hopkins Bloomberg School of Medicine – "We found that the antibiotics cut the cases by half. That's good news. They were able to have a rapid response with the antibiotics and limit the disease. ... Our study shows that when there is an exposure you can, in fact, prevent disease provided you get in there quick enough with antibiotics. The shorter we can shrink that interval, the more cases we can prevent."

13 March 2002

Events

The CDC issued a press release confirming that a lab worker at a private laboratory in Texas that is aiding CDC in processing environmental samples as part of the anthrax investigations has contracted cutaneous anthrax.

Statements

Tom Skinner, CDC spokesman – "We don't know how this person became infected in the lab. It's something that we're continuing to look into. We're sure that he got it in the lab; we just don't know how. ... It's not like there's a new letter out there."

14 March 2002

Events

In an interview with the BBC's Newsnight program, Dr. Barbara Hatch-Rosenberg puts forth the suggestion that the anthrax attacks resulted from a CIA test that went wrong. She suggested the possibility that the CIA could have ordered a "field trial" on the possible effects of sending anthrax through the mail and the contents could have been used by whoever conducted the anthrax attacks.

Statements

Barbara Hatch-Rosenberg (FAS) – "Some very expert field person would have been given this job and it would have been left to him to decide exactly how to carry it out. The result might have been a project gone badly awry if he decided to use it for his own purposes and target the media and the Senate for his own motives as not intended by the government project. ... This person knows a lot about forensic matters, knows exactly what he can be prosecuted for and what he

can get away with and I think he had some personal matters that he might have wanted to settle, but I think in addition that he felt that bio-defense was being underemphasized for some time in the past."

23 March 2002 Events

The New York Times runs a story on a memorandum released by the JHU Center for Civilian Biodefense Strategies outlining a visit to a Fort Lauderdale, FL emergency room by two men, who were subsequently identified as two of the 11 September hijackers, three months prior to the attacks. One of the men, Ahmed Alhaznawi, sought treatment for a dark lesion on his leg. Dr. Christos Tsonas, the ER doctor, reexamined his report after the first reports of anthrax and found that the symptoms described in his report matched those of cutaneous anthrax, although he did not suspect anthrax at the time Alhaznawi came in. The Center's memorandum concluded that Dr. Tsona's ex post facto diagnosis of cutaneous anthrax was "the most probable and coherent interpretation of the data available. Such a conclusion raises the possibility that the hijackers were handling anthrax and were the perpetrators of the anthrax letter attacks." See also Late August 2001

Statements

Dr. Christos Tsonas, emergency room doctor who treated Alhaznawi - "I said, 'Oh, my God, my written description is consistent with cutaneous anthrax.' I was surprised."

Dr. Tara O'Toole (CCBS), on the Center's memorandum – "This is a unique investigation that has many highly technical aspects. There's legitimate concern that the F.B.I. may not have access to the kinds of expertise that could be essential in putting all these pieces together."

John E. Collingwood, FBI spokesman, on the possibility of a connection between the anthrax attacks and the hijackers – "This was fully investigated and widely vetted among multiple agencies several months ago. Exhaustive testing did not support that anthrax was present anywhere the hijackers had been. While we always welcome new information, nothing new has in fact developed." Paul Bresson, FBI spokesman – "To date, there has been no evidence to support that any of the hijackers had been in contact with anthrax."

James Woolsey – "The links between Sept. 11 and the anthrax look like they're building." Woolsey also said the he has always dismissed the theory that "some crazed American Ph.D. microbiologist was all on his own ginning up this anthrax and just happened to send it off a week after the attacks."

24 March 2002

Statements

D.A. Henderson (OPHP), commenting on the 3/23 New York Times story – "The letters and their targets don't fit very well with politically unsophisticated foreigners. Are these just weird coincidences? They could be. ... The probability of someone this age having such an ulcer [as Alhaznawi did], if he's not an addict

and doesn't have diabetes or something like that, is very low. ... It certainly makes one awfully suspicious."

Unidentified FBI official – "We did look into this some time ago. This was fully investigated. It's a theory, but there's no evidence. It's just not there. We just have no evidence to feed the speculation that any of those guys came into contact with anthrax."

Steven M. Block, Stanford University – "This may or may not be related to the anthrax letters that killed Bob Stevens and four others. There are lots of possibilities here. One shouldn't jump to conclusions."

26 March 2002

Events

Postal officials estimate that it will cost \$35 million to clean both the Brentwood (DC) and Hamilton (NJ) postal facilities.

27 March 2002

Events

CT health officials report that anthrax victim Ottilie Lundgren most likely contracted anthrax from her junk mail, which passed through the same Trenton, NJ postal facility as the letters to Senators Daschle and Leahy.

29 March 2002

Events

The Washington Post reports that the Center for Civilian Biodefense Strategies examination of the events in FL three months prior to the September 11 attacks was prompted by an informal request by an FBI official who felt that the agency had not properly pursued the lead. According to an unidentified government official cited in the article, the FBI official who made the request was "not involved in the investigation in any way and had no standing" to make such a request. The FBI official in question also "never voiced his concerns internally or raised those issues from proper channels."

Statements

Dr. Thomas Inglesby (CCBS) – Alhaznawi's symptoms were specific to cutaneous and "should be treated with high suspicion. ... It would be reassuring and useful to know how investigators in the anthrax investigation have determined that this is unlikely to be anthrax."

Dr. Tara O'Toole (CCBS), on the Center's memorandum – "We wanted to make sure the heads of the intelligence agencies knew the specificity of the diagnosis. I was afraid they didn't understand that almost nothing causes a black [lesion] in an otherwise healthy young man. Apparently they didn't know that and that's upsetting."

5 April 2002

Events

The Texas laboratory worker who contracted cutaneous anthrax most likely contracted the disease because he failed to wear protective gloves while handling vials of spores.

9 April 2002

Events

A federal law enforcement officer, speaking on condition of anonymity, stated that the anthrax used in the fall attacks "was not routine. Somebody had to have special knowledge and experience to do this."

11 April 2002

Events

CNN reports that scientists examining the anthrax spores used in the fall attacks have found a new chemical in the coating the spores, in addition to the presence of silica (announced earlier).

15 April 2002

Events

Newsweek reports that, according to an unnamed government source, the anthrax used in the Leahy letter was milled to a microscopic fineness that was not achieved by the U.S. biological weapons program and contained a chemical compound coating that matches no known anthrax samples, including those from Russia and Iraq.

Statements

Barbara Hatch-Rosenberg (FAS), in an interview for *U.S. News and World Report*, on the FBI investigation – "It's a stalling tactic. I suppose they don't want the suspect to think they're close on the trail. I hope it's not because they are hesitant to point the finger at someone."

FBI official, on Rosenberg's comments – "It's insulting anyone would suggest we are sitting on evidence. This is murder; five people are dead."

Anonymous official, on the FBI investigation – "As an investigation, it's a nightmare."

William Patrick, response on being told by an FBI agent that he hadn't been consulted until four months into the investigation because, "Well, Mr. Patrick, you were a suspect." – "Well, I suppose I was."

20 April 2002

Events

Six months after the attacks, several of the inhalation anthrax survivors report continued health problems, including fatigue, joint pain, loss of memory, and inability to concentrate. Of the six survivors, only one has returned to work.

21 April 2002

Events

The Wallingford, CT mail sorting center is retested for anthrax several months after initial tests came back positive for anthrax. The facility remained open during this and several previous tests, much to the concern of union officials.

Statements

Michael Ganino, CT State Postal Workers Union president, on the fact that the Wallingford facility was kept open during testing – "We're not happy generally. We feel we are being treated as second-class citizens."

Jason Pate (MIIS), on the numerous private anthrax theories that have arisen:

- o "We all have our pet theories. But none seems to fit the facts exactly."
- o "Dr. Rosenberg thinks it's a disgruntled worker conspiracy. Drs. O'Toole and Inglesby think it's Sept. 11 accomplices. I think it's some right-wing extremists. But maybe it's a disgruntled right-wing extremist scientist accomplice."

Steven M. Block, Stanford University – "The fundamental question here is, are we victims of our own anthrax, or our own expertise, or is this a further fallout from Al Qaeda? It's a critical question. This is the first biological warfare or the 21st Century, and our proper response to it – morally, politically and in every other way – depends on our understanding of which it is."

Researcher, who wished to remain anonymous so as not to offend colleagues, on his colleagues' speculation – "I think that Barbara Hatch Rosenberg and Tara O'Toole may both be guilty of some degree of over-speculation."

25 April 2002

Events

Test results from the 21 April tests at the Wallingford, CT postal facility come back positive on three out of 103 samples taken at 71 locations in the building. The U.S. Postal Service says that the building will remain open and the locations of positive samples will be isolated.

Statements

William Gerrish, spokesman for the CT DOH – "What we feel is that these probably represent residual spores from contamination occurring last October. These largely undisturbed spores don't pose an immediate threat to the health and safety of the employees or the public.

1 May 2002

Events

An article by experts from Johns Hopkins University published in the *Journal of the American Medical Association* challenges the previously held notion that 8,000 to 10,000 anthrax spores were required for infection. The article suggests that smaller doses may in fact lead to infection. The article references a reexamination of data from monkey tests conducted in the 1950s and 1960s that was published in February 2002 in *The Lancet*. The new data suggest that for the most vulnerable of the monkeys (about 1 percent), the infective dose may have been as low as one to three spores.

Statements

Dr. Thomas Inglesby (CCBS), one of the article's authors – "We don't know what dose any of the victims got. But we can assume the people in New York and Connecticut got a very low dose. ... People read the LD-50 and took it as the minimum infective dose. But the floor [for infection] is far below, and it may be just a few spores. ... Early diagnosis is possible and it matters."

7 May 2002

Events

The New York Times reports that federal investigators have discovered that, in general, the anthrax sent through the mail last fall grew more potent from one letter to the next.

Statements

Dr. Arthur Friedlander (USAMRIID), on the ailments that continue to plague some anthrax survivors – "There are more questions than there are answers. We know only about this disease historically, for the most part, up until the recent tragic events. So this represents an opportunity to learn."

9 May 2002

Events

Traces of anthrax are found on about 20 pieces of mail at the Federal Reserve Board during routine screening.

Postal inspectors suggest that a mail sorter may have acted as a mill for the anthrax sent through the mail, compressing and grinding it into a finer powder. The Leahy letter passed through mail sorting machines one more additional time, possibly explaining the difference between the Leahy anthrax and the Daschle anthrax.

Scientists at TIGR complete detailed genetic "fingerprinting" of the anthrax bacteria used in the fall attacks, finding miniscule but consistent differences between the strain used in the attacks and the strain held at USAMRIID. The subtle differences suggest, according to TIGR scientists referenced by *The Washington Post*, that "it is now indisputable the mailed microbes are direct descendants of the germs developed at Fort Detrick." According the *Post* article, the sequencing has allowed researchers to possible rule out three sources of the anthrax, including a British biodefense lab and a natural outbreak in Texas in 1997. Strains from two and possibly three other labs were virtually indistinguishable from the FL anthrax.

Statements

Federal Reserve Board statement – "The affected mail was routine commercial and business mail and did not have any of the characteristics identified by the FBI as suspicious. The source of the possible contamination is not known. Subsequent tests of mailroom surfaces and mail distribution points within the board's buildings have all been negative."

Daniel Mihalko (USPIS) – "There is a very real possibility this could have been traces on some piece of equipment. Until the very detailed culture tests come

back, we'll have to wait and see. It could be mail that rubbed against something at an outside location."

Federal law enforcement official, on the mail sorter mill theory – "There's no enthusiasm for that theory. Mail processing would probably not be effective." Postal inspector, on the mail sorter mill theory - Each sorting machine "has a series of belts that take a letter and pinch it, compressing any anthrax. The more times it goes through a piece of equipment, it refines it. That's the most likely explanation."

Ken Alibek, on the mail sorter mill theory – "It could be an additional process of milling, like a mortar and pestle."

David Perlin, on the FBI investigation and the failure of the investigators to bring in outside experts – "As a scientist, I find it painful to follow the slow progress on characterization of spores in the anthrax letters. ... A slow, methodical approach may be fine for a routine investigation, but the perpetrator is still at large. We need a greater sense of urgency."

Dr. Timothy Read, TIGR scientist who headed the project to sequence the anthrax used in the attacks, on comparing the anthrax that killed Bob Stevens to the anthrax held at USAMRIID – "It is basically like looking for differences in identical twins."

Dr. Clare Fraser, TIGR – "Without a doubt, this kind of information can lead you in the right direction. It has the potential to narrow the focus a lot."

11 May 2002

Events

The Agency for Toxic Substances and Disease Registry announces that it will send a team of doctors, environmental scientists, and computer modeling experts to study the American Media, Inc. building in Boca Raton, FL. The building has been closed since October due to anthrax contamination.

13 May 2002

Events

A study published in *The Proceedings of the National Academy of Sciences* estimates, based on a mathematical model, that as many as 5,000 letters in the eastern United States could have been cross-contaminated by the anthrax letters as they passed through the mail system. The study also states the deaths of Kathy Nguyen and Ottilie Lundgren almost certainly resulted from cross-contamination.

Statements

Martin Blaser, chairman of medicine at the New York University Medical School and co-author of the study, on the implications of the study and the two mysterious cases in NY and CT – "We hope that there won't be any further outbreaks. But if there were, this could help us identify the populations at risk and might help us move quickly to find the source of the initial exposures. ... What was particularly disturbing was the woman in the Bronx, because there was no clear way in which she got the anthrax. But as soon as the Connecticut case came up, I had a pretty good hypothesis about what was going on – crosscontamination carrying a low dose of the microbe."

20 May 2002

Events

The Department of Justice announces that it will begin administering polygraph tests to hundreds of federal employees and contractors at USAMRIID and Dugway Proving Ground, two U.S. government facilities that produce and store anthrax. Some former employees of both facilities were also likely to be tested. Several pieces of mail delivered to the World Bank headquarters in DC tested positive for anthrax after an initial test. A second, more extensive test turned out negative, but World Bank employees were sent home for several days.

Statements

David Franz (SRI), on the possible perpetrator — "I think this was done by someone with years of laboratory experience, not somebody who downloaded a recipe off the Internet and stirred it up with a wooden spoon. [Achieving the high concentration of spores as in the letters used in the attack would have required a] high level of laboratory experience but not necessarily a high degree of laboratory infrastructure. The relatively small quantity of anthrax-powder that was recovered by authorities indicates that someone with a makeshift laboratory — if they really knew what they were doing — could have made this concentration of anthrax."

Barbara Hatch Rosenberg (FAS), on the FBI's plans to begin polygraph testing – "Maybe they really have one or two specific people and they're covering it with a large number of polygraphs. It's about time."

Anonymous Fort Detrick scientist, on the polygraph tests – "It looks to me like desperation. The trail has kind of gone cold."

22 May 2002

Statements

Steven Aftergood (FAS), expressing skepticism about the polygraph tests – "No one wants this cloud lifted more urgently than the people who are involved in this field of research. This is not an open-ended community at all, and this investigation has been a burden and an annoyance. The problem is that the polygraphs may also be a wild goose chase. It does have the signs of a kind of brute-force, try-anything approach, but sometimes that's what you have to do." John Martin, former senior Department of Justice (DOJ) official – The use of mass polygraphs "is a clear indication that they are running out of investigative leads. The broad net that is being thrown out, going after 200 suspects, indicates that they have not narrowed the number down to five or 10. [The tactic of mass polygraphs is] very, very unusual."

24 May 2002

Statements

Ronald Atlas, president-elect of the American Society for Microbiology, at the society's annual meeting in Salt Lake City – "I have looked at people next to me and I have wondered. But then I get mad at myself. These are my colleagues. It's hard for me to fathom that any one of the people I have worked with could be a murderer."

6 June 2002

Events

CDC releases a statement concerning the deaths of eight Brentwood employees in the months following the contamination of the facility in October. At the time of the press release, seven of the deaths were attributed to natural causes (heart disease, stroke, cancer) while the eighth was still under investigation. The release also stated that the number of deaths did not exceed expected levels for a population the size of the Brentwood workforce and that the causes of death were not inconsistent with data on deaths in the United States. The eighth death was later attributed to an enlarged heart.

7 June 2002

Events

Judicial Watch, a legal watchdog group, filed suits against several federal agencies for access to documents relating to the fall anthrax attacks. The group, working on behalf of Brentwood postal workers, asserts that top government officials may have known that the attacks were coming. According to the chairman of Judicial Watch, administration officials stated last fall that some White House personnel had begun taking Cipro on September 11. An administration spokesman denied the allegations.

Statements

Larry Klayman, chairman of Judicial Watch – "We believe that the White House knew or had reason to know that an anthrax attack was imminent or under way."

13 June 2002

Events

The Hartford Courant (CT) reported that the operating theory of FBI agents appears to be that the anthrax used in the attacks was grown in labs at USAMRIID and refined at a separate location. Supporting this are allegations concerning lax security and inventory control, as outlined in a 1992 inquiry, and allegations that someone was conducting unauthorized research on anthrax after hours at USAMRIID.

15 June 2002

Events

The Washington Post reports that since October 2001, eight postal workers from the Brentwood postal facility have died. Brentwood Exposed, an advocacy and support group for Brentwood employees, also reports that roughly 200 Brentwood employees have been hospitalized since October. Although none of the eight died of anthrax, CDC officials are conducting further study of the cases as part of a larger studying tracking the condition of 9,700 at risk people nationwide to determine what effects exposure to the bacteria, the emotional stress, or antibiotic side effects may be.

The CDC also reports that 70 percent of those placed on antibiotics last fall have responded to a telephone survey regarding antibiotic side effects. Of that group, approximately 75% have reported some side effects to the antibiotics.

16 June 2002

Statements

Barbara Hatch Rosenberg (FAS), in an interview with *Scotland on Sunday*, on the alleged perpetrator – "Early in the investigation, a number of experts, at least five that I know about, gave the FBI the name of one specific person as the most likely suspect. That person fits the FBI profile in most respects. He has the right skills, experience with anthrax, up-to-date anthrax vaccination, forensic training, and access to the U.S. Army Medical Research Institute for Infectious Diseases (AMRIID) and its biological agents through 2001. It has been part of the suspect's job to devise bioterror scenarios. Some of these are on record. He is known to have acted out at least one of them, in hoax form, perhaps as part of an assignment to test responses. Some hoax events that have never been solved, including several hoax-anthrax events, also correspond to his scenarios and are consistent with his whereabouts. Either the FBI is under pressure from the Pentagon or CIA not to proceed because the suspect knows too much and must be controlled forever from the moment of arrest, or the FBI is sympathetic to the views of the biodefense clique or the FBI really is as incompetent as it seems."

22 June 2002

Events

Scientists reportedly determine that the anthrax used in the fall attacks was made recently, no more than two years prior to the attacks. Based on this finding, investigators conjecture that the perpetrator(s) could make more anthrax and strike again.

According to *The New York Times*, the FBI investigation is still casting a wide net: "One group under scrutiny is the biopesticide industry, a group of eight primary companies that has produced a list of about 80 people who remain under investigation. Another group is the biopharmaceutical industry, a larger sector of more than 100 companies, which has produced a list of about 200 possible subjects. Finally, public and private laboratories with anthrax inventories or production capability account for another group of about 50 people who are under suspicion."

Statements

Government official, on the latest anthrax findings – "It's modern. It was grown, and therefore it can be grown again and again."

Dr. Henry Kelly, FAS president, on the FBI's handling of the investigation — "It's astounding that they haven't been able to narrow the field. There aren't that many people that could have been involved. ... It's entirely possible they have a good idea who the person is but don't have a good case. If I had to guess, that's where I'd say they are."

25 June 2002

Events

Federal authorities search the Frederick, MD home of Dr. Steven J. Hatfill for the second time in connection to the anthrax investigation. The search turned up no evidence of a connection to the anthrax attacks. Hatfill, a biologist formerly

employed by Science Applications International Corporation (SAIC), has apparently been the subject of much gossip concern possible connections to the attacks. He received his doctorate in Zimbabwe in 1984 and prior to that reportedly served in the Rhodesian military, allegedly as part of the elite Selous Scouts, and was still in the military at the time of a 1978-80 anthrax outbreak in Rhodesia that sickened thousands (it has been alleged that the attack was a deliberate act on the part of the white-led government). Hatfill also worked with UNSCOM and USMARIID, and had attended a CIA-run chemical and biological warfare (CBW) training program. It was also pointed out that the medical school Hatfill attended in Zimbabwe was near the Harare suburb of Greendale, where there was allegedly a Greendale School (it is later uncovered that there is no such school in this suburb). This was the name of the school in the return address of the anthrax letters.

Statements

Steven J. Hatfill – "I've got a letter from the F.B.I. that says I'm not a suspect and never was. I just got caught up in the normal screening they were doing, because of the nature of my job."

26 June 2002

Events

FBI investigators search a refrigerated mini-storage facility in downtown Ocala, FL and removed several boxes from a locker reportedly owned by Steven Hatfill.

Statements

Law enforcement source, commenting on the search of Hatfill's apartment – "I do not know what all of the results of the search were, but I can tell you there were no hazardous materials found in the apartment. I don't know how much in advance he knew about the search, but he has been cooperating with us fully all along."

Anonymous microbiologist, on the search of Hatfill's apartment – "Their intent was clearly to put his name in the public eye. The only question is why. It was either strictly for show – a bone tossed to Congress and the media – or they want to put pressure on him by starting a public investigation to stimulate the stalled non-public investigation."

27 June 2002

Events

The Baltimore Sun discusses a study commissioned by Hatfill while he was working with SAIC. The study, authored by William Patrick, reportedly included a description of an anthrax attack using mailed bacteria.

The FBI reports that in recent months, it has searched the homes of more than two-dozen U.S.-based biological warfare experts as part of the ongoing investigation.

Statements

FBI official, on the agency's investigation of Hatfill – "Obviously, he is somebody who had access to anthrax and scientific capability. That is why we want to look at him – to either remove him from a list of potentials or add him to

a list of potentials. ... Are we saying he's the guy or even a suspect? No, we're not "

1 July 2002

Events

A federal judge throws out a lawsuit by the NYMAPU seeking to force more cleaning at the Morgan Processing and Distribution Center in Manhattan.

2 July 2002

Events

An editorial in *The New York Times* by Nicholas Kristof describes a man, named "Mr. Z," who he believes is the likely culprit for the anthrax attacks. According to Kristof, experts in the microbiology field passed Mr. Z's name along to the FBI in October. Based on the description, it would appear that Mr. Z is Steven Hatfill.

5 July 2002

Statements

William Smith (NYMAPU), on the judges decision to dismiss a union lawsuit seeking to close the Morgan facility for additional cleaning and testing – "No one seems to care [a] bit about safety."

12 July 2002

Events

Nicholas Kristof writes another column in *The New York Times* discussing Mr. Z. In it he suggests that the FBI should reexamine a 1997 anthrax hoax against the B'nai B'rith headquarters in Washington, DC and a 1999 round of anthrax hoaxes in which letters were sent to *The Washington Post*, NBC's Atlanta Office, a Columbus, GA post office, and the Old Executive Office Building. The handwriting on the letter sent to the Columbus, GA post office allegedly resembles the 2001 letters in the use of bold capitals and language patterns. Kristof also notes that the 1997 hoax used an anthrax simulant in a gelatin base and the 1999 hoaxes used powdered simulant. This progression allegedly resembles a progression in skills noted on Mr. Z's resume.

Statements

John E. Collingwood, Assistant FBI Director for Public and Congressional Affairs, responding to Kristof's 2 July *New York Times* column criticizing the FBI's handling of the investigation – "In the midst of conducting more than 4,500 interviews and with the help of world-class scientists from 90 different labs, the F.B.I. has painstakingly developed and applied a scientific characterization of the anthrax in ways that preserve any evidentiary value. Sure, this takes time, but science has never been here before."

17 July 2002

Events

In an editorial for *The Weekly Standard*, David Tell discusses the case of Syed Athar Abbas, a Pakistani national who accepted a plea bargain from the

government in April 2002, pleading guilty to involvement in an elaborate scheme that defrauded two banks out of more than \$100,000 by means of two shell companies. Tell also discusses how in September 2001, when the FBI first began investigating Abbas, they discovered that he had recently purchased (using an alias and cash) a \$100,000 particulate mixer. This device, commonly used by major food and pharmaceutical manufacturers, is used to "process fluid-form organic and inorganic compounds into powder." Abbas has repeatedly refused to tell investigators of the whereabouts of the particulate mixer or about any accomplices that he may have been working. Although Tell, who had in a previous editorial been critical of the domestic perpetrator theory advanced by the FBI, Rosenberg, and others, acknowledges that there is no hard evidence linking Abbas with the anthrax attacks, he finds it odd that the case of Abbas and his particulate mixer has been almost completely ignored by the media.

22 July 2002

Events

Tomas Foral, a University of Connecticut student, is charged under the recently-passed Patriot Act with possession of a biological agent when it is discovered on 27 November 2002 that he kept two vials of anthrax-infected tissue after have been ordered to destroy them. Under an agreement with federal authorities, he is not prosecuted for the charge in return for his cooperation, but is sent to a pretrial diversion program.

Statements

Tomas Foral, University of Connecticut student, on his quandary – "This whole thing has been misconstrued. I was only saving it as a reference strain."

25 July 2002

Statements

Lisa Hensley (USAMRIID) – "Between 11 Sept. and May, USAMRIID processed over 31,000 samples and 260,000 assays in our forensics-based lab." Normal conditions for the lab were four to six samples per month.

26 July 2002

Events

Postal Service officials hold a press conference to announce that a test of decontamination techniques at the Brentwood facility will be conducted on 29 July. Postal officials also estimate that it will cost approximately \$22 million to decontaminate the facility.

Statements

Christine Armstrong, postal employee – "Who would want to go back in there? We have been treated unfairly from the get-go, and they have no idea what we're going through."

30 July 2002

Events

Postal Service officials in New Jersey announce that the Trenton Processing and Distribution Center in Hamilton will be reopened in the spring following a \$20-million decontamination and renovation process.

1 August 2002

Events

FBI agents and Postal Service inspectors execute a criminal search warrant and search the Frederick, MD apartment of Dr. Steven Hatfill for a second time, as well as his girlfriend's apartment. Hatfill's residence was previously searched (voluntarily, without a search warrant) in June. Hatfill has not been named as a suspect, but is considered a "person of interest" by the FBI, one of 20-30 people on a list maintained by the agency.

Statements

Law enforcement official, on Hatfill – "We're obviously doing things related to him that we're not doing to others. He is obviously of more interest to us than others on the list at this point."

Victor Glasberg, attorney for Steven Hatfill – "It's not fair. If the United States wants to charge anybody with a crime, they should damn well go ahead and do it in a fair manner. But that's different from the kids' game of telephone, bandying about allegations that get more expansive every time they're repeated, so that you can't tell fact from fiction."

Robert Mueller (FBI)

- o "We're making progress in the case, but beyond that I can't comment on the ongoing activities of the investigation."
- o "I can't get into what is being undertaken in the course of the investigation, but I do believe we're making progress."

Anonymous FBI official, on the search and Hatfill's status in the investigation:

- o "I think we are not going to characterize this guy in any way, shape or form.... We're looking at a lot of different people. Someone could safely characterize any of those people as suspects, but I'm not sure we have anyone that we would hand that label [of prime suspect] on.... We are doing a lot of investigating all over the place."
- The investigation in Hatfill "began as due diligence, but in pursuing all
 possibilities, it has now become more than that. There is a greater sense of
 urgency and anticipation."
- Recent developments in the Hatfill investigation have "created a lot of interest and a lot of activity and a lot [of] enthusiasm."

Thomas C. Carter, attorney for Hatfill – "He is one of many scientists who are undergoing the same scrutiny by the authorities, but for some reason his name keeps popping up. But he's a patriot – he's going to continue to cooperate in every way."

Barbara Hatch-Rosenberg (FAS), describing a meeting she had with FBI agents on 1 August – "They certainly wanted to keep talking about this person. On the

other hand, they already know everything I know. They asked me what evidence I felt they should be pursuing, and why I thought it was taking so long."

2 August 2002

Events

Steven Hatfill is placed on paid administrative leave from his new position with Louisiana State University's National Center for Biomedical Research and Training.

Statements

Paul Bresson, FBI spokesman – "To date, there has not been anyone charged with this crime. There were searches that took place [on 1 August]. Beyond that, I really can't comment."

Clint Van Zandt, former FBI profiler — "[Hatfill] has the logical and investigative background to suggest that he should be included in the pool of individuals that have engendered investigative interest. But they don't want to repeat the problems of the past, so they're saying 'let's not let the media or Congress rush us to the point where we cannot support our case and make it rock solid."" Barbara Hatch-Rosenberg (FAS) — "Obviously they were dragging their feet and undoubtedly some evidence has been lost. But I am very encouraged they are acting now."

Vincent Cannistrano, former CIA agent – Some within the FBI are "intellectually convinced they're on the right track, but they don't want to come up with a janitor theory that's wrong again."

3 August 2002

Statements

Dr. Martin Hugh-Jones (LSU) – "I feel myself that it's domestic. In the whole world, there are probably 200 serious anthrax researchers, and of that number, less than a dozen would have the skill and opportunity to make dry powders." One knowledgeable source – "There is a clear focus on people in the [U.S.] bioweapons complex. But I have not heard anything to say this is clearly the work of an American scientist."

Ken Alibek – "If it was Ames, it could be an insider, but my previous experience says we should be cautious. If a foreign country was involved, they would never use the strain from their own country."

Bill Walter, retired microbiologist and former scientist in the U.S. bioweapon program – "I read where they haven't left a stone unturned. There's about eight of us stones that are still unturned. It's a joke."

6 August 2002

Statements

Dr. Martin Hugh-Jones (LSU), describing his assessment of Hatfill's experience with anthrax – "He's never worked on it. He's never published on it."

7 August 2002

Statements

John Ashcroft:

- "Progress is being made. But until you cross the thresholds of information that will provide the basis for action, it may be that the progress doesn't mean a lot."
- o "My own view is that the work is very arduous, and it has not abated. It's fair to say that it's as intense as it ever was, if not more intense. But we're not in a position to announce an outcome."

Weldon L. Wood, National Police Bloodhound Association president, expressing doubt on the *Newsweek* report on the use of bloodhounds by the FBI (See 12 August 2002) – "Anything is possible. But is it feasible, after this length of time and what the letters have been through? I would doubt it."

9 August 2002

Statements

Jonathan Shapiro, attorney for Steven Hatfill:

- o "We are very angry at the way they have treated this man, who has done nothing but cooperate fully with federal authorities."
- o "Through innuendo in the public eye they have begun to destroy this man's life, his standing in the scientific community, his ability to make a living. That is absolutely wrong."
- o "We're extremely angry at the course of this investigation and the way the United States has seen fit to trash Dr. Hatfill."

Dr. Martin Hugh-Jones (LSU) – "Handling anthrax is very difficult. And whoever killed those people had access to good-quality, fine anthrax in powder form, and there would be only six to dozen people in the US with access to that."

10 August 2002

Events

Steven Hatfill, accompanied by his attorneys, gives his first public statement since his apartment was searched a second time.

Statements

Steven Hatfill – "I went from being someone with pride in my work, pride in my profession, to being made into the biggest criminal of the 21st century, for something I never touched. What I've been trying to contribute, my work, is finished. My life is destroyed."

Victor Glasberg:

- o "...he did not do anthrax work. Steve has never worked with anthrax. He has never cultivated anthrax. He has never handled anthrax."
- "Steve's life has been devastated by a drumbeat of innuendo, implication and speculation. We have a frightening public attack on a individual who, guilty or not, should not be exposed to this type of public opprobrium based on speculation."
- o "[At Fort Detrick] there's bacteriology research and there's virology research. They each have their separate labs. They each have separate

decontamination chambers. The lab Steve had access to dealt with viral diseases.... The two were separate and didn't mix.... He never worked with anthrax at Fort Detrick. He's a viral guy. That [anthrax] is a bacteria."

- o "To the best of our knowledge, there isn't any Greendale School. There is a subdivision near Harare called Greendale, but there are Greendales everywhere."
- Referring to the 25 June search: "They cart out 23 bags of stuff from his apartment. They swab the walls for anthrax. And if they came up with something, we don't know about it. The agent in charge told Steve, 'This is on instruction from on high."
- o "It's just absolutely clear this stuff is being leaked to the press for the purpose of giving their investigation high profile, to demonstrate that the FBI is on the case, without any regard to the consequences to this man."
- One would think that incidents like Richard Jewell would alert the authorities to the importance of proceeding fairly and discreetly in these investigations."

Chuck Dasey (USAMRIID) – "It's true he [Hatfill] didn't work on anthrax and was never issued vials of anthrax."

11 August 2002

Events

Authorities remove a public mailbox from Nassau Street in Princeton, NJ for additional testing after it tests positive for anthrax. This is part of an effort by investigators to determine where exactly in the Hamilton, NJ the letters were mailed.

Steven Hatfill gives a press conference outside his lawyer's office in Alexandria, VA, suggesting that he has been designated as the FBI's "fall guy." He airs his grievances against to FBI, alleging that they "manhandled" his girlfriend and wrecked her apartment as they searched it, and that they leaked information to the press concerning the search of Hatfill's apartment.

Statements

Steven Hatfill:

- "After eight months of one of the most intensive public and private investigations in American history, no one has come up with a shred of evidence that I had anything to do with the anthrax letters."
- o "I am a loyal American, and I love my country. I had nothing to do, in any way, shape or form, with the anthrax letters. And it is extremely wrong for anyone to suggest otherwise."
- "I am appalled at the terrible acts of biological terrorism that caused death, disease and havoc in this great country starting last fall, but I am just as appalled that my experience, knowledge, dedication and service relative to defending Americans against biological warfare has been turned against me in connection with the search for the anthrax killer."
- o "The FBI agents had promised me that the search would be quiet, private and very low key. It didn't turn out that way. Within minutes of my

- signing the release to have my residence and property searched, the television cameras, TV trucks and an overhead news helicopter were swarming around my apartment block."
- o "If I am a 'subject of interest,' I also am a human being.... I acknowledge the right of the authorities and the press to satisfy themselves as to whether I am the anthrax mailer. This does not, however, give them the right to smear me and to gratuitously make a wasteland of my life in the process. I will not be railroaded."
- Referring to discussions of his past and discrepancies in his resume that have been discussed in the media: "As a substitute, the press and not the public have been offered events from my past going back 20 or more tears as if this were critical to the matter at hand. In fact it is not. It is a smoke screen calculated to obscure the fact that there is no evidence that I, the currently designated fall guy, have anything to do with the anthrax letters."
- o "I don't know Dr. Rosenberg. The only thing I know about her views is that she and I apparently differed on whether the United States should sign on to a proposed modification of the international Biological Weapons Convention. This was something I opposed and believe she favored. I am at a loss to explain her reported hostility and accusations. I don't know this woman at all."

Victor Glasberg:

- Countering allegations that bloodhounds used in the search "went crazy" when taken to Hatfill's apartment "That's bogus. It's untenable. It doesn't work that way."
- On Hatfill's decision to make a public statement "I told him that he would have to be not merely crazy but stupid to [go public] if there was the slightest possibility that he was facing any kind of liability in relation to the anthrax matters. He said, 'I want to do it.'"

Patrick Clawson, spokesman for Hatfill:

- o "Dr. Hatfill has been living a life of utter hell. Steve was being made out to be a monster in the press like a wacko Unabomber. So I quite forcefully stated my position that Steve needed to get his story out before the press."
- o "I wouldn't be surprised if he's arrested. We've had that suspicion for some time, but not for anything involving bioterrorism, because he didn't have anything to do with that. When you've got the FBI and John Ashcroft crawling up your rectum like they are, they're likely to find something."
- o "You really have a case here of the government run amok." Christopher Murray (FBI):
 - o "We are unaware of any FBI employee who has named a suspect in the anthrax death investigation."
 - o "The FBI does not alert the news media to the service of search warrants."
 - o "...credible allegation concerning the mishandling of evidence will be investigated thoroughly."

Barbara Hatch-Rosenberg (FAS) – "I have never mentioned any names, not publicly, not to the FBI, not the Senate committee or staff, not to anyone. I have never said or written anything that pointed only to one specific person. If anyone sees parallels, that's their opinion. The FBI went out of its way to make one...name public. I presume they had some good reason for doing that. If not, I think it was reprehensible to do so."

Paul Bresson, FBI spokesman – "It's all part of an ongoing case. Nobody has been charged. Beyond that, there is nothing we can say."

Anonymous law enforcement official – "Some people have said this is our guy, but others have not. But if there was anything significant, we would have moved on to the next stage.... To be honest, we don't have anybody that is real good. That is why so much energy has gone into Hatfill – because we didn't have anybody else. There is a feeling of 'where do we go now?' A lot of other people already have been crossed off the list."

12 August 2002

Events

U.S. Postal Inspectors announce that a Princeton, NJ mailbox has tested positive for traces of anthrax. The mailbox was removed at send to an Army laboratory in Aberdeen, MD for additional tests. The anthrax traces were uncovered as part of an investigation of all mailboxes that feed into the Trenton, NJ facility that initially processed the anthrax letters.

Newsweek reports that, as part of the search of Hatfill's apartment, bloodhounds were given "scent packs" taken from the envelopes used in the attacks. The bloodhounds had reportedly been used in searches conducted at the homes of a dozen other people of interest, but did not exhibit a reaction until they were used at Hatfill's apartment, his girlfriend's apartment, and a restaurant where he had eaten. According to a law enforcement source, "They went crazy."

Statements

Law enforcement official, describing the reaction of the bloodhounds to Hatfill – "When you see how the dogs go to everything that connected him, you say 'Damn!"

Dan Mihalko (USPIS) – "We've been looking at all the mailboxes that feed into the Trenton facility. One of them did test positive."

Richard Spertzel, on Hatfill's statement and the investigation:

- o "He's being railroaded. I'm afraid they're creating another Richard Jewell."
- o "There were plenty of two-legged guinea pigs in that apartment complex. If the anthrax had been made there, his neighbors would be dead."

13 August 2002

Events

FBI agents canvassed Princeton, NJ, the site of the anthrax-contaminated mailbox in an effort to determine if there was a link between Hatfill and the mailbox. Area citizens and merchants were shown Hatfill's photograph.

In a *New York Times* column, Nicholas Kristof reveals that the 'Mr. Z' he has written about several times is Steven Hatfill.

Statements

Patrick Clawson, on the FBI canvassing efforts in NJ – "I don't think this is a complete investigation unless people are seeing pictures of all 30 people." Bill Evanina, FBI spokesman, on the contaminated mailbox – "We are hopeful that additional forensic tests will lead to additional clues about the origin of the letter or letters as well as any potential suspects."

14 August 2002

Statements

Victor M. Glasberg:

- o "It's grossly unfair to focus so directly on this one man. He's never been to Princeton. Period."
- o "What's most disturbing is the openness, the porousness, the publicness of this investigation. It's totally inappropriate."
- o "But with regard to Steven Hatfill, what they are doing is totally upside down, inside out and wrong."
- "One has hot to question whether there's a rush to judgment to find somebody, anybody, and worry about minor matters like guilt or innocence later."

Bill Evanina, FBI spokesman – "We are canvassing the general just as we would do in any investigation."

Christopher Murray (FBI) on Hatfill's designation as a "person of interest" – "I have no idea where that came from. I've seen it in the press, but no one in the FBI that I know has ever used that."

16 August 2002

Events

Postal service officials announce that they will test two NJ mailing centers that handle mail from the contaminated Princeton mailbox as a precautionary measure.

Statements

Diane Todd, USPS spokesperson – "This is totally a precautionary measure. No new workers have reported exposure [to anthrax] and there is no new evidence that these facilities are contaminated."

19 August 2002

Events

The NJ state health commissioner states that he suspects the anthrax spores found in a Princeton mailbox have been there several months, most likely since last fall. Federal investigators and scientists will conduct additional tests on the samples, including determining whether or not the samples match the strain used in the attacks.

Some observers believe that the anthrax investigation's focus on the Princeton, NJ area could complicate the investigation, as the area is home to several academic

labs, pharmaceutical companies and other firms that specialize in manufacturing fine industrial powders.

Statements

Dr. Clifton Lacy, NJ state health commissioner, on the anthrax-contaminated mailbox – "I think this is probably a remnant from last fall. We'll let our law enforcement colleagues do their investigation."

Richard Enbright, Rutgers University Waksman Institute of Microbiology – "You could make a case that the person might have chosen to send anthrax from Princeton because he wanted to pick a place that would only make the investigation more complicated."

Christopher Murray (FBI), refusing to comment on whether or not the anthrax traces found in the Princeton mailbox matched the Ames strain used in the attacks – "That's evidence. We don't talk about evidence."

Robert Bartley, in a *Wall Street Journal* editorial questioning FAS member Barbara Hatch-Rosenberg's depiction of the anthrax perpetrator and its alleged influence on the FBI investigation – "At the FBI big personnel changes are under way, including the retirement of the counterterrorism chief. The Bush administration needs to make sure this means the FBI will stop being led around by the FAS."

21 August 2002

Events

Postal officials announce that an additional three postal facilities in central NJ were tested for possible anthrax traces after it was determined that these facilities would have handled mail from the contaminated Princeton mailbox.

22 August 2002

Events

Postal Service officials announce that the decontamination test carried out at the Brentwood facility in DC was successful, paving the way for full-scale decontamination of the building.

Postal officials announce that the first two postal facilities recently tested in NJ were negative for traces of anthrax.

Victor Glasberg releases copies of complaints that he filed with the Justice Department's Office of Professional Responsibility and the FBI against the Bureau and Attorney General John Ashcroft requesting an inquiry into their handling of the investigation into his client. Spokespersons for the Bureau and the Department of Justice have not responded to Glasberg's complaints.

Statements

John Ashcroft, commenting on the anthrax investigation – "Mr. Hatfill is a person of interest to the Department of Justice, and we continue the investigation. For me to comment further, it would be inappropriate. The anthrax investigation is one like almost all investigation that involves breakthroughs and plateaus. Progress has been made. There is a sense of intensity in the investigation. But frankly, the ultimate plateau that's necessary is for us to cross a threshold which provides a basis for prosecutable facts."

25 August 2002

Events

Steven Hatfill gives a second press conference expressing his concern and dismay over his alleged mistreatment by FBI investigators. He produced copies of his time sheets that showed the hours he worked on 17 and 18 September and 8 and 9 October, the days when the anthrax letters were most likely mailed. He also offered blood and handwriting samples to the FBI as part of the effort to clear his name. Also, in the course of his statement, Hatfill specifically mentions *New York Times* columnist Nicholas Kristof, who wrote a series of articles outlining Hatfill as a potential perpetrator.

Statements

Steven Hatfill:

- o "I want to look my fellow Americans directly in the eye and declare to them: I am not the anthrax killer. I know nothing about the anthrax attacks. I had absolutely nothing to do with this horrible crime."
- "The assassination of my character appears to be part of a government effort to show the American people that it's proceeding vigorously with the anthrax investigation. My life is being destroyed by arrogant government bureaucrats who are peddling groundless innuendo and halfinformation about me to gullible reporters who, in turn, repeat this to the public under the guise of news."
- o "In my view, he [Ashcroft] has broken the Ninth Commandment: Thou shalt not bear false witness. I have never met Mr. Ashcroft. I don't know him; I have never spoken with him. I don't understand his personalized focus on me."
- o "I will be very interested to see how the Justice Department will police itself."
- o "I believe I may actually get arrested when all is said and done. If this occurs, it will have nothing to do with anthrax. If Steve Hatfill isn't the anthrax murderer, well, he spit on a sidewalk or littered or did something else he shouldn't have done."
- o Hatfill criticized Kristof, whom he said allowed himself "to be used as a vehicle to leak irreparably damaging information about me to the public."

Mark Corallo, Justice Department spokesman, responding to Hatfill's remarks – "The investigation is ongoing and we cannot comment further."

Nicholas Kristof, responding to Hatfill's comments – "You can quote me as saying I stand by the columns."

26 August 2002 Events

FBI officials state that investigators will return to the AMI building in Boca Raton, FL as part of the ongoing investigation. New techniques will be used to collect and test samples from throughout the building as part of an effort to determine how the anthrax spores entered the building. Investigators hypothesize that because no anthrax spores were found in the building's garbage receptacles, it is possible that the letter or letters that contaminated the building could still be

inside. FBI officials expect that the new investigation will take approximately two weeks.

The Baltimore Sun reports that, in response to a previous article in the newspaper, Postal Service officials reiterated that they had acted appropriately in dealing with the anthrax contamination at Brentwood and the risks to postal workers. Postal officials in NJ announce that the second round of three postal facilities recently tested for anthrax all tested negative for the presence of anthrax spores.

Statements

Hector Pesquera (FBI):

- "We hope that the evidence collected...will help bring to justice the person or persons who committed this horrific act."
- o "This has nothing to do with Mr. Hatfill. This is an ongoing criminal investigation, and...the entry is being made in furtherance of that criminal investigation."
- "Last year, we were in the building for a different reason. It was not as comprehensive an investigation as the one we are planning but judgmental around the victims. It was more of a public health concern investigation. This investigation will be scientifically driven for a criminal investigation."

Dwight Adams, FBI deputy lab director:

- "We hope to do a very comprehensive, detailed assessment of the spore contamination throughout the entire building."
- "These tools and techniques will allow for thousands and thousands of samples to be taken that back in October would have overwhelmed any public health laboratory in the state or the nation. These new techniques will allow not only for only qualitative sampling but also quantitative sampling."
- o "We're looking for a dissemination device, such as a letter or letters, again to generate new leads."

David Pecker (AMI) – "It's almost the anniversary of Bob Steven's death and the family really wants to know who's responsible. I'm hoping that they can really find something."

"George Fairfax," Brentwood supervisor and anthrax survivor — "They say our blood will save the nation. But yet we aren't recognized. I didn't volunteer for this mess. I didn't sign up to be a guinea pig. I'm doing my job, the next thing you know, I've got the flu. The next thing, I'm scared to death will I see the end of the day. Will I see my birthday? Will I see next year? I'm treated like toilet paper." [Note: "George Fairfax" is a pseudonym; this survivor's real name has not been revealed.]

David Hose, State Department mail facility employee and anthrax survivor — "We're less than second-class citizens. They [doctors] act like they are afraid to do anything to treat me, like they don't want to mar a pristine case of anthrax, like they want to make sure I get all the symptoms that I would get without interference from them. I'm a guinea pig."

Norma Wallace, Hamilton, NJ postal employee and anthrax survivor –

- o "I think we have been exploited enough. The research that the CDC and the military are doing on me and other survivors does not benefit us. We get no closure. They get the accolades and the money and the recognition. But we're like experimental animals."
- o "The people who bombed the World Trade Center, they were suicidal. So as far as the government is concerned, they will never go to trial. But the person or persons responsible for the distribution of weapons-grade anthrax, where is the accountability for that? I am really angry about that. It's sending a message that we don't matter."

27 August 2002

Events

According to Victor Glasberg the FBI has asked his client to submit blood and handwriting samples for analysis. Glasberg states that if the FBI does not make its analysis of Hatfill's handwriting public within five days, he will have an independent private analyst examine it. The FBI declined to confirm whether or not it requested such samples.

Statements

Christopher Murray (FBI) – "Any handwriting samples and results of any scientific or forensic examinations are evidence, which we don't discuss." Immunology expert, commenting on Hatfill's offer of a blood sample for FBI investigators – Any evidence from the sample might be inconclusive. "But in comparison to lie-detector tests and barking sniffer dogs, a solid, verifiable fact about exposure would be at the high-quality end of the evidence spectrum." Anonymous government anthrax expert, commenting on Hatfill's offer of a blood sample – "... any answer is going to be gray, and not black and white. If he is negative, that doesn't mean he could not have used a good technique and avoided any exposure. If he is positive, then it could easily be because of exposure to the microbe [at USAMRIID]."

Dr. Vincent Fischetti, Rockefeller University anthrax expert, commenting on Hatfill's offer of a blood sample – "If negative, it would help him because it's very difficult not to become contaminated when handling huge amounts of spores."

28 August 2002

Statements

Dr. Julie Gerberding (CDC), on lessons learned from the anthrax attacks and improvements that have been made:

- "We are building terrorism capacity on the existing foundation of public health. One of the things we learned last fall is that we needed to set aside some scientists who were not involved in day-to-day operations – a 'B Team' who had the time to research information and consult outside experts. And that's what we have been doing with West Nile."
- "We certainly have taken some giant steps forward, [but] we are not finished, we have got more expansion and more work to do in the laboratory compartment."

30 August 2002

Events

The Wall Street Journal reports that some Justice Department officials are becoming concerned with the focus of the anthrax investigation on Steven Hatfill, drawing parallels with the 1996 Richard Jewell case. A senior Justice Department official also believed that Attorney General Ashcroft blundered when he referred to Hatfill as a "person of interest" on 22 August.

Statements

Senior Justice Department official – "Nobody over here is comfortable with the way this is playing out."

3 September 2002

Events

Louisiana State University terminates Steven Hatfill's contract with the university's National Center for Biomedical Research and Training. Hatfill had been on leave since 2 August 2002, after his Frederick, MD apartment was searched a second time by FBI investigators.

FBI investigators continue to collect hundreds of samples from throughout the AMI building in Boca Raton, FL. FBI spokespeople characterize the effort at AMI as "successful," but did not elaborate on any findings.

Statements

Mark Emmert, LSU Chancellor – "The university is making no judgment as to Dr. Hatfill's guilt or innocence regarding the FBI investigation. Our ultimate concerns are the ability of the university to fulfill its role and mission as a land-grant university. In considering all of these objectives, I have concluded that it is clearly in the best interest of LSU to terminate this relationship." Steven Hatfill – "My life has been completely and utterly destroyed by John Ashcroft and the FBI. I do not understand why they are doing this to me. I'm now unemployed. Twenty years of training has now gone down the tubes. My professional reputation is in tatters. All I have left are my savings and they will be exhausted soon because of my legal bills."

4 September 2002

Events

The day after terminating Steven Hatfill's employment, LSU officials terminate the employment of Stephen Guillot, director of the university's National Center for Biomedical Research and Training and Academy for Counter-Terrorist Education. LSU spokesman Gene Sands refused to discuss why Guillot was terminated.

A Justice Department spokesperson confirms that Timothy Beres, acting director of the department's Office of Domestic Preparedness, sent an e-mail to the LSU National Center for Biomedical Research and Training on 1 August 2002 directing "that the Louisiana State University Academy of Counter-Terrorist Education immediately cease and desist from utilizing the subject matter expert and course instructor duties of Steven J. Hatfill on all Department of Justice funded programs." An anonymous Justice Department official stated that the e-

mail was sent by the ODP "based on their own criteria." LSU denies that this email had any impact on the decision to terminate Hatfill's employment with the university, and claimed that top officials were not aware of the e-mail until 4 September.

Representative Albert Wynn (D-MD) submits a bill to the House of Representatives to rename the Brentwood facility in honor of Joseph Curseen, Jr. and Thomas Morris, Jr., the two Brentwood posted workers who died as a result of the anthrax attacks.

Statements

Deborah Daniels, Assistant Attorney General – "The department has not been involved in any decisions made by LSU with respect to Mr. Hatfill's status as an employee of that university. It is a specific condition of our grant to LSU that we maintain management oversight and control. Steven J. Hatfill served as a subject matter expert on bioterrorism and was one of the primary instructors used in LSU's training program."

Patrick Clawson:

- o "It would be nice if the Justice Department would give a reason as to why it didn't want Steve Hatfill working on this project. He's one of this country's top biodefense experts. We need him protecting America. We don't need him on the sidelines right now."
- "Where is it that the attorney general gets authority to point an accusatory finger at a citizen without leveling any kind of formal charges? Where does the Justice Department get the power to get a man thrown out of his job? If the Justice Department has some evidence on Steve Hatfill, then by all means charge him. But quit destroying his life."

Paul Moskal, FBI spokesman, discussing the origins of the term 'person of interest' – "It was used as a descriptive term by somebody in the media to term what is transpiring. As far as I know, as best I can tell, it wasn't somebody from this office who first coined the phrase."

Paul Moore, analyst with the Center for Counterintelligence and Security Studies and former FBI agent – "When you do see the FBI doing these kinds of public things, they have come to a dead end in an investigation and they need to apply some pressure somehow."

Buck Revell, former FBI counterterrorism chief – "It is extraordinary. But with there being the involvement of potential biological weapons of mass destruction, investigators have a right to take such actions."

Lawrence Goldman, National Association of Criminal Defense Lawyers president – "The courts have said that there really is no entitlement to a job. Especially when dealing with sensitive information or potentially deadly substances. There is no standard of reasonable doubt when determining whether someone was fired wrongfully. Suspicion can be enough."

5 September 2002

Events

Victor Glasberg sends a letter to Attorney General John Ashcroft requesting that he extend an apology to Hatfill for his treatment during the investigation and that he find a new job for Hatfill. Glasberg also asks why FBI and Justice Department investigators have targeted Hatfill. The Justice Department has no immediate comment on the letter.

Statements

Victor Glasberg, in a letter to John Ashcroft:

- "With all due respect, it is proper for you to take the lead in setting this right immediately. In fairness, Dr. Hatfill is also entitles to an apology, and I would encourage you to see that one is provided to him."
- o "This functional equivalent of blacklisting is reprehensible and sanctionable."
- "...use your good offices promptly to secure appropriate employment for Dr. Hatfill at LSU or elsewhere, where he may put his considerable knowledge in the service of our nation's defenses against biological terrorism."

Greg Vincent, LSU Vice Provost for Academic Affairs – "We're going to have as seamless a transition as possible, making sure we continue our relationship with the Department of Justice. It's unfortunate we had to take these actions. But everybody is ready to step up to the plate to administer the program and fulfill our obligations."

7 September 2002

Statements

Anonymous bioweapons expert assisting the FBI investigation – "They weren't equipped to conduct an investigation of this magnitude. There aren't many people who have the expertise and understanding of what it would take to grow these spores, and none of those who do are criminal investigators."

Dr. Martin Hugh-Jones (LSU), commenting on difficulties in the investigation – "When you can't even find a refrigerator to keep the bug, that doesn't say much for your chances of ever finding the one who mailed it."

Cliff Van Zandt, former FBI profiler – "Clearly, this was somebody trying hard to make it seem like they are Muslim. But this case has gone beyond the profiling stage. The FBI is in uncharted waters with this case and inventing things as they go along."

Paul Moore:

- o "Most investigations don't prosper when they are public, and that's what bothers me about this case. It tells me they have either reached a dead end or their case has a great big hole in it and they are trying to put pressure on this person. They have departed from their mission, and until they can show where the meat is in this case, I'm going to be very skeptical of them."
- "There is no guarantee they will ever solve this case. Given some of their actions lately, I don't expect that they will."

10 September 2002

Events

FBI investigators complete their reexamination of the AMI building in Boca Raton, FL. According to an inventory submitted in federal court later in the week, investigators gathered almost 5,000 pieces of evidence in more than 550 trips into the contaminated building during the two-week investigation period. This included at 811 pieces of mail taken form the building's mailroom. The search reportedly failed to turn up the letter that may have contaminated the building or any reason why AMI was targeted.

Statements

Senior-level law enforcement official — "It's a fair assessment. I think many of us are resigned to the fact this could be another Unabomber case. The only way we may ever find this guy is if he says the wrong thing to the wrong person at the wrong time. That could be next week. It could be eight years. It could be two decades."

One federal source – "There is a limited list of suspects. The thinking is the person could be on that list, and mow it's a process of elimination." Dr. Martin Hugh-Jones (LSU):

- o "I don't think it's possible to say beyond a doubt that this anthrax came from those facilities [Fort Detrick and Dugway Proving Ground]."
- "Let me put it this way. Twenty years from now somebody is going to write a book that says their uncle said something about anthrax just before he shot himself in the head. And that is how we are going to solve the anthrax mystery."

Federation of American Scientists, disclaimer on the FAS web page that links to Rosenberg's anthrax profile – "FAS is not involved in any effort to publicly identify individual suspects or 'persons of interest' in the anthrax investigation. It has not and will not publish such accusations."

11 September 2002

Events

FBI investigators return to search the Frederick, MD apartment of Dr. Steven Hatfill for the third time. Hatfill has not lived in the apartment since 12 August, when he moved to Louisiana. FBI spokespersons had no comment on the reports.

Statements

Patrick Clawson:

- o "He doesn't know anything about it if they did search the house. If they are looking for something, how come they didn't find it during the first two searches?"
- o "How many searches does it take before the FBI gets it right? This is exactly the kind of stuff that is driving everybody crazy on this."

David Pecker (AMI):

o "I don't believe in coincidences. Fifteen of the 19 hijackers lived close to the Boca Raton building. Mohammed Atta went to the pharmacists here, looking for cream for a rash. Two of the hijackers went to the Holy Cross hospital because they had black scabs on their legs, and the doctor,

afterwards, apparently thought it was cutaneous anthrax. Then there's the name on the sign, American Media: look what happened to American Airlines. And then it hit the New York Post, the senators' offices, Tom Brokaw, and that's when everything tied together. I still think it was tied to al-Qaida. I don't believe it was domestic."

o "The local, state and federal officials were completely unprepared for bioterrorism. There was no communication at all, and by not communication, everybody imagined the worst. I believe the FBI is doing its best, but Congress and the White House – I feel very frustrated that nothing has been done."

13 September 2002

Events

A study published in the *American Journal of Medicine* examines the explosion in online "virtual pharmacies" offering the antibiotic ciprofloxacin that appeared shortly after the attacks. According to the article, fifty-nine such pharmacies offered the antibiotic at inflated prices and many times without a prescription, a violation of federal law. The sites disappeared shortly after the attacks stopped.

Statements

Alexander Tsai, Case Western Reserve University medical student and one of the authors of the study:

- o "We found that within two weeks of the first anthrax attack that a spate of these Web sites popped up. Having this high profile event gave people the opportunity to show there was a lack of regulation in this area."
- o "We analyzed them [the virtual pharmacies] and found they were of poor quality, had no safeguards and charged high prices."

14 September 2002

Statements

Steven Abrams, Boca Raton mayor, on the FBI's search of the AMI building – "I'm more concerned about knowing whether they find the culprit than whether they find the letter."

Gerald McKelvey, AMI spokesman, on the FBI search – "They were obviously concentrating on the mailroom and anything that came through the mail. It's not surprising."

15 September 2002

Events

The Palm Beach Post reports on the FBI investigation at the AMI building, reporting that the investigators believe that photocopiers were responsible for spreading anthrax spores throughout the building. According to this theory, the letter containing the anthrax was opened in the first floor mailroom, where the spores fell on reams of copier paper that were stored there. When the paper was loaded into the copiers and used, the cooling fans and other moving parts in the copiers aerosolized the spores.

16 September 2002

Events

The New York Times reports on several of the survivors of the anthrax attacks and the heath problems that continue to plague them. The article also discusses a planned study by the National Institutes of Health to examine the survivors and their conditions, mapping the courses of their recoveries and determining any possible long-term effects of anthrax.

Statements

Dr. Meryl J. Nass, anthrax expert and advisor to one of the survivors – "It's very peculiar to me that these people haven't had the million-dollar work-up that they deserve. Nobody has made an attempt to gather them together and test them all for the same things and compare the results. That's how you make a determination of what's wrong with them."

Rep. Dan Burton (R-IN), on the lack of follow-up studies for the survivors – "They need to get on the ball and make sure they're following every single case closely."

Dr. Mark Galbraith, infectious disease specialist and physician of one of the survivors – "We don't have a pathway, a textbook that says this is supposed to happen. We don't have enough experience with this to say, 'In six months or three years this is where he should be."

Dr. Bradley Perkins (CDC) – "We are concerned about the chronicity of symptoms among the survivors. That constitutes a surprise."

Mary Wright, head of the NIH study and chief of the biodefense clinical research branch at USAMRIID – "This research looks at the natural history of anthrax infection. It's a way to help understand what happened to people exposed to Bacillus anthracis. It's in place and we're definitely ready to go."

Dr. Arthur Friedlander (USAMRIID) – "It's vital that these studies be done. We need to learn as much as we can about this disease."

David Hose, anthrax survivor, on the NIH study – "It's a shame that they haven't already started."

18 September 2002

Events

Senator Chuck Grassley (R-IA) sends a letter to Attorney General John Ashcroft requesting an official definition of the term "person of interest" and an explanation of its usage, as well as examples of others who have been publicly identified in investigations as "a person of interest" over the past three years. In addition, Sen. Grassley also requested information on Justice Department policies on seeking the removal of employees from department-funded programs. The letter asked Ashcroft to reply by 30 September.

Statements

Senator Chuck Grassley (R-IA), in his letter to Ashcroft:

 "It is important that the government act according it laws, rules, policies and procedures, rather than make arbitrary decisions that affect individual citizens." "Since I have no knowledge of the information on which DOJ relied to take these steps, I have no views as to the appropriateness of DOJ's actions regarding Mr. Hatfill."

Richard Spertzel – "I've heard nothing that has changed my mind. You could not possibly make that quality of product in a clandestine fashion. It's not the sort of thing you can do in your garage or in your basement." Spertzel contends that FBI investigators are "looking in the wrong place."

19 September 2002

Statements

Dr. Julie Gerberding (CDC), on the anthrax response:

- "We had to figure out who was in charge, how to work with clashing organizational cultures and to develop trust under highly stressful circumstances."
- o "During the anthrax attacks last fall, they [CDC's Laboratory Response Network] tested over 125,000 clinical specimens."

23 September 2002

Statements

Athan G. Theoharis, Marquette University history professor who has written extensively on the FBI, commenting on the investigation – "Obviously, the bureau is under tremendous pressure to mail the anthrax murderer. [But] one would have though they would have announced the arrest or indictment of Hatfill before publicly naming him as a person of interest."

Anonymous congressional aide, on Hatfill's situation – "Nobody is going to come to this guy's defense until it's all been resolved."

Paul Bresson, FBI spokesman – "There's no contrived plan on the part of the FBI to win some sort of public relations battle. That's ridiculous."

29 September 2002

Statements

Dr. Martin Hugh-Jones (LSU), on health problems that continue to plague anthrax survivors – "It they are ill, they're ill – I can't argue with that. But you can get ill from a number of things. They may be experiencing stress from skating to close to the edge but, then again, who hasn't?"

Phillip Brachman, on health problems that continue to plague anthrax survivors – "But what I think has to be evaluated and appreciated is that these people have not only had a disease, they've had all this attention paid to them by the media and by others."

1 October 2002

Statements

Clint Van Zandt, former FBI profiler – "Do I think this case will be solved? Yes, I do. I think there will be something scientific or something behaviorally that will break this case. But Ted Kaczynski took 18 years."

Roscoe Howard, U.S. Attorney for Washington, DC, on the case:

- o "You always need a break. You just do, whether it's John Wilkes Booth breaking his leg or Kaczynski's brother coming forward."
- o "We are learning things everyday about spores, about what constitutes a crime scene, about who could do these things."
- o "It's a complex crime, one that just needs time and patience to solve." Cliff Lane, clinical director of NIAID, on the anthrax survivors "It's an incredibly unique situation. In the past, most patients died. You didn't have post-inhalation survivors. It's very difficult to know what one might find, which is what makes it important research."

5 October 2002

Events

Steven Hatfill announces that he has several lawsuits relating the FBI's investigation of him as part of the anthrax case. A spokesman for Hatfill refused to comment on who the targets of the lawsuits were and when they would be filed.

Statements

Steven Hatfill:

- "I have a number of lawsuits in preparation. Rest assured. I have a number of lawsuits in litigation, in preparation, extending on many different continents."
- "Throughout this entire year, I have tried to sit on the fence. There are times when I think it could be domestic. There are times when I think it is foreign. I don't know. I don't have enough information. I have not seen the powder. I don't have enough scientific evidence to make any sort of determination."

Dr. Meryl Nass, on the possibility that the anthrax toll may have been higher than officially reported – "One of my patient's sisters treated a case, and one of my cousins treated another with the classic rash, both postal workers in the New York metropolitan area. And several New York City postal workers died of unknown causes at the same time, which seems suspicious."

Dr. Martin Hugh-Jones (LSU), on the possible source of the anthrax – "I was hearing stories for a long time that Dugway had a virulent strain which they were using in field trials. My own model is that the Dugway strain was sent to Fort Detrick to be quality-tested and it was just hanging around the lab and someone pocketed it."

Don Foster, FBI forensic linguistics expert, on possible conflicts between the FBI and CIA over the investigation – "The CIA and FBI are sometimes seen as rivals. My anxiety is that the FBI agents assigned to this case are not getting full and complete co-operation from the US military, the CIA and witnesses who might have information."

7 October 2002

Statements

John Auerbach, Boston, MA Board of Health executive director, on communication during the outbreak – "We needed information. Every kind of government report that we needed was delayed. We were getting information

from journalists, for God's sake, not the CDC. There simply wasn't a good, accurate, timely internal communication system."

Dr. Julie Gerberding (CDC), on communication during the outbreak — "We made a decision at CDC that the people who needed information in order to effectively respond should be our priority.... As events wore on, it became clear that the CDC needed to be the primary source of scientific information. But once it was obvious to all that we needed to take the lead, we were in a reactive mode. And we are still catching up."

8 October 2002 Statements

Dr. James Hughes, NCID Director (CDC), on the overwhelming demand for anthrax testing – "It was a national problem. All the state public health laboratories were overwhelmed with specimens, hoaxes. It was even true internationally.... Surge capacity – imagine! If it was exhausted here at CDC – literally and figuratively – you can imagine what this means at the local level." Dr, Isaac Weisfuse, NYC Deputy Health Commissioner, on the overwhelming demand for testing – "...there were immediate problems. There was an expectation of instant analysis. Doctors wanted answers now. The volume of material far exceeded our capacity. The NYPD was bringing stuff in at all hours, say and night."

Dr. Marcelle Layton, head of the NYC Health Department's communicable disease section – "Communication is the key. And the issue that always comes up is: Who is in charge? There was no question who was in charge in New York City – it was the mayor."

APPENDIX B: GUIDE TO FREQUENTLY-OCCURRING FIGURES IN THE ANTHRAX CHRONOLOGY

John Ashcroft Attorney General of the United States

Dr. Anthony Fauci Director, National Institute of Allergy and Infectious

Diseases

Ari Fleischer White House Press Secretary

Dr. Julie Gerberding Acting Deputy Director, National Center for Infectious

Disease. Later Director of the Centers for Disease Control

and Prevention

Victor M. Glasberg Attorney for Steven J. Hatfill

Barbara Hatch-Rosenberg Director, Federation of American Scientists Chemical and

Biological Arms Control Project

Steven J. Hatfill Biodefense scientist, identified as a "person of interest" by

the investigation

Dr. D.A. Henderson Director, Johns Hopkins University Center for Civilian

Biodefense Studies, later Director of the Office of Public Health Preparedness (HHS) and Senior Science Advisor to

the Secretary of Health and Human Services

Dr. Martin Hugh-Jones Louisiana State University anthrax expert

Dr. Jeffrey Koplan Director of the Centers for Disease Control and Prevention

Dr. Scott Lillibridge Special Assistant to HHS Secretary for Bioterrorism

Dan Mihalko U.S. Postal Inspection Service spokesman Robert Mueller Director, Federal Bureau of Investigation

Dr. Michael Osterholm Director, University of Minnesota Center for Infectious

Disease Research and Policy, Special Advisor to the Office

of Public Health Preparedness (HHS)

Dr. Tara O'Toole Deputy Director, later Director, Johns Hopkins University

Center for Civilian Biodefense Strategies

Richard Spertzel Consultant and former chief UNCOM biological weapons

inspector

Tom Ridge Director, Office of Homeland Security

John Rowland Governor, Connecticut

Tommy Thompson Secretary of the Department of Health and Human Services

Dr. Ivan Walks Director, DC Department of Health

APPENDIX C: SOURCES CONSULTED

The Advertiser American Journal of Medicine The Atlanta Journal and Constitution The Arizona Republic The Associated Press The Australian The Baltimore Sun The Boston Globe The Boston Herald The Buffalo News Christian Science Monitor CNN.com The Courier Mail Daily News (New York) The Daily Telegraph (London) The Daily Telegraph (Sydney) Emerging Infectious Diseases Financial Times (London) Fort Worth Star Telegram FOXNews.com The Guardian (London) The Hartford Courant The Herald (Glasgow) The Herald Sun The Houston Chronicle *The Independent (London)* Insight on the News Journal of the American Medical Association The Los Angeles Times

The Miami Herald Milwaukee Journal Sentinel Morbidity and Mortality Weekly Report New England Journal of Medicine New Straits Times (Malaysia) The New York Times Newsday (New York, NY) Newsweek The Orlando Sentinel The Ottawa Citizen The Palm Beach Post Pittsburgh Post-Gazette The St. Louis Post-Dispatch St. Petersburg Times (Florida) The San Diego Union-Tribune The San Francisco Chronicle Science The Scotsman Star Tribune (Minneapolis) The Times (London) The Times-Picayune (New Orleans) Toronto Star USA Today The Washington Post The Washington Times The Wall Street Journal The Weekend Australian

The Weekly Standard

Internet Sites

UCLA School of Public Health, Department of Epidemiology Anthrax Site
http://www.ph.ucla.edu/epi/bioter/detect/antdetect_intro.html
Centers for Disease Control and Prevention Anthrax Information
http://www.bt.cdc.gov/agent/anthrax/anthraxgen.asp

APPENDIX D: ABBREVIATIONS

AFB Air Force Base

AMI American Media, Inc.

APHA American Public Health Association APWU American Postal Workers' Union

BOP Bureau of Prisons

CBW Chemical and biological warfare

CCBS Johns Hopkins University Center for Civilian Biodefense Strategies

CDC Centers for Disease Control and Prevention

CIA Central Intelligence Agency

CIDRAP University of Minnesota Center for Infectious Disease Research And

Policy

CSB&EI Saint Louis University Centers for the Study of Bioterrorism and

Emerging Infections

CSIS Center for Strategic and International Studies
CT DPH Connecticut Department of Public Health
DC DOH District of Columbia Department of Health
DHHS Department of Health and Human Services

DNA Deoxyribonucleic Acid
DOE Department of Energy
DOH Department of Health
DOJ Department of Justice

EPA Environmental Protection Agency
FAS Federation of American Scientists
FBI Federal Bureau of Investigation
FDA Food and Drug Administration

FEMA Federal Emergency Management Agency

FL DOH Florida Department of Health

HHS U.S. Department of Health and Human Services

JHU Johns Hopkins University

LD-50 Lethal Dose-50; The median lethal dosage for 50 percent of exposed,

unprotected individuals

LSU Louisiana State University

MIIS Monterrey Institute of International Studies
NASA National Aeronautics and Space Administration

NC DHHS North Carolina Department of Health and Human Services

NCID CDC National Center for Infectious Disease

NDU National Defense University

NIAID National Institute for Allergies and Infectious Diseases

NIH National Institutes of Health

NYC New York City

NYC DOH
NYMAPU
New York City Department of Health
NYMAPU
New York Metro Area Postal Union
NYPD
New York City Police Department
U.S. Office of Homeland Security

SAC Special Agent in Charge (FBI)

SAIC Science Applications International Corporation

SNL Sandia National Laboratory SRI Southern Research Institute

TIGR The Institute for Genomic Research

UN United Nations

UNSCOM United Nations Special Commission

USAMRIID United States Medical Research Institute for Infectious Diseases USAMRMC United States Army Medical Research and Materiel Command

USCP United States Capitol Police
USDA U.S. Department of Agriculture
USPIS U.S. Postal Inspection Service
USPS United States Postal Service
WHO World Health Organization