

GAO

Report to the Ranking Minority Member
Committee on Governmental Affairs
U.S. Senate

April 2003

U.S. POSTAL
SERVICE

Better Guidance Is
Needed to Improve
Communication
Should Anthrax
Contamination Occur
in the Future



GAO
Accountability • Integrity • Reliability

Highlights

Highlights of [GAO-03-316](#), a report to the Ranking Minority Member, Committee on Governmental Affairs, U.S. Senate

Why GAO Did This Study

In 2001, letters contaminated with anthrax resulted in 23 cases of the disease, 5 deaths, and the contamination of numerous U.S. Postal Service facilities, including the Southern Connecticut Processing and Distribution Center in Wallingford, Connecticut (the Wallingford facility). GAO was asked to address, among other matters, whether (1) the Postal Service followed applicable guidelines and requirements for informing employees at the facility about the contamination and (2) lessons can be learned from the response to the facility's contamination.

What GAO Recommends

To help prevent a reoccurrence of communication problems, GAO recommends that the Postal Service, OSHA, GSA, and the National Response Team—a group chaired by the Administrator of EPA and comprising 16 federal agencies with responsibilities for planning, preparing, and responding to activities related to the release of hazardous substances—work together to revise their existing guidelines or regulations to, among other things, require prompt communication of available test results, including quantitative results, to workers and others, as applicable. The Service, EPA, and GSA generally agreed with our recommendations, indicating that they would work together to revise their guidelines. OSHA did not comment on our recommendations.

www.gao.gov/cgi-bin/getrpt?GAO-03-316

To view the full report, including the scope and methodology, click on the link above. For more information, contact Bernard L. Ungar, (202) 512-2834, ungarb@gao.gov.

U.S. POSTAL SERVICE

Better Guidance Is Needed to Improve Communication Should Anthrax Contamination Occur in the Future

What GAO Found

The Wallingford facility first tested positive for anthrax in early December 2001. The contamination was found in samples collected from four mail-sorting machines in November. Analyses of the samples produced quantified results, including about 3 million anthrax colonies, or living anthrax cells, in one of the samples. While this was far more than the amount needed to cause death, none of the employees at the facility became sick from the anthrax contamination.

The Postal Service's decision not to inform workers about the number of anthrax colonies identified in December 2001 appears consistent with its guidelines because, according to the Service, it could not validate the results, as required. However, its subsequent decision not to release the results after an employee union requested all the facility's test results in January and February 2002, was not consistent with OSHA's requirement for disclosing test results that are requested. An OSHA investigation resulted in the Service's release of the quantitative test results in September 2002—about 9 months after the results were first known. Although OSHA did not issue a regulatory citation, it expressed concern about communication deficiencies.

In retrospect, the Service's decision not to release the quantitative test results in December 2001 was understandable given the challenging circumstances that existed at the time, the advice it received from public health officials, an ongoing criminal investigation, and uncertainties about the sampling methods used. However, numerous lessons can be learned from the experience, such as the need for more complete and timely information to workers to maintain trust and credibility and to help ensure that workers have essential information for making informed health decisions. Federal guidelines developed in 2002 by GSA and the National Response Team suggest that more—rather than less—information should be disclosed. However, neither the Service's guidelines nor the more recent federal guidelines fully address the communication-related issues that developed in Wallingford. For example, none of the guidelines specifically require the full disclosure of quantified test results. Likewise, OSHA's regulations do not require employers to disclose test results to workers unless requested, which assumes that workers are aware of the test results and know about this requirement.

Decontamination Efforts at the Wallingford, Connecticut, Facility



Source: U.S. Postal Service.

Contents

Letter		1
	Results in Brief	3
	Background	6
	Anthrax Contamination Was First Identified at Wallingford in December 2001 after an Extensive Multiagency Investigation	10
	Quantitative Test Results Were Provided to Workers in April 2002—but Not in December 2001	14
	Disclosure of Anthrax Test Results	19
	Lessons Learned at the Wallingford Facility Suggest the Need for More Complete and Timely Information to Workers	29
	Conclusions	34
	Recommendations for Executive Action	35
	Agency Comments and Our Evaluation	36
Appendix I	Objectives, Scope, and Methodology	45
Appendix II	Summary of Anthrax Testing at the Wallingford Facility between November 2001 and April 2002	48
Appendix III	Comments from the Environmental Protection Agency	51
Appendix IV	Comments from the U.S. Postal Service	53
Appendix V	Comments from the American Postal Workers Union	55
Table		
	Table 1: Summary of Sampling for Anthrax Contamination between November 2001 and April 2002 and the Associated Test Results	10

Abbreviations

CDC	Centers for Disease Control and Prevention
EPA	Environmental Protection Agency
FBI	Federal Bureau of Investigation
GSA	General Services Administration
HEPA	High Efficiency Particulate Air
HHS	Department of Health and Human Services
OSHA	Occupational Safety and Health Administration

This is a work of the U.S. Government and is not subject to copyright protection in the United States. It may be reproduced and distributed in its entirety without further permission from GAO. It may contain copyrighted graphics, images or other materials. Permission from the copyright holder may be necessary should you wish to reproduce copyrighted materials separately from GAO's product.



G A O

Accountability * Integrity * Reliability

United States General Accounting Office
Washington, DC 20548

April 7, 2003

The Honorable Joseph I. Lieberman
Ranking Minority Member
Committee on Governmental Affairs
United States Senate

Dear Senator Lieberman:

In September and October 2001, letters containing anthrax spores were mailed to news media personnel and congressional officials, leading to the first bioterrorism-related cases of anthrax in the United States.¹ The contaminated letters caused 23 illnesses and resulted in 5 deaths from inhalation anthrax and the contamination of numerous postal facilities. The U.S. Postal Service initially responded to this crisis by collecting and testing samples from over 280 of its facilities, including the Southern Connecticut Processing and Distribution Center in Wallingford, Connecticut (the Wallingford facility). The facility was first tested on November 11, 2001, and no contamination was found.

In late November 2001, the death of a Connecticut woman—1 of the 5 people who died—spurred an extensive investigation by a multiagency team to determine, among other things, how she had been exposed to anthrax. Believing that the woman may have died from exposure to mail that had been contaminated as it passed through the Wallingford facility, federal and state investigators conducted more extensive testing of the facility. Facility workers received antibiotics on November 21, 2001—the day that the elderly woman died. The antibiotics were provided as a precautionary measure, since the Postal Service’s earlier testing of the facility had not identified any contamination. At about the same time, the Postal Service also initiated a medical surveillance program to monitor the health of the facility’s employees. The investigative team sampled the facility on numerous occasions between November and December 2001 and, in early December, identified anthrax on four mail-sorting machines. Anthrax also was identified in areas above the mail-sorting machines in

¹Technically, the term “anthrax” refers to the disease caused by *Bacillus anthracis* and not the bacterium or its spores. In this report, we use the term “anthrax” for ease of reading and to reflect terminology commonly used in the media and by the general public.

April 2002.² On both occasions, the affected areas were decontaminated, while mail processing continued in other areas of the facility.

Perhaps because the facility's workers had been provided with antibiotics, none of the employees at the Wallingford facility became sick from anthrax. However, you requested that we review the Postal Service's disclosure of anthrax test results to the facility's workers. As agreed, in this report, we address (1) how and when contamination was identified at the Wallingford facility, (2) what and when information was communicated to facility workers, (3) whether the Postal Service followed applicable guidelines and requirements for informing facility workers about the contamination, and (4) whether lessons can be learned from the response to contamination at the facility. As agreed, our future work will compare the treatment of postal workers at the Wallingford facility with the treatment of employees at other postal facilities contaminated with anthrax in the fall of 2001.

To address our reporting objectives, we interviewed federal and state officials involved in investigating and responding to anthrax contamination at the Wallingford facility, including officials from the Postal Service's headquarters office, its Connecticut district, and the Wallingford facility; the Connecticut Department of Public Health; and numerous federal agencies. We also interviewed representatives of employees at the facility, including the national American Postal Workers Union and its Greater Connecticut Area Local Union. We discussed, among other matters, the officials' roles and involvement in responding to the crisis and lessons that can be learned from the response. We obtained and reviewed documentation related to the sampling and testing of the facility, including laboratory test results; information about when and how test results and associated health risks were communicated to facility workers; the Postal Service's guidelines for releasing and communicating test results; the Occupational Safety and Health Administration's (OSHA) regulatory requirements for disclosing test results to workers; more recent federal guidelines developed in 2002 by the General Services Administration (GSA) and the National Response Team—a group chaired by the Administrator of the Environmental Protection Agency (EPA) and comprising 16 federal agencies with responsibility for planning, preparing, and responding to activities related to the release of hazardous substance;

²The elevated areas of the facility—known as the “high bay”—include pipes, ducts, lights, joists, beams, and overhead conveyors.

and other documents related to the facility's contamination. Additional information on our scope and methodology appears in appendix I.

Results in Brief

Following a series of negative test results in November 2001, the Wallingford facility first tested positive for anthrax in early December. The positive results were found in samples collected from four mail-sorting machines on November 28, 2001. Subsequent analyses of the samples identified two quantitative results, including about 3 million colony-forming units of anthrax in a sample collected from one of the mail-sorting machines.³ This finding was far more than the 8,000 to 10,000 spores considered harmful, at that time, if inhaled in a fine powder form. Although district postal managers said they received written confirmation of the test results from the Chief Epidemiologist for the Connecticut Department of Public Health (Chief Epidemiologist) on December 10, 2001, available documentation indicates that Postal Service headquarters may have received the results 2 days earlier. In April 2002, after the mail-sorting machines had been decontaminated and returned to operation, anthrax was found in samples collected from areas above the machines. Following both the December 2001 and April 2002 test results, the contaminated areas were isolated and decontaminated and, thereafter, returned to operation.

On December 2, 2001—when anthrax contamination was first identified in the facility—Postal Service managers and a physician under contract with the Postal Service met with workers to inform them that “trace” amounts of anthrax had been found in samples collected on November 28. Knowing that the laboratory initially identified a small number (1 or 2 colony-forming units) of anthrax spores, the Chief Epidemiologist—who helped lead the investigation—told district postal managers that it would be accurate to use the term “trace” to describe the extent of contamination. On December 2, postal managers also relayed the Chief Epidemiologist's health-related recommendations to the facility's employees. For example, although the Chief Epidemiologist viewed the health risk as “minimal,” workers were advised, as a precautionary measure, to continue taking the antibiotics they received on November 21, 2001—the day that the Connecticut woman died from inhalation anthrax. On December 12,

³The term “colony-forming units” refers to the number of living cells in a sample and is typically reported per gram of material sampled for High Efficiency Particulate Air vacuum samples and per square inch for samples collected using wipes.

2001—2 days after district postal managers said they received written confirmation of the presence of about 3 million spores in a sample collected on November 28 and, possibly, 4 days after headquarters postal managers received the results—postal managers once again relayed the Chief Epidemiologist’s views and health-related recommendations to employees at the facility. Specifically, district postal managers told us that they informed workers that, while trace amounts of anthrax existed on three mail-sorting machines, a “concentration” of spores had been identified in a sample collected from a fourth machine. Although the extent of contamination was much greater than initially believed, following the assurances of the Chief Epidemiologist, postal managers said they informed workers that there was “no additional risk” to employees because all of the steps needed to protect them had already been taken. In April 2002, the Postal Service provided employees with the actual quantitative test results (1 to 18 colony-forming units) from the samples collected in April from areas above the previously contaminated mail-sorting machines.

Although the Postal Service’s communication of anthrax test results appears consistent with its guidelines, its decision not to provide the December 2001 quantified results (i.e., the number of colony-forming units found in the positive samples)—after being requested to do so by an employee union—did not satisfy OSHA’s disclosure requirements. The Postal Service generally provided the facility’s test results to workers within 1 day of receiving the test results. Such timely disclosure is consistent with the Postal Service’s guidelines to notify workers “as soon as possible.” However, for a period of 2 days, district managers delayed informing the facility’s workers about the documented test results that the district postal managers received on December 10, 2001. According to the Postal Service, the additional time was needed to obtain advice from public health officials about the meaning of the results, particularly the result indicating the presence of about 3 million spores in a sample collected from one mail-sorting machine. According to Postal Service managers, the December 2001 decision not to release the quantitative results—even after being requested to do so by a union leader—was also consistent with the Postal Service’s guidelines because, according to the managers, the Postal Service could not ensure that the sampling had been done in accordance with procedures specified in its guidelines, and, thus, it could not validate the results, as required by its guidelines. However, the Postal Service’s decision not to release the December 2001 quantitative test results after a union leader requested all of the facility’s test results on January 29, 2002, and February 6, 2002, was not consistent with OSHA’s regulations for disclosing test results that are requested by workers or

their designated representatives. OSHA's regulations require employers to disclose test results within 15 working days of the request or explain the delay and provide the requester with a time frame for releasing the results. OSHA's subsequent investigation into this matter resulted in the Postal Service's release of the December 2001 quantitative test results in September 2002—more than 7 months after the union leader first requested the results and about 9 months after the test results were known by the Postal Service. OSHA did not cite the Postal Service for not disclosing the quantitative test results earlier; however, in an October 7, 2002, letter to the Postal Service, OSHA noted that a “failure to effectively communicate issues which can have an effect on a worker's health and safety, can lead to fear and mistrust.”

While the Postal Service's decision not to release the quantitative test results in December 2001 is understandable given all of the circumstances that existed at the time, the lessons learned from this experience suggest the need for more complete and timely information to workers to maintain trust and credibility. Officials from OSHA and members of the investigative team did not specifically fault the Postal Service for not releasing the quantified results when they were first known in December 2001. However, they said full and timely disclosure of test results is the best method for communicating with employees and others. Two federal guidelines developed in 2002 by GSA and the National Response Team suggest that more—rather than less—information should be disclosed. For example, GSA's guidelines emphasize the need for “timely, clear, consistent, and factual” information, including any limitations associated with the information, so that people can make informed decisions. The other set of guidelines, developed by the National Response Team, warns agencies not to withhold information because it could affect the agency's credibility. However, neither the Postal Service's guidance nor the more recent federal guidelines fully address the anthrax communication-related issues that developed at the Wallingford facility. For example, none of the guidelines specifically require the full disclosure of all test results, including quantitative test results. Likewise, OSHA's regulations for communicating test results to workers do not address the need for full, immediate, and proactive disclosure. We are making several recommendations to minimize the likelihood that the communication-related problems at the Wallingford facility will reoccur elsewhere.

The Postal Service, EPA, and GSA generally agreed with our findings and recommendations and indicated that they would work together to revise their respective guidelines. The union also agreed with our recommendations to better coordinate communication between federal

agencies when events occur. However, the union said that our report did not adequately reflect the union’s perspective of the facts and that a number of our conclusions were not supported by the facts. We disagree. We believe that our conclusions are fully supported by the evidence presented in this report and that the report presents a fair, objective, and balanced depiction of the facts as best we could determine them.

Background

Anthrax is an acute infectious disease caused by the spore-forming bacterium called *Bacillus anthracis*. Anthrax is found in the soil in many parts of the world and forms spores (like seeds) that can remain dormant in the environment for many years. Anthrax can infect humans; however, the disease occurs most commonly in herbivores.⁴

Human anthrax infections are rare in the United States and have normally resulted from occupational exposure to infected animals or contaminated animal products, such as wool, hides, or hair. Infection can occur in three forms: (1) cutaneous, usually through a cut or an abrasion;⁵ (2) gastrointestinal, by ingesting undercooked contaminated meat; and (3) inhalation, by breathing aerosolized anthrax spores into the lungs. Aerosolization occurs when anthrax spores become airborne, thus enabling a person to inhale the spores into the lungs. Symptoms depend on how the disease is contracted and, on the basis of experiences in the fall of 2001, are now thought by medical experts to typically appear within 4 to 6 days of exposure, although individuals have contracted the disease as long as 43 days after exposure. The disease can be treated with a variety of antibiotics and is not contagious.

Persons who come in contact with anthrax spores are described as having been “exposed.” Depending on the extent of contamination and its form, a person can be exposed without developing the disease. Anthrax spores are dormant cells that can germinate and, if viable, replicate under suitable environmental conditions, such as in the human body. A person can die if the anthrax spores grow and the bacteria multiply and spread throughout the body. There is a range of laboratory tests for detecting anthrax in a

⁴Herbivores are animals that eat plants.

⁵Cutaneous means of, relating to, or affecting the skin. Cutaneous anthrax is characterized by lesions on the skin.

person's body and in the environment. Laboratories report anthrax test results either qualitatively (e.g., as "positive" or "negative") or quantitatively (e.g., as a specific number of colony-forming units per gram or square inch of material sampled or in milligrams per microliter).

Before the fall of 2001, outbreaks of inhalation anthrax in the United States had been linked mainly to occupational exposure. However, according to the Centers for Disease Control and Prevention (CDC), there was a release of anthrax in 1979 from a military bioweapons facility in Sverdlovsk in the Former Soviet Union. The release of anthrax, which had been prepared in a powder form, reportedly caused the death of 66 people and demonstrated the lethal potential of aerosolized anthrax as a weapon.⁶

Because so few instances of inhalation anthrax have occurred, scientific understanding about the number of spores needed to cause the disease is still evolving. According to the contract physician responsible for providing medical advice to postal employees at the Wallingford facility in the fall of 2001, her literature search revealed that a person would need to inhale 8,000 to 10,000 spores to contract the disease.⁷ However, given that anthrax spores were never discovered in the Connecticut woman's home or places that she frequented,⁸ experts we consulted now believe that the number of spores needed to cause inhalation anthrax could be very small, depending on a person's health status and the aerosolization capacity of the anthrax spores.

The Postal Service's infrastructure includes, in part, its headquarters office in Washington, D.C.; 8 area offices; the Capital Metro Operations office; approximately 350 mail processing and distribution centers, including the Wallingford facility; and about 38,000 post offices, stations, and branches. The area offices are further divided into 85 postal districts throughout the United States, including the Connecticut district in Hartford, which oversees operations at the Wallingford facility. The Wallingford facility is

⁶The last cases of anthrax from this release occurred 43 days after the individuals' exposure.

⁷According to CDC, the estimate of 8,000 to 10,000 spores is from a Department of Defense, Defense Intelligence Agency publication entitled *Soviet Biological Warfare Threat*, DST-161OF-057-86 (Washington, D.C.: 1986).

⁸In commenting on our draft report, EPA noted that anthrax spores also were not found in the home or workplace of a female hospital worker who died from inhalation anthrax in October 2001 in New York City.

operated by a facility manager and is under the jurisdiction of the District Manager in Hartford.

On or about October 9, 2001, at least two letters containing anthrax spores entered the U.S. mail stream—one was addressed to Senator Thomas Daschle, the other to Senator Patrick Leahy. Before being sent to the Brentwood facility in Washington, D.C.—the facility that processed mail to the Senators—the letters were processed on high-speed mail-sorting machines at a postal facility in Hamilton, New Jersey. The Hamilton facility—also known as the Trenton postal facility—processed mail that was to be transported to Wallingford for further processing.⁹

The Wallingford facility covers about 350,000 square feet and has over 1,100 employees. The facility handles nearly 3 million pieces of mail per day and operates 24 hours a day with employees who work one of three 8-hour shifts. Two unions—the Greater Connecticut Area Local American Postal Workers Union, in New Haven, Connecticut, and the Mail Handlers Union in Boston, Massachusetts—represent workers at the facility.

In October 2001, the Postal Service established a Unified Incident Command Center (the Command Center) in Washington, D.C., to, among other things, manage the Postal Service's response to anthrax contamination in its facilities. The Command Center was staffed by Postal Service employees and supported by several agencies, including EPA; CDC; the U.S. Army Corps of Engineers; the U.S. Postal Inspection Service; OSHA; and the Federal Bureau of Investigation (FBI).

On November 20, 2001, a team of representatives from state and federal government agencies with responsibilities for law enforcement (the Connecticut State Police and the FBI); environmental safety (the Connecticut Department of Environmental Protection); public health (the Connecticut Department of Public Health, local health departments, and CDC); and the Postal Service was formed to investigate and formulate the public health response to the case of the elderly woman who contracted and subsequently died from inhalation anthrax. The Chief Epidemiologist

⁹Two other contaminated letters were sent to a television news anchor and the editor of *The New York Post* in New York City on or around September 18, 2001. Although the letters were processed through the Hamilton/Trenton facility, it is not known whether the letters contaminated the Wallingford facility.

for the Connecticut Department of Public Health (Chief Epidemiologist),¹⁰ an on-site CDC team leader, and a CDC team leader in Atlanta, jointly led the on-site investigation team. The team communicated with one another largely through twice-daily confidential telephone conference calls during which information was shared, possible actions were discussed, and decisions were made. Once contamination was identified in the Wallingford facility, a facility-specific response team was formed consisting of the National Institute for Occupational Safety and Health, the Agency for Toxic Substances and Disease Registry, and CDC—all within the Department of Health and Human Services (HHS); the Corps of Engineers; the Postal Service; EPA; and the Connecticut Department of Public Health. The team was led by the Postal Service's Command Center. OSHA—an agency within the Department of Labor that enforces safety and health standards in the workplace—was not part of the response team.

The Postal Service requested and the investigative team agreed that the Postal Service would be the sole party responsible for communicating test results and other information to the workers at the facility. In this regard, the physician under contract with the Postal Service informed the facility's workers that, according to her research, inhalation of 8,000 to 10,000 spores would likely be needed to cause inhalation anthrax.

¹⁰Epidemiology is a branch of medical science that investigates the incidence, distribution, and control of disease in a population.

Anthrax Contamination Was First Identified at Wallingford in December 2001 after an Extensive Multiagency Investigation

The Wallingford facility was tested on numerous occasions between November 2001 and April 2002 (see table 1). The first sampling was performed by a Postal Service contractor on November 11, 2001, as part of the Postal Service’s effort to identify facilities that may have been contaminated with anthrax. The contractor collected 53 samples using dry swabs.¹¹ The laboratory found no contamination and provided the negative results to Postal Service managers on November 14. A second Postal Service contractor sampled the facility on November 21, 2001—the day the Connecticut woman died. The 64 samples, collected using dry swabs, tested negative, and the results were verbally provided to Postal Service officials on November 23. (App. II summarizes additional information about sampling at the facility, including the dates of the samples, the agencies involved in the sampling, the date and content of information provided to workers. This appendix also provides information about decontamination activities at the facility.)

Table 1: Summary of Sampling for Anthrax Contamination between November 2001 and April 2002 and the Associated Test Results

Sampling date	Type (Number of samples)	Result	Agency that collected the samples ^a
11/11/01	Dry swabs (53)	Negative	Postal Service
11/21/01	Dry swabs (64)	Negative	Postal Service
11/25/01	Wet swabs (60)	Negative	CDC
11/28/01	Wet wipes and HEPA vacuums (212)	Positive	CDC
12/02/01	Wet wipes (200)	Positive	CDC
4/21/02	HEPA vacuums (101)	Positive	Postal Service

Sources: GAO (summary) and Postal Service and CDC (data).

Legend

CDC – Centers for Disease Control and Prevention
 HEPA – High Efficiency Particulate Air

^aThe Postal Service used a contractor; CDC was assisted by the Agency for Toxic Substances and Disease Registry.

Following confirmation on November 20, 2001, that the elderly Connecticut woman had contracted inhalation anthrax, the multiagency

¹¹Swabs can be either wet or dry and have small surface areas (similar to Q-tips®). Swabs are typically used to sample small, nonporous surface areas (less than 100 sq. cm) that do not have a large accumulation of dust. Depending upon the circumstances, wet swabs may attract more particles of sample material than dry swabs.

state and federal investigative team targeted mail as one possible source of her exposure. Having found no contamination at the Wallingford facility or at the woman's home and other places she frequented in the 2 months preceding her death, CDC and the Agency for Toxic Substances and Disease Registry resampled the facility on November 25, 2001, using wet swabs—not dry swabs. These 60 samples also tested negative. The laboratory informed the Chief Epidemiologist of the results, and he, in turn, called district postal managers to relay the results.

Determined to ascertain the role that mail may have played in the woman's exposure to anthrax, on November 28, 2001, CDC and the Agency for Toxic Substances and Disease Registry, with the full support of the Postal Service, performed what officials termed a "targeted" and "extensive" sampling of the facility. The team collected 212 samples, the majority of which were from machines that could have been used to process mail to the deceased woman's home. The team also used different collection methods than had been used earlier—that is, the team collected samples using two methods: wet wipes and HEPA vacuums rather than dry swabs or wet swabs alone.¹² The use of these sampling methods resulted in the identification of anthrax on 4 of the facility's 13 mail-sorting machines.

The Chief Epidemiologist first knew the results of the November 28, 2001, sampling effort on December 2, when samples collected from three of the mail-sorting machines tested "positive" for anthrax. Shortly thereafter, a fourth machine—which also had been sampled on November 28, 2001—also tested positive for anthrax.¹³ The laboratory analyzed the November 28, 2001, samples and provided two quantified results. The results indicated that although all four of the machines were contaminated, one of the machines was heavily contaminated. Specifically, on the basis of the laboratory's quantified results, the Chief Epidemiologist identified 2.9 million colony-forming units of anthrax—about 3 million spores—in a sample of 0.55 grams of material (dust) collected from the heavily

¹²Wet wipes are sterile gauze pads, approximately 3 inches square. Wet wipes are typically used for sampling larger (more than 100 sq. cm), nonporous surface areas.

¹³This machine was suspected of being positive for anthrax on December 2, but that suspicion was not confirmed until later.

contaminated machine.¹⁴ A second sample identified 370 colony-forming units per gram of material collected from another mail-sorting machine. The two samples were collected using HEPA vacuums.¹⁵

The laboratory e-mailed the quantitative results to CDC officials and the Chief Epidemiologist on December 6. After subsequent discussions with the laboratory concerning the results as well as related discussions over the next few days with members of the investigative and response teams, the Chief Epidemiologist faxed the results on December 9 to the Postal Service's district Human Resource Manager, who, according to the manager, received them on December 10. Precisely when Postal Service headquarters and district managers first became aware of the quantified test results is unclear. According to CDC officials and the Chief Epidemiologist, they began discussing the quantitative results with team members, which they believe included a district postal manager, on December 6, 2001. However, district postal managers said that they were not involved in discussions about the quantitative results until December 9. District postal managers confirmed that the Chief Epidemiologist faxed the quantitative results to the district on December 9 (a Sunday) and that district postal managers received the fax on December 10. However, a chronology of the events prepared in January 2002 by Postal Service employees and shared with CDC indicates that postal managers at headquarters may have received the documented results on or about December 8, 2001. We discussed the chronology with postal headquarters managers in March 2003 and they told us that, according to their recollections, there were errors in the chronology that were not corrected. They also said that they do not otherwise recall precisely when they received the documented quantitative results. Absent definitive documentation of when Postal Service headquarters received the test results and documentation of the discussions between public health and

¹⁴The sample collected 0.55 grams of material (dust) from the heavily contaminated machine. The laboratory adjusted its analyses to reflect a full gram of sample and reported the presence of 5.5 million colony-forming units per gram of material sampled. The Chief Epidemiologist subsequently determined, through extrapolation, that the 0.55 grams of material sampled contained approximately 2.9 million colony-forming units of anthrax. According to the Chief Epidemiologist, this finding was equivalent to about 3 million spores. In this report, we refer to the 2.9 million colony-forming units for the 0.55 grams of material actually sampled.

¹⁵The number of colony-forming units was not provided for any of the other positive samples. The other samples were collected using wet wipes, which, according to the Chief Epidemiologist, did not allow for measuring the amount of dust collected.

postal managers, we were unable to determine when Postal Service headquarters managers first learned of the quantitative test results.

On December 9, 2001, the Chief Epidemiologist also relayed the results of other samples collected at the facility. The samples were collected on December 2—hours before the four contaminated mail-sorting machines were to be enclosed and decontaminated—by CDC and the Agency for Toxic Substances and Disease Registry. The 200 samples were collected using wet wipes to establish the extent of contamination on the machines. The results identified unspecified amounts of contamination (i.e., “positives”) on (1) 30 of 52 samples collected from the heavily contaminated machine, (2) 3 of 52 samples from a second machine, and (3) 1 of 48 samples from each of the two other mail-sorting machines.

A Postal Service contractor under the guidance of CDC and the Corps of Engineers decontaminated the four mail-sorting machines. To test the effectiveness of the decontamination, follow-up samples were collected between December 7 and December 18, 2001. The laboratory informed the Chief Epidemiologist of the negative results on December 20. The Chief Epidemiologist relayed the results to district postal managers who, shortly thereafter, returned the machines to operation. The facility remained open throughout the period in part because, according to public health officials, there was no evidence that the anthrax was airborne, workers had already received antibiotics, no one had contracted the disease, and action had already been taken to isolate the contaminated machines from workers on December 2, 2001—the day that anthrax contamination was first reported.¹⁶

On April 21, 2002, a Postal Service contractor, in consultation with CDC, OSHA, EPA, and the Connecticut Department of Public Health, sampled areas above the previously contaminated machines using HEPA vacuums. The sampling was performed because of a Postal Service requirement for testing prior to the routine cleaning of elevated areas in facilities that had previously tested positive for anthrax. The effort was undertaken to protect workers from the possibility of exposure to spores that may have blown into these areas as a result of the Postal Service’s prior use of compressed air to clean its facilities. The laboratory relayed the results

¹⁶According to the contractor’s report on the decontamination, the mail-sorting machines were enclosed in “6-mil polyethylene sheeting” supported by wood frames. Further, according to the report, air filtration devices, with exhausts to the outside, were installed to maintain negative air pressure inside each of the four enclosures.

from the April 21 sampling effort to district postal managers on April 24. The results revealed from 1 to 18 colony-forming units in 3 of 101 samples collected from the elevated areas.¹⁷ The contaminated areas were subsequently encapsulated and decontaminated. A Postal Service contractor collected follow-up samples to test the effectiveness of the decontamination between May 1 and June 3, 2002. The laboratory reported negative results in all of the samples directly to district postal managers on June 6 and, on June 7, the facility was returned to full operation.¹⁸

Quantitative Test Results Were Provided to Workers in April 2002—but Not in December 2001

The Postal Service typically provided nonquantitative (i.e., “positive” or “negative”) results from samples collected between November 2001 and April 2002 to employees on each of the facility’s three work shifts. The specific content of the information disclosed varied. The Postal Service began communicating the results of the first samples—which were collected on November 11, 2001—on November 15, the day after the Postal Service received the negative results. The Facility Manager informed supervisors and union officials of the results, and the supervisors, in turn, informed employees at the facility. According to a district manager, the test results also were posted on designated bulletin boards at the facility. The Postal Service began relaying the results of the November 21, 2001, sampling effort, which were also negative, to employees in a briefing on November 23, the day that district postal managers were notified of the results. On November 27, the day that district managers received the results from the third sampling done on November 25, 2001, the Facility Manager once again began briefing employees about the negative results.

According to district postal managers, they began informing employees about contamination at the facility on December 2, 2001, the same day they learned that the facility was contaminated. The positive results were identified from samples collected on November 28, 2001, and were relayed to district postal managers in a telephone call from the Chief Epidemiologist. The Chief Epidemiologist met with district postal facility managers, union representatives, and a physician under contract with the Postal Service on December 2, 2001, to discuss the results. District postal

¹⁷Specifically, the test results indicated (1) 1 colony from 7.50 grams of material sampled, (2) 10 colonies and 11 colonies from 7.69 grams of material sampled, and (3) 13 colonies and 18 colonies from 5.67 grams of material sampled.

¹⁸During the period of decontamination, many of the facility’s mail processing operations were transferred to other postal facilities.

managers told us that no documentation of the meeting exists; however, according to several of the individuals present, the Chief Epidemiologist described the extent of contamination as “trace” amounts on three mail-sorting machines.¹⁹ According to the Chief Epidemiologist, although the laboratory initially reported only a positive finding, his subsequent discussions with laboratory personnel indicated that the samples contained “one or two” colony-forming units of anthrax. Thus, he said, he used the term to denote a small amount of contamination. Also, he said, “trace” seemed appropriate given the number of sampling efforts undertaken before any contamination was found in the facility.

According to officials present at the December 2, 2001, meeting, they pressed the Chief Epidemiologist about any possible risk to workers at the facility and were assured that for a variety of reasons, there was no additional health risk. First, as a precautionary measure, workers had been provided antibiotics on November 21, the day the Connecticut woman died from inhalation anthrax. Second, even if workers had not chosen to take the antibiotics, the results of the Postal Service’s medical surveillance program indicated that none of the facility’s workers had contracted the disease. Further, in the view of the Chief Epidemiologist and CDC officials, workers were not expected to contract the illness because the contamination was found weeks after what public health officials considered the likely incubation period for the disease.²⁰ Third, the contaminated machines were being isolated and decontamination was scheduled to begin the next day. Fourth, there was no evidence that the anthrax was airborne because no spores had been found in the facility’s heating, ventilating, and air conditioning systems. Finally, related to this last issue, the Chief Epidemiologist told us that the likelihood of spores being blown within the facility (becoming airborne) had been greatly reduced by the Postal Service’s decision on October 23, 2001, to stop using compressed air to clean its facilities. Nevertheless, as a precautionary

¹⁹As previously discussed, a fourth machine also tested positive for anthrax on the basis of samples collected on November 28, 2001. However, the positive results were not confirmed until after December 2, 2001.

²⁰Although individuals have contracted inhalation anthrax 43 days after their exposure to the disease, according to the Chief Epidemiologist and CDC literature, individuals exposed in the 2001 anthrax incidents typically contracted inhalation anthrax within 4 to 6 days. In the view of public health officials, the letters to Senators Daschle and Leahy entered the mail stream on or about October 9, 2001—weeks before contamination was identified at the facility and, thus, well after the period they viewed as the likely period of maximum risk of exposure to the disease.

measure, the Chief Epidemiologist recommended that the Postal Service advise facility workers to continue taking antibiotics.

According to district postal managers, after their December 2, 2001, meeting with the Chief Epidemiologist; the physician and postal managers, including the Facility Manager, began briefing employees on each of the facility's three shifts. The managers relayed the Chief Epidemiologist's views that there was no additional health risk associated with the test results. According to the managers, they also informed workers about planned actions to remediate the contamination.²¹

As previously discussed, district postal managers recall being notified of the quantitative test results on December 9, 2001, which is the date they told us that the Chief Epidemiologist first called them to relay the results of additional laboratory analyses that he and CDC had received on December 6, 2001. The results were from the two samples collected on November 28, 2001, including the sample involving 2.9 million colony-forming units per 0.55 grams of sample material (dust) collected from one of the four contaminated mail-sorting machines. The Chief Epidemiologist told us that he discussed the results with laboratory personnel and, after these discussions, concluded that the results revealed the presence of "about 3 million spores." According to district postal managers, the test results were discussed at length in teleconferences between them, the Chief Epidemiologist, and other members of the investigation team on December 9 and 10. District postal managers said that they were concerned about the test results and asked whether the facility's employees were at risk. Although we were told that no documentation exists about the advice the Postal Service received at the time, according to district postal managers, the Chief Epidemiologist informed them that there was "no additional risk" to employees for the same reasons previously cited—the contaminated machines had already been isolated and were being decontaminated; the anthrax was not believed to be airborne; employees at the facility had already been offered antibiotics; and, in the view of public health officials, the incubation period for the

²¹The Postal Service also issued a statement to the news media on December 2, 2001. Referring to the November 28 sampling, the press release stated that "trace amounts" of anthrax had been identified on three mail-sorting machines in the facility. The press release quoted the Connecticut Commissioner of Public Health as saying that, "This is a very small amount of anthrax." The press release further indicated that, according to public health officials, the contamination posed "no health risk" to postal employees or their customers, in part because the machines had already been isolated and were to be decontaminated.

disease had already passed without illness. Nevertheless, as a precautionary measure, the Chief Epidemiologist recommended that the Postal Service managers advise workers to continue taking their antibiotics. CDC concurred with the Chief Epidemiologist's recommendation and assessment about the health risk.

According to participants in the teleconferences, they also discussed how to communicate the quantitative test results to workers at the facility. As a result of these conversations, we were told, the participants agreed that using the term "trace"—after the finding of about 3 million spores in a sample from one of the four mail-sorting machines—was no longer appropriate in describing the extent of contamination at the facility. As a result, district managers asked the Chief Epidemiologist how the results could be communicated to employees and others. According to district postal managers, the Chief Epidemiologist advised them that it would be accurate to characterize the contamination as a "concentration of spores" on one mail-sorting machine and "trace" amounts on three others. The Chief Epidemiologist agreed that he used the terms "trace" and "concentration" to describe contamination at the facility. However, he subsequently informed us that he did not provide a single description of the extent of contamination in the facility but, instead, told postal managers that this was one way to discuss the extent of contamination to facility workers. According to the Chief Epidemiologist, it was up to the Postal Service to determine how to communicate the test results. A district postal manager told us that he relayed information about the concentration of spores in the facility—one of the interpretations provided by the Chief Epidemiologist—to the Facility Manager, without any information about the actual quantitative results. The Chief Epidemiologist and district postal managers agree that they never discussed whether the Postal Service should disclose the quantified test results to employees.

According to the Chief Epidemiologist, at the invitation of district postal managers, he met with facility managers and union leaders on December 12 to discuss the test results and to answer questions about his health recommendations.²² The terms "concentration of spores" and "heavily contaminated machine" were used, he said, but no quantitative results were presented or discussed. Union representatives and Postal Service

²²In commenting on our draft report, postal headquarters officials also indicated that, on December 12, 2001, the District Manager and the Inspector in Charge for the Northeast Area met with the Chief Epidemiologist, the Commissioner of the Connecticut Department of Public Health, and the Connecticut Governor and his staff.

officials we spoke to do not recall this meeting. However, district postal managers issued a press release on December 12 containing the terminology that the Chief Epidemiologist said he had used. Further, district postal managers told us that supervisors on each of the facility's three work shifts began relaying the Chief Epidemiologist's views and health-related recommendations directly to the facility's employees on December 12. Union representatives told us that they did not recall any supervisory briefings on December 12.²³ Although no documentation of these briefings is available, postal headquarters officials said that the December 12 press release would have been made widely available per the Service's standard operating procedures and that a local Connecticut newspaper reported the information contained in the press release on December 13.

According to the district managers, during follow-up testing later that month, workers were routinely advised of the qualitative (e.g., negative/positive) test results when the Postal Service received them from the laboratory. Beginning on December 20, 2001, workers were briefed that all of the follow-up samples had tested negative for contamination. On December 21, the Postal Service issued a press release stating that the four mail-sorting machines had been completely decontaminated and returned to service.

In contrast to its actions in December 2001, the Postal Service fully released all test results related to its April 21, 2002, sampling of the facility's elevated areas. An OSHA official involved in sampling the facility's elevated areas—OSHA was not involved in December 2001—recommended immediate disclosure of all of the results. The results, which included the finding of from 1 to 18 colony-forming units in several samples, were provided to union representatives in a meeting on April 24, the same day that postal managers were notified of the results. Later that day, facility managers and the Chief Epidemiologist began briefing employees about the results, indicating that 3 of 101 samples collected from 71 locations were contaminated.²⁴ According to the President of the

²³The President of the Greater Connecticut Area Local American Postal Workers Union indicated that there is no record or evidence indicating that the union leadership or workers were ever advised about the change in the level of contamination from "trace amounts" to a "concentration of spores" on one of the mail-sorting machines.

²⁴According to the Chief Epidemiologist and district postal managers, the Chief Epidemiologist also informed workers about the December 2001 quantified results, including the finding of about 3 million spores on one mail-sorting machine.

Greater Connecticut Area Local American Postal Workers Union, the quantitative results were also posted on bulletin boards in the facility. There is little documentation of these briefings or the advice that the Postal Service received from public health officials. However, we were told that postal managers relayed the views and recommendations of the Connecticut Department of Public Health officials, who had advised them that there was no immediate health risk to workers and, therefore, that the employees would not need to take antibiotics. This decision was based, in part, on the view that the contaminated areas had already been isolated and, in consultation with CDC, OSHA, and EPA, were to be decontaminated. The managers also assured workers that testing would be performed to ensure that no contamination was present before the areas were returned to operation.²⁵ The elevated areas were resampled in a series of tests and, on June 6, 2002, the final laboratory report indicated that all samples were negative for anthrax. Postal Service managers met daily with union representatives to provide and discuss test results and the status of decontamination efforts. The Postal Service posted the final results on bulletin boards in the facility on June 7, informing employees that decontamination had been completed.

Disclosure of Anthrax Test Results

Consistent with its guidelines, the Postal Service generally provided the facility's test results to workers within 1 day of receiving the results. The one exception to this practice involved the December 2001 quantitative test results. In this case, there was a delay of at least 2 days between the date that the Postal Service received documentation of the quantified test results and the date that it notified its workers about the "concentration of spores" on one mail-sorting machine. It is not clear precisely when in December 2001 the Postal Service first received the documented test results. While the Postal Service informed workers of the results in a qualitative manner, it did not disclose the actual quantitative results to workers until September 2002. The Postal Service's decision not to release the quantitative test results in December 2001 appears to have been consistent with its guidelines because the sampling methods used could not be validated, as required. However, its decision not to release the December 2001 quantitative test results in response to two requests by a local union leader in January 2002 and February 2002 was not consistent with OSHA's regulations for disclosing test results that are requested by workers or their designated representatives. OSHA's subsequent

²⁵The Postal Service also issued a press release communicating similar information.

investigation into this matter resulted in the Postal Service's release of the December 2001 quantitative test results in September 2002—more than 7 months after the union leader first requested the results and about 9 months after the results were first known by the Postal Service. OSHA did not cite the Postal Service for its decision not to disclose the results earlier; however, in a October 7, 2002, letter to the Postal Service, OSHA noted that a “failure to effectively communicate issues which can have an effect on a worker's health and safety, can lead to fear and mistrust.”

The Postal Service's Release of the December 2001 Test Results Appears Consistent with Its Guidelines

Following the anthrax contamination of several postal facilities, the Postal Service, in consultation with public health and other organizations that were members of the Postal Service's Command Center, issued—in December 2001—policies and procedures for, among other things, releasing and communicating anthrax test results.²⁶ The guidelines specify, among other things, how and when test results will be communicated to employees and the public. The guidelines state that results cannot be released until confirmed data are received from CDC or a state public health laboratory. Also, all confirmed data have to be validated before being sent to the Command Center.²⁷ Once data are confirmed and validated, the guidelines state that the Manager of the Command Center is to release the data to affected district and facility managers, the affected state health department(s), and the CDC liaison at the Command Center. According to the guidelines, when a Facility Manager receives the results, he or she is to ensure that employees, union representatives, and other affected parties are notified “as soon as possible.” An earlier version of the guidelines, dated November 16, 2001, has identical requirements.

The Postal Service, with one exception, began disclosing the laboratory test results for samples collected from the facility within 1 day of receiving the qualitative results. Such prompt disclosure is consistent with the Postal Service's guidelines, which require facility managers to notify workers of sample results “as soon as possible” if the results are confirmed and validated. The one exception to this practice appears to

²⁶U.S. Postal Service, *Interim Guidelines for Sampling, Analysis, Decontamination, and Disposal of Anthrax for U.S. Postal Service Facilities* (Dec. 4, 2001). The guidelines were developed as the anthrax crisis unfolded with input and guidance from several federal agencies, including CDC and OSHA, and the national unions that represent postal workers.

²⁷The Postal Service's guidelines do not define the meaning of the terms “confirmed” and “validated.”

have occurred after the Postal Service received written confirmation of the results from the two quantified samples collected on November 28, 2001. According to district postal managers, they began relaying the results to facility workers on December 12, 2001—2 days after district postal managers said they first received written confirmation of the laboratory’s quantified results from the Chief Epidemiologist. District postal managers provided several reasons for their 2-day delay in notifying workers of the results.²⁸ First, they said they needed time to consult with public health officials from Connecticut’s Department of Public Health and CDC about (1) the meaning and implications of the quantitative results and (2) how to describe the results and associated health risks to employees at the facility. Second, the managers said that they needed additional time to obtain advice from Postal Service headquarters and to draft a press release. Although the district did not receive the quantitative results until December 10, as previously discussed, a chronology of events prepared in January 2002 by Postal Service employees and shared with CDC indicates that postal managers at headquarters may have received the documented results on or about December 8, 2001—4 days before workers were informed of the test results.²⁹ The length of the delay in informing workers cannot be specifically determined because postal headquarters managers do not recall when they first obtained the written test results.

According to Postal Service managers, the decision to withhold the actual quantified results from facility workers also was consistent with the guidelines because the Postal Service could not ensure that the contractor’s sampling procedures were consistent with the procedures and protocols specified in the guidelines. As a result, according to the Postal Service, it was unable to validate the results as required by its

²⁸ Although the Postal Service began relaying information about the concentration of spores on one machine on December 12, we were unable to determine whether the Postal Service also relayed the specific results of samples collected on December 2. As discussed in appendix II, the Postal Service received these results on or around December 9. The results identified unspecified amounts of contamination (i.e., “positives”) on (1) 30 of 52 samples collected from the heavily contaminated machine, (2) 3 of 52 samples from a second machine, and (3) 1 of 48 samples from each of the two other mail-sorting machines.

²⁹ As previously discussed, in March 2003, postal headquarters managers told us that there were errors in this chronology that they believe were not corrected and that they do not recall precisely when they received the documented results. Absent definitive documentation of when Postal Service headquarters received the test results and documentation of the discussions between public health and postal managers, we were unable to determine when Postal Service headquarters managers first learned of the quantitative test results.

guidelines. More specifically, the Postal Service indicated that the results could not be validated, in part, because the team that collected the samples—individuals from the Agency for Toxic Substances and Disease Registry and CDC—did not always measure and record the extent of the surface area that they sampled.³⁰ Also, the team used various sampling methods, and there was no way to correlate the results from the various methods used.³¹ The Postal Service also indicated that the laboratory that produced the results was not hired by or working directly for the Postal Service, as had been expected when the Postal Service developed its guidelines.³²

Aside from the requirements in its guidelines, district postal managers said two other factors influenced their decision not to disclose the quantified results in December 2001. First, district postal managers said that they were uncertain about whether they could release the results given the ongoing FBI criminal investigation related to the facility's contamination.³³ Although acknowledging that they did not consult the FBI or others about releasing the quantitative results, district postal managers noted that the investigative team was subject to strict rules and had agreed not to

³⁰In its technical comments on our draft report, CDC noted that the HEPA vacuum sample, which identified 2.9 million colony-forming units of anthrax, had been taken on the feeder mechanism of a mail-sorting machine. While the precise surface area of the feeder mechanism would be difficult to measure, CDC noted that the mechanism is an important part of the mail's pathway through the machine. Thus, even though there are limitations in the ability to measure such areas, CDC pointed out that there is value in sampling these types of complex mail processing surfaces.

³¹For additional information about the rationale for the sampling methods used at Wallingford as well as information about related validation issues, see CDC, *Environmental Sampling for Spores of Bacillus anthracis. Emerging Infectious Diseases*. Vol 8. No. 10. (October 2002).

³²Unlike its actions in December 2001, the Postal Service immediately provided all of the test results, including the quantified results of from 1 to 18 colony-forming units, to employees at the facility in April 2002. Full and immediate disclosure of the April 2002 test results had been recommended by an OSHA official to avoid miscommunication, confusion, and workers' concern about how the data may have been interpreted. The decision to release the results also appears consistent with the Postal Service's guidelines because, according to the Postal Service, the sampling and analyses were performed by a Service contractor in accordance with the Service's procedures and protocols for sampling. According to the Manager of the Command Center, this allowed the Postal Service to validate the results.

³³In addition to its participation on the investigation team at Wallingford, the FBI also was conducting a separate criminal investigation related to the facility's contamination. The U.S. Postal Inspectors, the U.S. Attorney's Office, the Connecticut Department of Public Health, and CDC were also members of the criminal investigation team.

disclose information exchanged during its twice-daily conference calls. Second, they said that there was considerable uncertainty about what the results meant from the standpoint of worker safety and public health. The District Manager explained that in December 2001, interpretations about the meaning of the results were changing by the hour, depending on the views of individuals involved at the time. As a result, according to members of the investigative team, there was considerable daily discussion within the team about what the test results actually meant.³⁴ CDC pointed out that it “did not and still does not know how to interpret quantitative results such as the high spore count from a health risk standpoint.” Nevertheless, CDC noted that the actions taken by the Postal Service when the contamination was found were “very cautionary and prudent.”

The Postal Service’s Delay in Disclosing the December 2001 Quantitative Test Results Was Not Consistent with OSHA’s Disclosure Requirements

To help ensure that employees have safe and healthy work places, OSHA enforces a variety of standards that it developed to eliminate foreseeable and preventable hazards, such as worker exposure to asbestos, lead, and carbon monoxide. The risk of contamination from anthrax was not anticipated when these standards were developed. Thus, there is no specific OSHA standard governing the timing and disclosure of test results for anthrax and a host of other unanticipated substances that could harm workers. However, regardless of the contamination, OSHA regulations require employers to disclose exposure-related test results “whenever an employee or designated representative requests access to a record. . . .³⁵ Employers are required to provide access to the records “in a reasonable time, place, and manner.” If access is not provided within 15 working days, employers must explain the delay and indicate when the record can be

³⁴Since the amount of surface area collected for the sample containing about 3 million spores was not recorded, investigators could not determine whether the spores had been spread over the sample area or clumped together in one spot. Also, according to a team member, it was not clear how to extrapolate the result from the surface sample into its potential for existing in the air. (Additional information on the interpretation of surface sampling results is contained in CDC’s *MMWR Weekly*, December 21, 2001, and in its fact sheet entitled *Comprehensive Procedures for Collecting Environmental Samples for Culturing Bacillus anthracis* (revised April 2002).

³⁵Within the context of the regulation, “records” include exposure and medical records. More specifically, records include “environmental workplace monitoring or measuring of a toxic substance or harmful physical agent, including personal, area, grab, wipe, or other form of sampling, as well as related collection and analytical methodologies, calculations, and other background data relevant to interpretation of the results obtained.”

made available.³⁶ OSHA has considerable discretion in enforcing this requirement and, depending upon the seriousness of the situation, can cite and even fine an employer for noncompliance.³⁷

The President of the Greater Connecticut Area Local American Postal Workers Union—a designated representative of many of the facility’s employees—triggered the OSHA requirement on January 29, 2002, when he requested postal facility managers to provide copies of all test results and all supporting and relevant documents for all anthrax testing conducted at the Wallingford facility in the fall of 2001.³⁸ The request was made pursuant to the union’s collective bargaining agreement with the Postal Service. The Postal Service responded on February 6, 2002, with a summary listing of tests performed at the Wallingford facility, including information about whether the test was positive or negative for anthrax. The Postal Service did not (1) provide any of the actual laboratory reports for the tests or (2) inform the union leader that it had not disclosed all of the relevant records. According to the Postal Service, it viewed the union leader’s request, like others it receives from the union, in the context of its collective bargaining agreement with the union, not within the context of OSHA’s disclosure requirement. As a result, the Postal Service did not provide him with the earliest date when the other records would be made available, as required by OSHA’s regulations.

Noting that the Postal Service had not provided him with certain test results, including results related to the decontamination of the four mail-sorting machines in December 2001, the union leader submitted an identical request for all of the records to the Postal Service on February 28, 2002—again under the collective bargaining agreement. The Postal Service provided the results of tests performed on November 11, 2001, as well as the results of the December 2001 decontamination efforts. However, once again, according to the headquarters’ manager responsible for establishing and overseeing the Command Center, the Postal Service did not view the request within the context of the OSHA disclosure requirement. As a result, the Postal Service did not apprise the union

³⁶29 C.F.R. § 1910.1020 (e)(1)(i).

³⁷OSHA may cite the following violations with or without a fine: “Other than Serious,” “Serious,” “Repeated,” “Failure to Abate,” and “Willful.”

³⁸The union leader also requested test results from the post office in Seymour, Connecticut—the post office that delivered mail to the deceased woman’s home.

leader of the reason for the delay in disclosing all of the records or the earliest date when the records would be made available.

According to the union leader, he believed that the Postal Service had provided him with all of the relevant information and did not pursue the matter further until April 2002—after he learned from a newspaper article that at least one of the facility’s test results had been quantified.³⁹ According to the union leader and the Postal Service physician who had been responsible for providing medical advice to workers at the facility in December 2001, this was the first time that they were aware that any of the facility’s test results had been quantified.

The union leader told us that the news article alarmed him; as a result, he initiated action to obtain the quantified test results under the Freedom of Information Act. Specifically, on April 23, 2002, the union leader requested OSHA, the Connecticut Department of Public Health, and CDC to supply “any and all documents regarding any and all investigations of hazardous conditions, or suspected hazardous conditions, including, but not limited to, all documents related to any and all investigations of contamination, or suspected contamination, of the anthrax virus at the [Wallingford facility] in 2001 and 2002.”

OSHA responded to the request but indicated that it did not have the test results and, therefore, it could not release the information. Second, while the Commissioner of the Connecticut Department of Public Health had discussed the December 2001 quantified results with the union leader on April 22, 2002, and the Chief Epidemiologist had briefed the facility’s workers about the quantitative results on April 24, 2002, the department subsequently declined to release the actual results because of state prohibitions on releasing epidemiological investigative data.⁴⁰ Finally, although CDC had previously (1) released the quantitative test results for

³⁹A March 26, 2002, article in *The New York Times* discussed a presentation by the Chief Epidemiologist about contamination at the facility, including the finding of “about 3 million spores” from a sample collected in November 2001. The Chief Epidemiologist told us that he presented this information at an international conference on emerging infectious diseases because he wanted to emphasize the importance of maintaining the Postal Service’s restriction on the use of compressed air to clean its facilities to ensure that any residual spores at Wallingford and other postal facilities are not blown elsewhere in the facilities.

⁴⁰The Commissioner told us that he was not aware that his department had not provided the requested test results. We did not evaluate state laws related to the release of epidemiological data because doing so was outside the scope of our work.

the Wallingford facility at a March 2002 conference and (2) published some quantitative test results for the Brentwood facility in Washington, D.C.,⁴¹ it did not release the results to the union until March 28, 2003, because, according to a CDC official, the FBI had only recently notified CDC that it did not need to review CDC's records before the release of "anthrax-related information."⁴²

Unsuccessful in obtaining the facility's test results, the union leader filed a formal complaint with OSHA. The May 29, 2002, complaint alleged that the Postal Service had "intentionally failed to properly and timely disclose to the employees working at [the facility] and to their union representatives the actual level of anthrax contamination found on four (4) automated processing machines back in December 2001." The letter noted that the Postal Service was aware of the quantified test results "on or about December 12, 2001" yet did not inform the facility's workers. Absent knowledge of the actual amount of contamination at the facility, the union leader charged that employees had inadequate information for making informed decisions, such as decisions about whether to continue (1) taking antibiotics and (2) working in the facility. The union leader and other union representatives subsequently explained to us that, according to their discussions with workers at the facility, many of the employees either (1) did not take their antibiotics or (2) stopped taking their medicine prematurely on the basis of the Postal Service's use of "trace" and "concentration" to characterize the extent of contamination in the facility.

The complaint resulted in an OSHA investigation and the Postal Service's subsequent release of test results from samples collected in November and December 2001. This included the actual laboratory record for the sample that identified about 3 million spores in a sample collected from one mail-sorting machine on November 28, 2001. The Postal Service provided the quantified results to union representatives and to members of the facility's Safety and Health Committee on September 4, 2002, along with a letter

⁴¹Sampling performed by CDC investigators and Postal Service contractors at the Brentwood facility in October 2001 identified from 8,700 to 2 million colony-forming units per gram of material collected from high-speed mail-sorting machines and areas near the machines. CDC published the results in December 2001. See *MMWR Weekly*, December 21, 2001/50(50); 1129-1133.

⁴²According to CDC, it consulted with the FBI to determine whether the request was subject to 45 C.F.R. § 568, which permits CDC to withhold information that would interfere with ongoing law enforcement proceedings.

describing the Postal Service's reasons for not releasing the results earlier. Specifically, the Postal Service indicated that the results could not be validated because "the laboratory that produced the results was not hired by or working directly for the Postal Service." As a result, the letter cautioned recipients not to use the information to interpret the risk to employees who had been working in the facility in December 2001.

At the conclusion of the inspection, OSHA's area office in Bridgeport, Connecticut, reported that its inspection had "revealed conditions of significant findings," which—while not warranting a citation for a regulatory violation—were of "sufficient importance to require [the Facility Manager's] attention." OSHA's October 7, 2002, letter to the Postal Service also stressed the importance of timely communication of test results and stated that a "failure to effectively communicate issues which can have an effect on a worker's health and safety, can lead to fear and mistrust." Furthermore, the letter informed the Postal Service that "effective and forthright communication of any and all information relating to exposure records, both quantitative and qualitative, to toxic substances and harmful physical agents should take place in a timely manner."

According to OSHA officials, OSHA typically sends a letter of significant findings when the employer has disclosed information requested by an employee or his or her designated representative while the complaint is still open—as the Postal Service did on September 4, 2002, prior to the end of OSHA's investigation. Although OSHA did not believe that a citation was warranted, OSHA officials stated that they used a letter of significant findings to establish a basis for a future violation if the problem reoccurs.

Dissatisfied with OSHA's decision not to take regulatory action, on October 17, 2002, the union leader requested that OSHA's Regional Administrator in Boston, Massachusetts, review the matter. The request was based, in part, on the fact that the Postal Service did not release the quantified results until September 4, 2002—more than 3 months after the union filed its complaint with OSHA and more than 7 months after the union had first requested all test results directly from the Postal Service. The request also cited conflicting information that had been received by OSHA about whether postal managers were still in possession of the December 2001 quantified results in June 2002, when OSHA initiated its investigation, and thus whether the Postal Service could have supplied the

information to the union earlier.⁴³ In his request, the union leader argued that a regulatory citation was needed because, otherwise, there would be no incentive for the Postal Service to prevent a similar situation from reoccurring. OSHA's Regional Administrator reviewed the matter and, by a letter dated November 26, 2002, affirmed OSHA's prior decision not to issue a regulatory citation.

We discussed OSHA's findings with officials responsible for the inspection. They noted that OSHA was not involved at the facility until April 2002—well past the December 2001 period in question. Nevertheless, they cited the emergency situation that had existed at that time and indicated that, on the basis of their subsequent knowledge of the events that had transpired, they believed the Postal Service had taken “reasonable and prudent” actions to protect its employees throughout the period of the facility's contamination. As a result, any hazard associated with the Postal Service's nondisclosure of the quantitative test results had been eliminated in December 2001—about 6 months before OSHA's investigation began. Also, the OSHA officials noted that because the Postal Service had subsequently released the requested data, in their view, it would not be appropriate to issue a regulatory citation.

In a February 2003 letter to the union leader, OSHA's Regional Administrator reaffirmed OSHA's decision not to cite the Postal Service. According to the Regional Administrator, the agency's decision was influenced by several factors, including the (1) national panic about the anthrax threat in the fall of 2001; (2) lack of information about the significance, in terms of employee exposure, of anthrax spores found in the facility; and (3) existence of an ongoing criminal investigation into the

⁴³According to a November 26, 2002, OSHA letter to the union leader, the Postal Service did not have a copy of the December 2001 quantified results until August 13, 2002. Our work showed that the Postal Service headquarters may have received documentation of the quantified test results on or about December 8, 2001, and that the district had the written results on December 10. Further, both of the offices maintained copies of the results throughout the period in question. Postal Service officials told us they did not know why OSHA was unaware that they had the results. Although OSHA provided us with documentation associated with its investigation, the source of misinformation about the Postal Service's possession of the quantitative test results could not be discerned from the material provided. Furthermore, our discussions with postal and OSHA officials did not enable us to resolve this issue.

source of the anthrax spores that involved several federal agencies.⁴⁴ Nevertheless, she emphasized the need for better communication by the Postal Service and reaffirmed OSHA’s concern about the “failure of communication and openness” exhibited by the Postal Service in this case.

Lessons Learned at the Wallingford Facility Suggest the Need for More Complete and Timely Information to Workers

Although OSHA and members of the investigative team in December 2001 were not critical of the Postal Service’s decision not to release the December 2001 quantified results when they were first known, in hindsight and within the context of lessons learned, they said there was no reason why the results and any limitations associated with the results could not have been disclosed at that time. They explained that from their perspectives, full and timely disclosure of laboratory results is the best method for communicating test results. For example, the Chief Epidemiologist from the Connecticut Department of Public Health emphasized that it is important to “put the information out there frankly and then discuss it.” Similarly, CDC officials stated that the principle is to get all of the information out to employees regarding their health risks. Finally, although not a member of the investigative team, an OSHA official who was involved in the facility’s decontamination in April 2002 told us that he advised the Postal Service to provide employees with the “raw data sheets” of test results to avoid miscommunication, confusion, and concern about how the data may have been interpreted.

Two recent guidelines developed by GSA and the National Response Team stress the importance of complete and timely information. The guidelines are intended to disseminate information learned from the response to anthrax contamination at postal and nonpostal facilities in the fall of 2001, including lessons relating to the communication of test results. GSA released its guidelines in July 2002.⁴⁵ The guidelines are written in the form of a policy advisory—not as regulations or explicit directives—and

⁴⁴According to the Postal Service, district postal managers—through the U.S. Postal Inspection Service—contacted the FBI before releasing the December 2001 quantified test results in September 2002. According to the Postal Service, the FBI told a member of the Inspection Service that the quantified data could be released since the information already had been discussed at a CDC conference and reported in the newspapers.

⁴⁵GSA is responsible for providing workspace and security for many federal agencies. The agency also offers guidance and policies for various government functions, including mail management. These guidelines are entitled *GSA Policy Advisory: Guidelines for Federal Mail Centers in the Washington, DC Metropolitan Area for Managing Possible Anthrax Contamination*.

primarily apply to the operation of mail centers located in federal agencies in the Washington, D.C., area. While not requirements, GSA's recommendations for communicating test results to workers, in our view, are relevant to the Postal Service and others. The guidelines emphasize the importance of the integrity of the information communicated to workers and stress the need for "timely, clear, consistent, and factual" information about risk levels and any limitations associated with the information. The guidelines conclude that people need "solid" information to have the "confidence to make informed choices."

The National Response Team developed the other guidelines, which are still in draft. The most recent version of the guidelines is dated September 30, 2002, and is entitled *Technical Assistance for Anthrax Response*.⁴⁶ Although not a member of the National Response Team, the Postal Service assisted in the development of the guidelines. The guidelines (1) suggest that more—rather than less—information should be disclosed and (2) provide a number of recommendations about communicating information during emergency situations. For example, the guidelines advise agencies to consider that "different audiences (e.g., employees, reporters, local politicians) may need different types of information" and to "anticipate what information people need and in what form." Further, although the guidelines caution against passing on "everything you know," it points out the consequences of not fully disclosing information. Specifically, the guidelines warn, ". . . do not withhold information . . . it is very likely that the withheld information will be found out, which will cripple your credibility. . . ." Finally, the guidelines advise agencies to "admit when you have made a mistake or do not know the information."

Although helpful in ensuring the integrity of information to be released, neither of the two recent guidelines nor the Postal Service's guidelines

⁴⁶GSA emphasized that the guidelines developed by the National Response Team should be the primary source of advice for anyone managing a credible threat situation. GSA explained that its guidelines deal primarily with actions that managers of federal mail centers in the Washington, D.C., area should take to prepare for possible anthrax threats and to determine whether an anthrax threat is credible. As a result, once a credible threat has been identified, responsibility for managing the situation passes from the manager of the mail center to law enforcement, public health, and other authorities.

explicitly address all of the communication issues that arose at the Wallingford facility.⁴⁷ None of these guidelines

- explicitly require disclosure of quantitative test results, when available, or specify the terminology (e.g., number of colony-forming units per gram or square inch of material sampled) that should be used to communicate the results to workers or others, along with any limitations associated with the results, or
- specify the actions that should be taken if test results cannot be validated, including a strategy for communicating unvalidated test results to workers.

Furthermore, the Postal Service’s guidelines do not define the meaning of “validation” or specify the steps that must be taken to validate test results. The Postal Service headquarters’s manager who was responsible for establishing and overseeing the Command Center told us that the term was intended to describe a method for ensuring that work had been done in accordance with the Postal Service’s sampling and testing procedures and, therefore, for coordinating the release of validated results. However, the guidelines do not specify who is to do the validation or how it is to be done, particularly when the testing is not done or sponsored by the Postal Service.

The experts whom we consulted (1) told us that the sampling method (HEPA vacuums) used to collect the samples that were quantified was appropriate and (2) agreed that the lack of documentation about the extent of surface area sampled, especially given the complexity of the facility’s mail-sorting machines, could have made interpretations about the results difficult.⁴⁸ Nevertheless, they noted that the method of counting colony-forming units is a long-standing, definitive, and universally

⁴⁷GSA and EPA—as the Chair for the National Response Team—explained that, by design, their guidelines were not intended to prescribe specific actions because knowledge about how to respond to anthrax is evolving rapidly, and each situation is unique. Instead, the agencies indicated that their guidelines provide background information and viable options for individuals who, in the case of GSA’s guidelines, operate and manage federal mail centers or, in the case of guidelines developed by the National Response Team, respond to anthrax attacks.

⁴⁸We consulted with numerous experts in the field of microbiology, including Dr. Jack Melling, former Director and Chief Executive Officer of the British Center for Applied Microbiology Research; Dr. Paul Keim, Professor in Microbiology, Northern Arizona University; Col. Eric Henchal, Department of the Army; and Dr. Barbara Johnson, former Safety Officer at the Dugway Proving Grounds, Department of the Army.

accepted microbiological technique for determining the amount of bacteria in a given sample, including anthrax. The results show how many spores have replicated to form colonies, which can be seen by the naked eye. Thus, regardless of the sampling issues at Wallingford, none of the agencies involved provided any evidence indicating that the number of colony-forming units identified by the laboratory was incorrect. Accordingly, although the sampling issues may have hindered the interpretation of the test results,⁴⁹ according to these experts, the use of the term “concentration” to convey the finding of about 3 million spores in one sample may have been misleading because it did not adequately convey the health risk associated with the sample. According to the experts with whom we talked, providing information about the actual test results to workers would have given them better information for making informed medical decisions.

In this case, according to the experts we consulted, an appropriate way to communicate the results to workers would have been to indicate that 2.9 million colony-forming units (from 0.55 grams of dust) were found in a sample from one machine, along with appropriate limitations regarding the sampling procedures used. Although a precise interpretation of the health risks associated with the quantitative test results was problematic, providing the quantitative results would have given workers a framework for evaluating the information they were previously given regarding the 8,000 to 10,000 spores believed—at that time—to be needed to cause inhalation anthrax and would have provided some indication of the magnitude of the anthrax present in the facility. According to CDC, although the number of anthrax colonies can be counted, it is not possible to count the exact amount of anthrax in the environment because of uncertainties about how well a sample picks up anthrax. In other words, there could be more anthrax in the environment than can be picked up by a sample.

An additional problem relating to the existing guidelines is that none of them (1) specify who should be involved in deciding what to communicate to workers and others, as appropriate; (2) describe the documentation

⁴⁹The National Response Team’s September 2002 draft guidelines agree that methods have not been validated for a variety of sampling techniques. Accordingly, the guidelines recommend that agencies use “a multi-disciplinary team” to help them interpret anthrax test results. Relating to this, according to CDC, it is important to scrutinize new sampling techniques, such as the HEPA vacuum, to understand the strengths and limitations of the methods so that the methods can be subsequently validated.

agencies should maintain, including the advice agencies receive from public health officials or others about the communication of test results to workers; or (3) discuss the actions that should be taken if test data are requested by an employee or a designated representative. As previously discussed, OSHA representatives were not involved in the December 2001 discussions about what to communicate to workers. This deprived the Postal Service of the insights and suggestions that OSHA could have offered. Furthermore, although the Postal Service representatives cited uncertainty over what information could be released given the ongoing criminal investigation, the Postal Service did not consult with the FBI on this issue. According to FBI officials we interviewed in Connecticut, the test results were of no value to their investigation and, had they been consulted, they said that they would have allowed the results to be released.

As previously discussed, another issue that arose in the Wallingford case involved differing recollections among the various parties regarding who participated in certain discussions and about what advice was given. For example, in contrast to the recollections of officials from CDC and the Connecticut Department of Public Health, postal managers told us that they did not participate in a December 6, 2001, telephone conversation in which the quantitative test results were first discussed. Further, postal managers have different recollections about the advice they received from the Chief Epidemiologist than the information that he recalls. Also, in the Wallingford case, the Postal Service said that it did not associate the union leader's request for the test results with OSHA's regulatory requirement and, therefore, did not realize that it was obligated to either provide the results within 15 days or provide the reasons for the delay along with a time frame for providing the results. Related to this, OSHA's disclosure requirements do not fully address the emergency situation that arose at Wallingford, where workers were exposed to an unanticipated and externally introduced hazard capable of causing serious health problems, including death. The regulations are not applicable until an employee or a designated representative requests test results and, even then, the employer has up to 15 days to provide the information or explain why it is not providing the information. The 15-day time frame is far more than the number of days needed to contract inhalation anthrax.

We discussed OSHA's regulatory requirements with OSHA's Director of Enforcement Programs. The Director told us that OSHA's standards were written for airborne exposure to chemical and physical agents in the workplace, and, at the time they were drafted, OSHA did not envision biological hazards, such as anthrax. According to the Director, OSHA's

current regulatory agenda do not include any planned modifications to its requirements, including any changes to require the immediate and proactive disclosure of records related to an employee's exposure to unforeseen hazards, such as anthrax, regardless of whether the records are requested by workers or their designated representatives.

Conclusions

In retrospect, the Postal Service's decision not to release the quantitative test results in December 2001 was understandable given (1) the circumstances that existed at that time, (2) the advice it received from public health officials, (3) an ongoing criminal investigation, and (4) uncertainties surrounding the validation of the sampling methods used and the meaning of the test results. However, the decision deprived facility employees of information that may have been useful in making informed decisions about whether to take or continue taking antibiotics and whether to continue working in the facility. Furthermore, in hindsight, it is clear that not fully disclosing quantified test results can affect an agency's credibility and lead to worker distrust. It is also apparent now that not consulting relevant agencies—in this case, OSHA and the FBI—regarding its December 2001 decision about what to disclose to employees deprived the Postal Service of information that could have been useful in deciding what to communicate to its workers. Finally, the Postal Service's failure to document the discussions that it had with other agency personnel on communication issues makes it difficult to resolve discrepancies in recollections that arose. As demonstrated at Wallingford, documentation of the advice and recommendations received from others, either at the time they are received or shortly thereafter for emergencies, could help resolve questions that may arise later about what was done and why.

The agencies involved in the investigation and response to anthrax at Wallingford have learned a number of lessons from their experiences, including the need for more effective sampling methods and more explicit and consistent guidance concerning the communication of test results for hazardous substances, such as anthrax. However, the guidelines developed by the Postal Service, GSA, and the National Response Team are still too general to prevent problems like those that occurred at the Wallingford facility. Specifically, the current guidelines do not (1) require the prompt disclosure of all available test results, using specified terminology; (2) define how test results should be validated or the actions that should be taken when results cannot be validated; (3) specify which agencies should be involved in deciding what to communicate to workers and others; or (4) require documentation of the advice and recommendations from other organizations involved in deciding the

actions to be taken during a crisis. Moreover, since employees and their designated representatives may not know that test results are available or that they can be requested, it appears incumbent upon employers to, in emergency situations, immediately disclose test results without waiting for an employee or representative to request them. Because current OSHA regulations require the disclosure of test results only when an employee or representative requests them, such as occurred in the Wallingford case, organizations can still decide to withhold essential information. Lastly, agency officials dealing with an anthrax situation or similar emergency may not be aware of, or associate an employee's request for test data with, OSHA's regulations, which can result in penalties for noncompliance.

Recommendations for Executive Action

To help prevent the reoccurrence of the communications problems that occurred at the Wallingford facility, we recommend that the Postmaster General; the Administrator of GSA; and the Administrator of EPA, as Chairperson of the National Response Team, work together to, where applicable, revise guidelines to

- require prompt communication of test results, including quantified results when available, to workers and others;
- specify the terminology that should be used to communicate quantitative test results to employees and others (e.g., the number of colony-forming units per gram or square inch of material sampled) and any limitations associated with the test results;
- define what is meant by the validation of test results and explain the steps that must be taken to validate sampling or testing methods that are undertaken by the agency itself or by another organization;
- specify the actions that should be taken if test results cannot be validated, including a strategy for communicating unvalidated results;
- specify the agencies that should be involved in deciding what to communicate to workers and others, as appropriate;
- require documentation of the basis for decisions made, including the (1) advice the organization receives from public health officials and others about the communication of health-related information to workers and others, as appropriate, and (2) specific content of what the organizations communicate to workers and others; and
- reflect OSHA's regulations for disclosing test results requested by workers or their designated representatives.

In light of new concerns about the possibility and impact of future terrorist actions using unforeseen hazardous substances, we also recommend that the Assistant Secretary for Occupational Safety and

Health consider whether OSHA regulations should require—in emergency situations—full and immediate disclosure of test results to workers, regardless of whether the information is requested by an employee or his or her designated representative.

Agency Comments and Our Evaluation

We requested comments on a draft of this report from the Postmaster General; the Commissioner of the Connecticut Department of Public Health; the Secretaries of HHS, Labor, and Homeland Security; the Attorney General—for the FBI; the Administrators of EPA and GSA; and the President of the American Postal Workers Union. EPA, the Postal Service, GSA, the union, and the FBI provided comments on our conclusions and/or recommendations. Their comments are summarized below.

EPA's Assistant Administrator provided comments on March 21, 2003, in EPA's capacity as the Chair for the National Response Team. According to the EPA Assistant Administrator, OSHA, GSA, HHS (specifically the National Institute of Occupational Safety and Health), and the Postal Service were consulted in preparing the response. EPA indicated that the members of the National Response Team believe that our draft report provided a balanced presentation of anthrax testing and communications with employees at the Wallingford postal facility. While stating that the National Response Team agrees with our references and recommendations regarding the content of its guidelines—*Technical Assistance for Anthrax Response*—EPA stated that the guidelines had been carefully written as a technical resource document, as opposed to a directive or guidance, and that knowledge on anthrax is evolving rapidly. Thus, EPA noted that each response situation is unique. As a result, EPA stated that the guidelines were intended to provide scientific background and viable options for responders to consider in addressing specific circumstances. Nevertheless, EPA indicated that “certain improvements” could be made to the guidelines that would be responsive to our recommendations. The letter did not specify the nature of the planned improvements. EPA also provided technical comments, which we included, as appropriate. EPA's letter is reproduced in appendix III.

In his March 31, 2003, comments on our draft report, the Postal Service's Chief Operating Officer and Executive Vice President stressed that the safety and security of its employees and its customers were then and now of the utmost importance. The Postal Service also emphasized that, when the anthrax crisis unfolded in the fall of 2001, there were no guidelines and no designated regulatory agency for dealing with the crisis. While stating

that the Postal Service acted quickly and prudently to communicate pertinent information to its employees, the Postal Service acknowledged that there are always opportunities to improve communications regarding anthrax and other biohazards. In this regard, the Postal Service stated that it is committed to working with the National Response Team to revise the team's technical assistance guidelines for anthrax and, when completed, that it planned to ensure that its guidelines are consistent with the team's updated guidelines. The Postal Service also noted that it agreed with many of our specific recommendations. For example, the Postal Service agreed that test results, including quantified results, should be released to employees and others as quickly as possible. The Postal Service also agreed that any limitations associated with the results should be explained. Further, the Postal Service recognized the importance of developing and maintaining sufficient records concerning its communication of health-related information to employees and others. Finally, the Postal Service indicated that it is aware of its obligation to release testing information to employees and their unions, when requested to do so. The Postal Service's letter, which is reproduced in appendix IV, did not comment on our other recommendations. The Postal Service also provided technical comments, which we included, as appropriate.

The Postal Service's commitment to work with the National Response Team in revising the team's anthrax-related guidelines and, thereafter, to ensure that its guidelines are consistent with the revisions made to the team's *Technical Assistance for Anthrax Response*, should go a long way in ensuring that the Postal Service's employees have all of the information they need to make informed decisions about their health and safety in a timely manner. However, because the National Response Team did not specify the nature of its planned revisions to its technical assistance, we believe that the Postal Service should also revise its guidelines to address any recommendations that are not eventually included in the National Response Team's revised technical assistance, particularly with respect to issues related to the meaning of "validation," the steps that must be taken to verify sampling methods or test results, and the release of test results that cannot be validated.

On March 31, 2003, GSA's Associate Administrator provided oral comments on our draft report. GSA said that it had consulted with the National Response Team and with key members of an Interagency Working Group that had participated in the development of GSA's anthrax-related guidelines. According to GSA, the other members of the working group had similar comments. Overall, GSA said that our draft report provided a balanced presentation of anthrax testing and communications

with employees at the Wallingford facility and that it generally agrees with our references to, and recommendations regarding, its guidelines. Like the comments we received on behalf of the National Response Team, GSA also emphasized that its guidelines were written as a policy advisory and that they were not intended to prescribe specific actions that should be taken in every case. Instead, GSA indicated that its guidelines are intended to provide background information and viable options for managers who operate federal mail centers in the Washington, D.C., area. GSA also explained that its guidelines deal primarily with the actions that these managers should take to prepare for possible anthrax threats and to determine whether an anthrax threat is credible. Once a credible threat has been identified, responsibility for managing the situation passes from the manager of the mail center to law enforcement, public health, and other authorities. As a result, GSA emphasized that the guidelines developed by the National Response Team should be the primary source of advice for anyone managing a credible threat.

GSA noted that it needs to consult with the entire Interagency Working Group before implementing specific changes to its guidelines. However, GSA informed us that it agreed with three of our recommendations and indicated that it would work with other members to revise its guidelines related to (1) the prompt disclosure of all test results, including any available quantified results; (2) the need for adequate documentation of the advice an agency receives from public health officials and others and its related communications with employees and others; and (3) OSHA's regulations for disclosing test results requested by workers or their designated representatives.

GSA also said that it would address the issues covered in three of our other recommendations somewhat differently than in the manner that we suggested. Nevertheless, GSA indicated that it would work with the Interagency Working Group to address the concerns raised in our report. The three recommendations in question relate to the need for (1) common terminology in communicating quantitative test results, (2) understanding what is meant by the "validation" of sampling methods and test results, and (3) specifying the actions to be taken if test results cannot be validated. Specifically, while GSA commented that it agrees that all test results should be conveyed to workers promptly, it said that it does not believe that quantitative test results should be used in all cases. GSA explained that appropriate testing methods vary according to site-specific circumstances and the ability to quantify results depends on the testing methods used. GSA also noted that the term validation has various meanings. Rather than promote confusion or add unnecessary detail to

distinguish the different types of validation, GSA said that it would address our recommendations by adding a statement in its guidelines that recommends sharing all available test results; specifying the testing methods used; and explaining the limitations, if any, of the results and the testing methods.

We appreciate GSA's commitment to address the concerns raised in our report. From GSA's comments, it appears that further clarification of our view may be warranted. We did not mean to imply that quantitative results should be used in all cases. As indicated in our report, quantitative results are not always available, depending on the sampling methods used. In fact, in the case of the Wallingford facility, quantified results were rarely available. However, when quantitative results are available, like GSA, we continue to believe that it is important to disclose them to all affected parties. We clarified our recommendation to avoid any misunderstandings in this area.

Regarding our final recommendation, GSA indicated that parties involved in responding to anthrax may change over time and, as a result, it believes that its guidelines—in a general fashion—adequately identify the types of parties that should be involved in deciding what to communicate to workers and others. Nevertheless, GSA said that, in consultation with the Interagency Working Group, it would look for ways to enhance this part of its guidelines.

The President of the American Postal Worker's Union commented on our draft report in a letter dated March 25, 2003. The union said that it agreed with our recommendations to better coordinate communication between federal agencies when events occur. However, the union said that our report did not adequately reflect the union's perspective of the facts and that a number of our conclusions were not supported by the facts. We disagree. We believe that our conclusions are fully supported by the evidence presented in this report and that the report presents a fair, objective, and balanced depiction of the facts as best we could determine them. We also disagree that the report does not adequately reflect the union's perspective. Our report clearly concludes that the Postal Service's December 2001 decision not to disclose the quantitative results deprived workers of essential information for making informed decisions related to their health and safety. In addition, the report lays out a number of lessons that can be learned to avoid similar problems in the future. Furthermore, the report contains several recommendations for improving communication with postal and other workers in the future if another bioterrorist attack occurs. The union's letter is reproduced in appendix V.

The union disagreed with a number of our conclusions. First, the union disagreed that the Postal Service's decision not to release the quantitative results to workers in December 2001 appeared consistent with its guidelines. The union reiterated the requirements in the Postal Service's guidelines which, as discussed in this report, specify that confirmed test results must be validated before being sent to the Postal Service's Command Center and, once the data are confirmed and validated, the guidelines state that the Manager of the Command Center is to release the data to, among other parties, affected postal managers and state health departments. Thus, in the union's view, the test results are considered to be validated when they are reported by the Manager of the Command Center. However, this is not what happened in Wallingford. In the Wallingford case, the laboratory reported the quantitative results directly to the Connecticut Department of Public Health and CDC—not to the Postal Service's Command Center—and the Chief Epidemiologist provided the test results directly to the Postal Service's district office. Thus, the results were not reported by the Command Center as anticipated by the guidelines. According to the Postal Service, the December 2001 quantitative results could not be validated, within the context of the Postal Service's guidelines, because the party that collected the samples did not work for the Postal Service and the Postal Service could not ensure that the samples had been collected in accordance with procedures set forth in its guidelines. While we believe that the Postal Service's decision not to release the quantitative test results in December 2001 appears consistent with its guidelines on the basis of its interpretation of the validation requirement, we also believe that the use of the term "validation" in the context of anthrax testing can be problematic. Therefore, our report contains a recommendation to define what is meant by validation and explain the steps that must be taken to validate test results.

Second, the union stated that, in its view, it is unacceptable to withhold exposure information under any circumstances. While we agree in principle, our conclusion that the Postal Service's decision not to release the quantified test results in December 2001 was understandable is based on the particularly challenging and difficult circumstances that existed at that specific point in time. As discussed in this report, these circumstances included an ongoing investigation of the bioterrorist attack; the advice that the Postal Service received from public health officials; uncertainties surrounding the validation of the sampling methods used and the meaning of the test results. In addition, while the Postal Service's existing guidelines do not address all of the conditions that existed at the Wallingford facility, the decision not to disclose the quantified results in December 2001 appears consistent with the existing guidelines.

Furthermore, neither OSHA nor the members of the investigative team, including CDC, the Connecticut Department of Public Health, the FBI, and EPA, specifically faulted the Postal Service for not releasing the quantitative results at that time. Nevertheless, our report clearly states that, in hindsight, not disclosing test results can be problematic and that the decision not to disclose the December 2001 quantified results deprived workers of important information. Consequently, we are making several recommendations to improve future communication of test results, including the prompt disclosure of available qualitative and quantitative results, and any limitations associated with the sampling methods or test results.

Third, the union stated that our report concluded that it was understandable and acceptable that the Postal Service failed to follow OSHA's regulatory disclosure requirements and, as a result, that it was acceptable to withhold the quantitative results for 9 months. We disagree with the union's characterization of our conclusion. Our report clearly states that the Postal Service's decision not to release the test results in response to two union requests in January and February 2002 was not consistent with OSHA's regulations. To help ensure that similar situations do not occur in the future, we are recommending that EPA, the Postal Service, and GSA revise their guidelines to reflect OSHA's regulations for disclosing test results requested by workers. Related to this, we are also recommending that OSHA consider strengthening its regulatory requirements to require—in emergency situations—full and immediate disclosure of test results to workers, regardless of whether the information is requested by an employee or his or her designated representative.

Finally, the union said that the report concluded that the Postal Service followed its guidelines “with one exception,” without explaining that the exception involved the sample containing about 3 million spores on one heavily contaminated mail-sorting machine. According to the union, this exception placed employees at considerable risk. As discussed in this report, we agree that the Postal Service's decision not to release the quantitative results in December 2001 deprived the facility employees of information that may have been useful to them in making informed decisions about whether to take or continue taking antibiotics and whether to continue working in the facility. However, we disagree that we have not adequately explained the circumstances associated with this situation. Throughout the report we discuss the results in question as well as the fact that the quantitative test results were not communicated to workers. Furthermore, the report clearly discusses the actual finding of

about “3 million spores,” the “concentration” of spores that was communicated to workers, as well as the fact that exposure to 3 million spores is far more than the amount considered necessary to contract the disease.

On March 27, 2003, we received technical comments from an FBI unit chief responsible for dealing with threats from weapons of mass destruction. The FBI noted conditions that existed in the fall of 2001 that it believes might have contributed to some of the problems that we identified at the Wallingford facility. These conditions included uncertainties about anthrax testing and the interpretation of test results and conflicting information about (1) what constituted a lethal dose of anthrax and (2) the amount of spores needed to contract inhalation anthrax. The FBI also commented on our recommendation that agency guidelines specify the terminology that should be used to communicate quantitative test results. Specifically, the FBI noted that it believes that quantitative test results are not as helpful to employees as qualitative information. The FBI also said that, in its view, quantitative data are less applicable to the health and safety of employees than qualitative information. As a result, the FBI suggested that we revise our recommendation to specify that qualitative—rather than quantitative—test results should be disclosed to workers.

While we agree that the prompt disclosure of qualitative test results is important, we continue to believe that available guidelines need to be revised to ensure that any quantitative test results are properly disclosed. Thus, we have not revised our recommendation in this area. Experts that we interviewed believe that, when available, quantitative test result data can be helpful to employees. Further, CDC, the Connecticut Public Health Department, and OSHA officials told us that the full disclosure of test results is appropriate and that full disclosure can help avoid misunderstandings, miscommunication, confusion, and mistrust. Similarly, the experts we consulted—including the former Director and Chief Executive Officer of the British Center for Applied Microbiology Research—said that if the actual results had been provided to postal employees, they would have had better information for making informed medical decisions, particularly since the amount of anthrax in the facility was much higher than the 8,000 to 10,000 spores that postal employees had been advised would likely be needed to contract inhalation anthrax. A final reason for not revising our recommendation is that by not providing quantitative test results when requested by employees or their designated representatives, an agency could be found in violation of OSHA regulations and, therefore, subject to penalties for noncompliance.

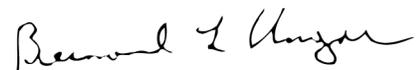
OSHA and two HHS components—CDC and the Agency for Toxic Substances and Disease Registry—provided technical comments via E-mail, which we incorporated, as appropriate. OSHA did not comment on our recommendation that the Assistant Secretary for Occupational Safety and Health consider whether OSHA regulations should require—in emergency situations—full and immediate disclosure of test results to workers, regardless of whether the information is requested by an employee or his or her designated representative. We also received technical comments from the Chief Epidemiologist of the Connecticut Department of Public Health in which he stated that, overall, the report accurately portrays his role as well as the role of the Connecticut Department of Public Health as it relates to the situation at the Wallingford facility. He suggested a number of revisions to clarify this report, which we incorporated. In a March 31, 2003, letter, HHS’s Acting Principal Deputy Inspector General said that the department had no comments aside from the technical comments provided by two of its components. Finally, we requested comments from the Secretary of Homeland Security, but we did not receive any.

As arranged with your office, unless you publicly announce its contents earlier, we plan no further distribution of this report until 30 days after the date of this letter. At that time, we will send copies to the Chairman of the Senate Committee on Governmental Affairs; the Chairman and Ranking Minority Member of the House Committee on Government Reform; the Postmaster General; the Secretaries of HHS, Labor, and Homeland Security; the Administrators of EPA and GSA; the Assistant Secretary for Occupational Safety and Health; the Attorney General; the Connecticut Department of Public Health; CDC; the Agency for Toxic Substances and Disease Registry; the national American Postal Workers Union; and other interested parties. Copies will be made available to others on request and are also available at no charge on our Web site at <http://www.gao.gov>.

If you have any questions about this report, please contact me on (202) 512-2834 or at ungarb@gao.gov. Key contributors to this assignment were

Don Allison, Hazel Bailey, Bert Japikse, Latesha Love, Cady Summers, and Kathleen Turner. Jack Melling and Sushil K. Sharma provided technical expertise.

Sincerely yours,

A handwritten signature in cursive script that reads "Bernard L. Ungar".

Bernard L. Ungar
Director, Physical Infrastructure Issues

Appendix I: Objectives, Scope, and Methodology

Our objectives for this report were to determine (1) how and when contamination was identified at the U.S. Postal Service's Southern Connecticut Processing and Distribution Center in Wallingford, Connecticut (Wallingford facility); (2) what and when information about contamination was communicated to facility workers; (3) whether the Postal Service followed applicable guidelines and requirements for informing facility workers about the contamination; and (4) whether lessons can be learned from the response to contamination at the facility.

To address these objectives, we identified and, with Postal Service headquarters, district, and facility managers, discussed the roles of the agencies involved in investigating and responding to anthrax at the Wallingford facility. We met with officials from the Postal Service, the Connecticut Department of Public Health, the Centers for Disease Control and Prevention (CDC), the Agency for Toxic Substances and Disease Registry, the Occupational Safety and Health Administration (OSHA), the Environmental Protection Agency, the Federal Bureau of Investigation, the national American Postal Workers Union, and its Greater Connecticut Area Local Union. We also requested and reviewed agency documentation related to the testing of the facility and the subsequent finding of anthrax contamination as well as documentation about how, when, and what information the Postal Service communicated to workers about the extent of contamination at the facility. The information documented, among other things, the various roles of the agencies involved, the laboratories' test results, sampling plans and testing protocols, press releases, information about the content of employee briefings, the Postal Service's guidelines for testing and communicating anthrax test results, OSHA requirements for disclosing records related to employee health risks, and more recent anthrax guidelines developed by the General Services Administration and the National Response Team.

We also interviewed officials from involved agencies to determine their views and the extent of their involvement in the response to the facility's contamination between November 2001 and June 2002. Specifically, (1) what information was provided to employees at the facility and when, and by whom, it was provided and (2) what lessons can be learned about the response to contamination at the facility. Finally, we reviewed published literature, including technical reports on anthrax, and consulted several experts. We did not independently assess or verify any of the laboratory test results, sampling plans, or testing protocols to determine their accuracy or adequacy. Moreover, because the Postal Service did not document all of the advice that it received from public health officials or the precise information it communicated to workers at the facility, we

largely relied on the recollections of Postal Service, public health, and other officials to reconstruct these events. We conducted our review from September 2002 through March 2003 in Hartford, North Haven, New Haven, and Bridgeport, Connecticut; Washington, D.C.; and Atlanta, Georgia, in accordance with generally accepted government auditing standards.

**Appendix I: Objectives, Scope, and
Methodology**

[This page is intentionally left blank]

Appendix II: Summary of Anthrax Testing at the Wallingford Facility between November 2001 and April 2002

Test date	11/11/01	11/21/01	11/25/01	11/28/01
Agencies involved in testing	Postal Service	Postal Service	CDC and the Agency for Toxic Substances and Disease Registry	CDC and the Agency for Toxic Substances and Disease Registry
Date and information provided to the Postal Service	11/14/01: No contamination was found.	11/23/01: No contamination was found.	11/27/01: No contamination was found.	12/2/01: Unspecified amounts of contamination were identified on three mail-sorting machines. ^a 12/6/01 - 12/9/01: ^b Additional analyses identified two quantified results: 2.9 million colony-forming units per 0.55 gram of sample material (dust), approximately 3 million anthrax spores, on one machine, and 370 colony-forming units per gram of sample material on a second machine. ^c 12/8/01 - 12/10/01: ^d Received documentation on results of 11/28/01 testing, including the quantitative data.
Date and summary of information provided to workers	11/15/01 - 11/16/01 Briefings to employees: Workers were informed that no anthrax contamination was identified. Test results also were posted on designated bulletin boards.	11/23/01 - 11/24/01 Briefings to employees: Workers were informed that no anthrax contamination was identified.	11/27/01 - 11/28/01 Briefings to employees: Workers were informed that no anthrax contamination was identified.	12/2/01 - 12/3/01 Briefings to employees: Workers were told that "trace" amounts of anthrax were identified on three mail-sorting machines and that there was minimal risk of contracting anthrax. A 12/2/01 Postal Service press release provided similar information. 12/12/01 - 12/13/01 Briefings to employees: Workers were told that additional analyses of the 11/28/01 samples revealed a "concentration of spores" on one machine and "trace amounts" on three other machines. A 12/12/01 Postal Service press release provided similar information. 9/4/02 Postal Service letter released quantified test results: The two quantified results were released along with all test results for November and December 2001. The letter provided reasons for not releasing the quantitative results earlier. This information also was communicated to workers during employee briefings.

Source: GAO.

Appendix II: Summary of Anthrax Testing at the Wallingford Facility between November 2001 and April 2002

12/2/01	12/7/01 - 12/18/01	4/21/02	5/1/02 - 6/3/02
<p>CDC and the Agency for Toxic Substances and Disease Registry</p>	<p>Postal Service</p>	<p>Postal Service</p>	<p>Postal Service</p>
<p>12/9/02: Analyses from the 12/2/01 sampling identified contamination on (1) 30 of 52 samples collected from the heavily contaminated machine, (2) 3 of 52 samples on a second machine, and (3) 1 of 48 samples from each of the two remaining mail-sorting machines.</p>	<p>12/20/01: Results of final samples identified no contamination.</p>	<p>4/24/02: Three of 101 samples collected were contaminated. The contamination ranged from 1 to 18 colony-forming units.</p>	<p>6/6/02: Results of final samples identified no contamination.</p>
<p>12/12/01 - 12/13/01 Briefings to employees: Workers were told that contamination was now identified on four machines (see 12/12/01 entry under 11/28/01 test date). We were unable to determine whether the Postal Service also relayed to employees the specific results of samples taken on 12/2/01.</p>	<p>12/20/01 - 12/21/01 Briefings to employees: Workers were informed that all follow-up samples related to the machines' decontamination had tested negative for contamination. A 12/21/01 Postal Service press release provided similar information, indicating that the machines had been returned to service.</p>	<p>4/24/02 Briefing to union representatives: Union representatives were provided with the quantitative results from samples collected on 4/21/02.</p> <p>4/24/02 - 4/25/02 Briefings to employees: Workers were informed that 3 of the 101 samples were positive for anthrax. According to public health officials, there was no immediate health risk and therefore the use of antibiotics was not recommended. The affected areas were isolated and decontaminated in consultation with CDC, OSHA, and EPA. The Postal Service provided similar information in employee bulletins and a press release.</p>	<p>5/1/02 - 6/3/02: Postal Service managers met daily with union representatives and others to discuss test results and decontamination efforts. Laboratory reports were provided to union representatives as they became available.</p> <p>6/7/02 Postal Service notice to employees: The Postal Service informed workers that all samples were negative and decontamination was complete. The notice was posted on bulletin boards in the facility.</p>

^aA fourth machine was suspected of being positive for anthrax on December 2 but was not confirmed to be positive until later.

^bPrecisely when Postal Service headquarters and district managers first became aware of the quantified test results is unclear. According to CDC officials and the Chief Epidemiologist, they began discussing the quantitative results with investigative team members, which they believe included a district postal manager, on December 6, 2001. However, district postal managers said that they were not involved in discussions about the quantitative results until December 9. Absent documentation, we were unable to reconcile these views.

**Appendix II: Summary of Anthrax Testing at
the Wallingford Facility between November
2001 and April 2002**

^cAccording to CDC, although the number of anthrax colonies can be counted, it is not possible to count the exact amount of anthrax in the environment because of uncertainties about how well a sample picks up anthrax. In other words, there could be more anthrax in the environment than can be picked up by a sample.

^dDistrict postal managers confirmed that the Chief Epidemiologist faxed the quantitative results to the district office on December 9 (a Sunday), and that district managers received the fax on December 10. However, other documentation suggests that postal managers at headquarters may have received the documented results on or about December 8. Postal headquarters managers said that they do not recall precisely when they received the documented results, and absent definitive documentation, we were unable to determine when they first knew about the quantitative test results.

Appendix III: Comments from the Environmental Protection Agency



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

MAR 21 2003

OFFICE OF
SOLID WASTE AND EMERGENCY
RESPONSE

Bernard L. Ungar
Director, Physical Infrastructure Issues
United States General Accounting Office (GAO)
Washington, D.C. 20548

Dear Mr. Ungar:

Thank you for the opportunity to review and comment on the draft report entitled "U.S. Postal Service: Better Guidance is Needed to Improve Communication Should Anthrax Contamination Occur in the Future" (GAO-03-316). The Environmental Protection Agency (EPA), as Chair of the National Response Team (NRT), provides this statement. The NRT consulted with its members, including the Occupational Safety and Health Administration (OSHA), the General Services Administration (GSA), the Department of Health and Human Services (specifically, the National Institute of Occupational Safety and Health), and the U.S. Postal Service in preparing this letter.

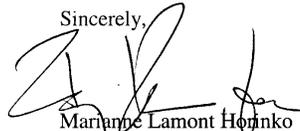
The NRT believes the report provides a balanced presentation on anthrax testing and communications with employees at the Wallingford, Connecticut postal facility. We appreciate GAO efforts to produce an accurate report. In general, the NRT agrees with the references and recommendations regarding the content of the NRT's Technical Assistance for Anthrax Response (TAD). It is important to note, however, that the TAD was carefully written as a technical resource document, as opposed to a directive or guidance. Knowledge on anthrax response is evolving rapidly, and each situation is unique. As a result, the TAD does not prescribe specific actions that should be taken in every case, but provides scientific background and viable options for responders to consider in addressing specific circumstances. However, we believe that we can make certain improvements to the TAD that will be responsive to GAO's recommendations.

The enclosure provides EPA's technical comments for GAO's consideration when

Recycled/Recyclable • Printed with Vegetable Oil Based Inks on 100% Recycled Paper (40% Postconsumer)

preparing the final report. If you have questions about any of these comments, please contact Karen Burgan at (703) 603-9917.

Sincerely,



Marianne Lamont Horinko
Assistant Administrator

Enclosure

Appendix IV: Comments from the U.S. Postal Service

PATRICK R. DONAHOE
CHIEF OPERATING OFFICER
AND EXECUTIVE VICE PRESIDENT



March 31, 2003

Mr. Bernard L. Ungar
Director, Physical Infrastructure Issues
United States General Accounting Office
Washington, DC 20548-0001

Dear Mr. Ungar:

Thank you for providing the United States Postal Service the opportunity to review and comment on the GAO draft report, U.S. Postal Service: Better Guidance Is Needed to Improve Communication Should Anthrax Contamination Occur in the Future. This report examined events relating to the anthrax contamination of the Southern Connecticut Processing and Distribution Center located in Wallingford, Connecticut.

We stress that the safety and security of our employees and customers were at the time, and continue to be, of the utmost importance to the Postal Service. The Postal Service made every effort to move quickly to protect its employees and to safeguard the mail commencing November 20, 2001, when notified that a Connecticut resident was suspected of having contracted inhalation anthrax. The Postal Service immediately began testing at the facility, informing its employees of the situation, and ensuring that antibiotics were provided to them. We note, as did GAO in its draft report, that none of the employees at the facility became ill as a result of the anthrax contamination.

We appreciate GAO's acknowledgement that decisions made by the Postal Service relating to events that transpired at the facility were understandable, given the circumstances at the time, advice received from public health agencies, an ongoing criminal investigation, and uncertainties surrounding the sampling methods used. It should be noted that, at the time, there were no guidelines and no designated regulatory agency for dealing with this type of situation. The Postal Service acted quickly and prudently to communicate pertinent information to its employees, relying upon the advice of public health experts. We understand, however, that there are always opportunities for improvement in our future communication efforts regarding anthrax or other biohazards.

We realize that recollections of events occurring in a difficult atmosphere may vary, particularly after more than a year has passed. Nonetheless, our focus has been and will remain on providing complete and accurate information to our employees as promptly as possible regarding any situation that may affect their health and safety.

With regard to GAO's specific recommendations, the Postal Service is committed to working with the National Response Team (NRT) in making appropriate revisions to the Technical Assistance Document (TAD) for Anthrax Response. The Postal Service fully realizes the challenges faced by the NRT in going forward on this issue. We plan to revise Postal Service guidelines in this area so that they are consistent with the TAD. We agree that test results, including quantified results if available, should be released to employees and others as quickly as possible. We further agree that in communicating available test results, the testing methods used should be specified and any limitations of either the testing methods or the test results should be explained. The Postal Service will make every effort, as it did at Wallingford, to consult with appropriate federal, state, and local agencies in deciding on appropriate communications to employees and

475 L'ENFANT PLAZA SW
WASHINGTON DC 20260-0080
www.usps.com

Appendix IV: Comments from the U.S. Postal Service

- 2 -

others. Also, we acknowledge the importance of attempting to develop and maintain sufficient records concerning communications on health-related information to employees and others. The Postal Service is aware of its obligations to release testing information to employees and their unions when requested.

If you or your staff would like to discuss any of these comments, I am available at your convenience.

Sincerely,



Patrick R. Donahoe

Appendix V: Comments from the American Postal Workers Union



American Postal Workers Union, AFL-CIO

1300 L Street, NW, Washington, DC 20005

March 25, 2003

William Burrus
President
(202) 842-4246

Mr. Bernard L. Ungar
Director, Physical Infrastructure Issues
General Accounting Office
441 G Street, N.W., Mailroom #2T23B
Washington, D.C. 20548

Re: Review of Draft GAO-Pub No. (GAO-03-316)

Report to the Ranking Minority Member
Committee on Government Affairs
United States Senate

Titled

U.S. Postal Service
Better Guidance Is Needed To Improve Communication Should Anthrax
Contamination Occur in the Future

Dear Mr. Ungar:

The following is presented as comments after APWU's review of the above referenced document. We viewed the document as very generous toward the USPS response to the events and lacks considerably in presenting the union's perspective of the facts. One of the most disturbing items is that the report portrays the events as acceptable based upon the circumstances, but fails to highlight that the actions were inconsistent with both Postal Service practice/policy and OSHA regulations.

The report provides a number of facts about the circumstances surrounding the events at the anthrax contamination Wallingford, CT facility, but a number of conclusions are not fully supported by the facts.

The claim by the Postal Service that the results had not been validated is not supported by the facts. The Manager of the Command center reported the results and the Postal Services own guideline required the reporting of validated results. [2-4.2.1 Notifying Key Agencies and U.S. Postal Service Officials. Results from anthrax sampling and analysis are not released to the affected facility or the public until the confirmed data is received from the CDC and/or State Public Health Laboratories. All confirmed data must be validated before it is sent directly to the Managers, Safety Performance Management and Environmental Management Policy, at U.S. Postal Service Headquarters. In turn these managers will notify the U.S. Postal Service Headquarters Unified Incident Command Center managing all anthrax sampling, analysis, and decontamination work. The Headquarters Unified Incident Command Center Manager (or his/her designee) will release validated data simultaneously via FAX and phone to the following agencies, union representatives, management representatives, and the contractors'



**Appendix V: Comments from the American
Postal Workers Union**

March 25, 2003
Page 2

representatives] The conclusions must be that the results were considered validated when reported by the Manager of the Command Center. Further, the decision not to report the quantitative results even after a formal request by the local union president was made in spite of OSHA regulation requiring the employer to provide exposure data to employees and employee representatives. The Postal Services requirements are that the facility manager notifies employees and unions of the results. In essence the GAO concludes that it is understandable and even acceptable that the Postal Services, given the circumstances, failed to follow the law (OSHA Standards) providing essential worker protection.

The report concludes that the Postal Service followed its guidelines "with one exception" without noting that the exception involved those samples showing significant concentrations of anthrax spores. This exception placed the employees of the facility at considerable risk. It is very disturbing that the report draws the conclusion that "under the circumstances it is understandable" that the Postal Service did not report the quantitative results for nine months. We are unaware of any circumstances under which it is understandable to ignore statutory worker protection standards. The OSHA regulation 29 CFR 1910.1020 is clear in stating that exposure data must be provided to employees and employee representatives. It does not imply nor state that the employer may withhold exposure data if they so choose. If there were any question as to the accuracy or "validity" of the results it should have been explained not withheld.

The report states that the Postal Service followed the advice of the Chief Epidemiologist. This fact demonstrates that the Postal Service received validated information from an acceptable source, a local health department, to the postal guidance document. Further, the responsibility for worker protection in the workplace falls to OSHA, not CDC nor Local Health departments. Although advice was provided by a Local Health Department, it was nothing more than advice, and did not in any way relieve the Postal Service from compliance with workplace standards.

GAO has recommended that additional effort be made to better coordinate communication between Federal agencies when events occur. We agree, but strongly believe that the Union must be an integral part of this process. Unions represent the worker and workers better understand the work process as it is performed if they and their representatives are informed.

As a statement of findings, the report concludes that "none of the employees at the facility became sick from anthrax contamination." This statement without explanation is misleading. Employees were being treated with antibiotics since early in the process and this treatment was most likely a significant contributing factor in the lack of reported illness.

In closing, we thank you for your efforts in gathering the facts and reporting findings. We question the conclusions and most particular that GAO could find that under any circumstances it would be acceptable to withhold exposure information from the workers. In this time of heightened alert, the employer must provide adequate and timely information that the employee is afforded adequate protection from harm. It is never understandable that an employer can deny or inhibit this opportunity for self protection.

Sincerely,


William Burrus
President

WB:hfa
opeiu #2/afl-cio

GAO's Mission

The General Accounting Office, the audit, evaluation and investigative arm of Congress, exists to support Congress in meeting its constitutional responsibilities and to help improve the performance and accountability of the federal government for the American people. GAO examines the use of public funds; evaluates federal programs and policies; and provides analyses, recommendations, and other assistance to help Congress make informed oversight, policy, and funding decisions. GAO's commitment to good government is reflected in its core values of accountability, integrity, and reliability.

Obtaining Copies of GAO Reports and Testimony

The fastest and easiest way to obtain copies of GAO documents at no cost is through the Internet. GAO's Web site (www.gao.gov) contains abstracts and full-text files of current reports and testimony and an expanding archive of older products. The Web site features a search engine to help you locate documents using key words and phrases. You can print these documents in their entirety, including charts and other graphics.

Each day, GAO issues a list of newly released reports, testimony, and correspondence. GAO posts this list, known as "Today's Reports," on its Web site daily. The list contains links to the full-text document files. To have GAO e-mail this list to you every afternoon, go to www.gao.gov and select "Subscribe to daily E-mail alert for newly released products" under the GAO Reports heading.

Order by Mail or Phone

The first copy of each printed report is free. Additional copies are \$2 each. A check or money order should be made out to the Superintendent of Documents. GAO also accepts VISA and Mastercard. Orders for 100 or more copies mailed to a single address are discounted 25 percent. Orders should be sent to:

U.S. General Accounting Office
441 G Street NW, Room LM
Washington, D.C. 20548

To order by Phone: Voice: (202) 512-6000
 TDD: (202) 512-2537
 Fax: (202) 512-6061

To Report Fraud, Waste, and Abuse in Federal Programs

Contact:

Web site: www.gao.gov/fraudnet/fraudnet.htm

E-mail: fraudnet@gao.gov

Automated answering system: (800) 424-5454 or (202) 512-7470

Public Affairs

Jeff Nelligan, managing director, NelliganJ@gao.gov (202) 512-4800
U.S. General Accounting Office, 441 G Street NW, Room 7149
Washington, D.C. 20548