



GSA Policy Advisory:

Guidelines for Federal Mail Centers In the Washington, DC Metropolitan Area For Managing Possible Anthrax Contamination

I. Introduction

Since October 11, 2001, when terrorists contaminated the U.S. mail stream with anthrax, federal agencies and first responders have sought to identify unknown substances resembling anthrax powder. New information indicates that none of the field test methodologies for detection of *Bacillus anthracis* (anthrax) provides information that can be used to make decisions in federal mail centers.

In light of this new information, GSA offers these guidelines as standard operating procedures for dealing with potential anthrax contamination specifically in the Washington, DC area. These guidelines should be implemented to the extent that a worksite-specific assessment shows they are appropriate. They are arranged into four groups:

- Threat assessment
- Incident response
- Detection equipment and routine sampling
- Planning and communications

An Interagency Working Group (IWG) sponsored by the Office of Homeland Security and the Office of Science and Technology Policy developed these guidelines. The agencies participating in the IWG are listed in Appendix A to these Guidelines. GSA is issuing these guidelines as part of its responsibilities to the federal mail management community under the Federal Records Act (44 U.S.C 2904).

GSA and the IWG intend these guidelines for use primarily by:

- Federal mail managers in the DC metro area
- First responders to federal mail centers in the DC metro area
- Law enforcement personnel and others who might become involved in incidents of possible anthrax contamination
- Environmental and safety officers in federal agencies

Others who may find these guidelines useful include mail center workers, federal executives responsible for mail center operations, federal workers who handle mail outside of mail centers, and the general public.

The IWG wrote these guidelines for federal agencies in the DC metro area, which includes the city of Washington, DC, and the Maryland and Virginia counties that immediately surround it. The guidelines focus on the DC area because federal agencies in and around Washington are at the highest risk from a new anthrax attack. The IWG will, in the near future, revise these guidelines to address the needs of federal activities nationwide.

Note: Technically, the term “anthrax” refers to the disease caused by *B. anthracis*, and not to the bacterium or its spores. However, terms such as “anthrax contamination” or “releases of anthrax” are often used in this document to make it easier to read and to reflect terminology commonly used in the media and the general public. This document uses anthrax to also include anthrax spores.

II. Threat Assessment

Recommendation 1: Before taking dramatic actions to respond, a federal facility should work with specially trained law enforcement to determine whether an anthrax threat is credible.

First responders have identified five categories into which almost all anthrax threats fall. The appropriate action, specified below, depends on the category:

1. A mail piece (i.e., an unopened letter or package delivered by the US Postal Service (USPS) or another carrier), which has been irradiated and x-rayed, looks suspicious according to established criteria (see Appendix B to this document for the standard list of suspicious characteristics).

First, a mail center supervisor or, where none is available, a designated mail center worker should examine the mail piece to confirm that it meets the criteria established for the location. If the supervisor confirms the determination, then a specially trained mail center worker should open it and examine the contents. If the mail piece contains powder or appears to contain any biological, chemical, or radiological threat, follow the recommended protocol for managing credible threats and call the appropriate law enforcement authority. If it does not contain any threat, the mail piece should be delivered.

The recommended protocol for managing credible threats in the Washington, DC Metropolitan area is provided in Appendix C to this document.

2. A unopened mail piece look suspicious, and it has been x-rayed but not irradiated.

This circumstance normally will occur because a courier or an express mail carrier other than the USPS has delivered the mail piece, or because the mail center is outside the range of ZIP codes for which the USPS is irradiating the mail. As above, a supervisor or designated person should confirm that it meets the established criteria for a suspicious mail piece. If confirmed, *do not open it.*

Next, determine if the mail piece is addressed to a person who actually works in the facility. If so, and if the addressee can be located in a reasonable period of time, ask the addressee to identify the package. If the addressee recognizes the package, deliver it to him or her.

If the addressee does not recognize the package, follow the recommended protocol for managing credible threats (Appendix C) and call the appropriate law enforcement authority.

3. A unopened mail piece looks suspicious, and it has not been x-rayed or irradiated.

This circumstance normally will occur only in federal mail centers in the DC metro area that receive mail addressed to ZIP Codes outside the 20200 through 20599 range and that are too small to have their own x-ray equipment. As such, their level of risk is assumed to be lower than the mail centers inside that ZIP code range.

As above, a supervisor or designated person should confirm that the mail piece meets the established criteria for a suspicious mail piece. And, as above, the addressee should be asked to identify the mail piece. If the addressee does not identify it, follow the recommended protocol (Appendix C) and call the appropriate law enforcement authority.

Note: Items 1 through 3 on this list are also displayed graphically in Appendix D to this document "Decision Tree For Handling Mail in DC-Area Federal Mail Centers."

4. A letter or package of unknown origin (i.e., not delivered by an established carrier to a mail center) looks suspicious.

Call appropriate law enforcement, and follow the recommended protocol for managing credible threats in Appendix C.

5. Unidentified powder -- no association with a letter or package and no other indications of a threat.

Call appropriate law enforcement or other qualified security personnel. If the law enforcement officer determines that the threat is not credible, trained maintenance personnel should be directed to clean up the material as appropriate. If the law enforcement officer determines that the threat is credible, follow the protocol in Appendix C.

III. Incident Response

Recommendation 2: The response of a federal facility to a credible anthrax threat should be an integrated effort: law enforcement should perform the threat assessment and protect any possible criminal evidence; the Laboratory Response Network (LRN) should culture samples as needed; the local public health department should coordinate the overall response to any positive culture and perform any medical evaluations; and the agency should ensure that all parties participate in advance planning for credible threats.

Every mail center should have a written security plan. As part of that security plan, the mail center should have a standing arrangement with the appropriate law enforcement organization. That plan should specify the law enforcement telephone number to be called if a suspicious letter or package is identified.

Law enforcement must, in turn, have an arrangement with one or more LRN laboratories, so that suspect samples can be tested. The security plan should also address how samples will be transported quickly to the laboratory. When the sample is collected, the facility will designate who (including a backup) will be available on a 24/7 basis to receive the laboratory's results.

The LRN laboratory will culture the samples that are suspected of containing anthrax spores and will inform local public health that they are testing a credible threat. Preliminary results will be available within 12 to 24 hours after culturing begins. The laboratory will inform the law enforcement contact, the designated facility point of contact, and local public health of the results, either positive or negative.

If a positive culture is obtained, the law enforcement contact must call the Federal Bureau of Investigation, the local police, and the Postal Inspection Service. The FBI will be responsible for the criminal investigation. Local public health is responsible for coordinating the response, in accordance with the National Response Team's (NRT) "Technical Assistance for Anthrax Response."

Notes:

Concurrent with development of "Technical Assistance for Anthrax Response," the National Response Team (NRT) and U.S. Postal Service formed the National Coordinating Council (NCC), which is an *ad hoc* interagency coordination group designed to organize and communicate response efforts, employing the

expertise of various agencies under the federal response structure. Consistent with its mission, the NCC developed working groups of technical experts to draft the individual chapters in the Technical Assistance Document, and to ensure that the information presented reflects federal experience in responding to anthrax.

The NRT is a standing interagency group, co-chaired by the Environmental Protection Agency and the Coast Guard. The NRT comprises 16 federal agencies that have major responsibilities in environmental protection, transportation, emergency management, worker safety, and public health. The Clean Water Act (CWA) provides the authority for the NRT.

The purpose of the “Technical Assistance for Anthrax Response” is to help protect public health and safety by providing the most current information available throughout the federal government, and sharing national experience to date in responding to releases of *B. anthracis*. The “Technical Assistance for Anthrax Response” will be available in the near future through a password-protected website. To inquire about access, please see <http://www.nrt.org/>.

The Laboratory Response Network for Bioterrorism (LRN) is a network of governmental (local, state and federal) laboratories that have been trained by the Centers for Disease Control and Prevention (CDC) to process samples by well-established and validated procedures. These laboratories utilize LRN standard protocols for testing and must successfully complete periodic proficiency testing challenges sent from CDC. The LRN was formed as a self-organized group through the efforts of the CDC and the Association of Public Health Laboratories (APHL). Through the APHL, local, state, national and global health leaders are linked, to promote the highest quality laboratory practices worldwide.

To identify the appropriate LRN laboratory, when developing the security plan, call the Association of Public Health Laboratories at 202-822-5227.

IV. Anthrax Detection and Routine Sampling

Recommendation 3: Microbiological culture in a laboratory approved by the Laboratory Response Network is the validated standard for determining the presence of anthrax spores. Field testing using polymerase chain reaction or handheld immunoassays for the detection of *B. anthracis* is not recommended and should not be performed.

The Department of Health and Human Services (DHHS) has released guidance on use of these methods. A copy of this guidance is attached as Appendix E. DHHS has also provided the following table to address performance characteristics of the various test methods indicating that the effectiveness of these methods is unsatisfactory.

Performance characteristics of bacterial culture, polymerase chain reaction (PCR) and handheld immunoassays for the detection of B. anthracis			
	Microbiological Culture	Polymerase chain reaction (PCR)	Handheld immunoassays
Minimum limit of detection (spores)	1	100 - 1000	100,000 to 100 million
Assesses viability	Yes	No	No
Nonspecificity	No	Yes (near-neighbor bacteria)	Yes (near-neighbor bacteria and chemicals)
Other issues	-	Susceptible to inhibition and contamination. Sample preparation difficult	-

Recommendation 4: In light of the above, routine environmental sampling (surface or air) for the detection of *Bacillus anthracis* is not recommended for Federal agency mail centers.

In response to the 2001 anthrax attacks, Federal agencies have asked whether environmental sampling is necessary to protect federal workers. Analysis of the available scientific evidence, and experience since last October 2001 indicate that routine sampling is unnecessary because:

- Low levels of *B. anthracis* contamination (i.e. 1-10 spores) do not pose a significant risk to human health.
- Since wet or dry swabs typically collect less than 10 percent of available spores on a given surface, the number of samples needed to detect such low-level contamination is cost prohibitive for routine sampling.
- Programs to detect airborne B. anthracis contamination have not demonstrated value in practical applications.
- On-site testing has the potential to needlessly contaminate the environment, expose personnel, and result in the loss of important evidence.

Any facility that is considering routine sampling should consider the following factors in making this decision:

- Recommendation 4 of this document;
- Whether the facility's mail is being irradiated by the USPS;
- Any prior anthrax contamination at the specific facility in question;
- Delays in delivering mail that will result from sampling and testing;
- Risk assessment for the specific facility, including the probability of a new anthrax attack there;
- Costs of sampling and responding to inconclusive or false results;
- The degree to which mail center personnel and others in the facility are concerned about anthrax disease.

After performing a risk assessment, if a federal facility still deems it necessary to implement routine sampling, a sampling plan must be developed in close coordination with medical, environmental, public health, and industrial hygiene professionals who are familiar with environmental sampling methods, public health impacts, and worker safety issues related to anthrax. For specific information about sampling procedures, see "Comprehensive Procedures for Collecting Environmental Samples for Culturing *Bacillus anthracis*, Revised April 2002, which is available at www.cdc.gov/niosh/unp-envsamp.html. This CDC document emphasizes culturing all samples at an LRN-member laboratory.

V. Planning and Communications

Security planning: The new Federal Management Regulation, 41 CFR, Part 102-192, Mail Management, states, "Every Federal agency and agency location where an agency has one or more full time personnel processing mail must implement a written mail security plan." This regulation was published in the Federal Register on June 6, 2002. It should be noted that 41 CFR, Part 101-9, which was replaced by the new regulation, included a similar requirement. GSA has published a "Mail Center Manager's Security Guide" on its website, at www.gsa.gov/mailpolicy to assist agencies with security planning. Every security plan should be reviewed periodically by an external resource, such as the Federal Protective Service.

Security assessment: Security planning starts with a security assessment, conducted by a qualified expert. Security assessment is very site-specific; it will provide different results for every location. The "Mail Center Manager's Security Guide" includes a list of resources for security assessments.

Gloves, masks/respirators, and protective clothing: Gloves and masks/respirators should be made available for any mail center workers or others who process mail, because wearing gloves or a mask eases the fears of some workers, and gloves protect against the dusts generated by irradiation. They are not necessary for protection from anthrax or other threats, except in

areas where large volumes of mail are processed on high-speed equipment. Other protective clothing is unnecessary except to protect workers clothing from dust and other dirt. Where respirators are used, they are subject to the requirements of OSHA's respiratory protection standard (29 CFR 1910.134).

Mail center design: All but the smallest mail centers should be placed in enclosed rooms, with defined points of entry. Wherever the security assessment, mail volumes, and cost considerations make it appropriate, the mail center should have its own air handling and ventilation system, including HEPA filters in most cases. Separating the air handling system protects the rest of the facility from anthrax and many other threats that may be delivered in the mail, and HEPA filters help protect mail center workers from the dusty products of irradiation as well as many different threats. Note that Recommendation 4, above, indicates that the filters should not be sampled routinely for anthrax contamination.

General inbound mail processing guidelines: All mail delivered to federal agencies should be x-rayed by trained personnel, except in the smallest locations. In those small locations where volume does not support this, consider partnering with another facility or with headquarters to x-ray. All deliveries from couriers and express carriers other than the USPS (e.g., FedEx) should be x-rayed as well. Where it is practical, the inbound mail operation should be separated from the rest of the mail center's operations (e.g., retail, outgoing mail).

Training and rehearsal: Education and awareness are the essential ingredients to preparedness. Mail center employees must remain aware of their surroundings and the mail pieces they handle. Effective training will develop a culture of security awareness. Every security plan should discuss how new and current mail center workers will be trained and how they will rehearse various plans and scenarios.

Internal communications: Many people who work in federal facilities are still very frightened of anthrax. It is critical, therefore, that all internal communications about anthrax contamination be **timely, clear, consistent, and factual**. Every security plan should specify the agency managers and agency public affairs officials who will coordinate all internal communications in the event of a positive laboratory culture. Security plans should also ensure that:

- All available information is communicated in a timely manner;
- Everyone is sending the same message;
- All facts have been confirmed with competent authorities;
- Designated officials also have designated backups;
- Local union officials are involved;
- Messages are crafted so that all personnel can easily understand the information;

- Every effort is made to communicate and explain the existing level of risk, the significance of the incubation period for anthrax disease, as well as any limitations concerning the available information;

External communications: The recent terrorist attacks have shown that the American people rely on the federal government for a great many things. Even a suggestion of anthrax contamination in a federal facility can lead people to wonder whether the affected federal agency can still provide the services they need. It is critical, therefore, that all external communications be **timely, clear, consistent, and factual**, just as with internal communications. For external communications, each security plan should also:

- Identify the audiences most likely to be affected;
- Provide specific steps for communicating with those audiences; and
- Describe how local public health and local law enforcement officials will be included in the communications process.

VI. Summary

The United States Postal Service (USPS) is irradiating much of the mail that is being delivered to federal agencies in the Washington, DC, metropolitan area. The USPS has also instituted a number of procedural changes to minimize the threat to their workers and mail center workers across the United States. The most significant of these is cleaning high-speed mail processing equipment with HEPA-equipped vacuum cleaners instead of blowers. Together, these changes have established a reasonable level of protection for mail center workers. The IWG is recommending against routine sampling for anthrax contamination after considering current USPS processes, the low risk of cross-contamination from last fall's attacks, and a careful assessment of the risk that another attack that might occur in the future.

The four major recommendations in these guidelines are:

1. Before taking dramatic actions to respond, a federal facility should work with specially trained law enforcement to determine whether an anthrax threat is credible.
2. The response of a federal facility to a credible anthrax threat should be an integrated effort: law enforcement should perform the threat assessment and protect any possible criminal evidence; the Laboratory Response Network (LRN) should culture samples as needed; the local public health department should coordinate the overall response to any positive culture and perform any medical evaluations; and the agency should ensure that all parties participate in advance planning for credible threats.
3. Microbiological culture in a laboratory approved by the Laboratory Response Network is the validated standard for determining the presence of anthrax spores. Field testing using polymerase chain reaction or handheld

immunoassays for the detection of *B. anthracis* is not recommended and should not be performed.

4. In light of the above, routine environmental sampling (surface or air) for the detection of *Bacillus anthracis* is not recommended for Federal agency mail centers.

The terrorists' objectives are to sow fear and create panic. The most important and effective response to terrorism is to help the victims work through their fear and panic, and the best tool is communication. Solid, believable information gives people the confidence to make informed choices, and informed choice gives us a sense of control over our destiny.

Since September 11, 2001, all levels of government have cooperated to strengthen our nation's security and defend against terrorism. This document is an example of such an effort – it is designed to help federal agencies perform their critical missions for the American people.

Appendix A: Working Group Membership

The members of the Interagency Working Group that prepared these guidelines represent the:

Department of Commerce

National Institute of Standards and Technology (NIST)
Office of Legal Enforcement Standards (OLES)

Department of Defense

U.S. Army Medical Research Institute of Infectious Diseases (USAMRIID)
Navy Medical Research Center (NMRC)

Department of Health and Human Services

Centers for Disease Control and Prevention (CDC)
Laboratory Response Network (LRN)

Environmental Protection Agency (EPA)

Federal Emergency Management Administration (FEMA)
Office of Emergency Preparedness

Department of Justice

Federal Bureau of Investigation (FBI)
National Institute of Justice (NIJ)

General Services Administration (GSA)

Federal Protective Service (FPS)
Office of Governmentwide Policy (OGP)

Office of Homeland Security (OHS)

Office of Management and Budget (OMB)

Office of Science and Technology Policy (OSTP)

United States Postal Service (USPS)

Postal Inspection Service (USPIS)

Appendix B: Standard List Of Suspicious Characteristics

Characteristics of a suspicious package or letter vary, depending upon the types of mail that your operation routinely processes. That is, what is suspicious in one mail center is not necessarily suspicious in another. However, anything from the following list that is unusual, in terms of your normal mail, or multiple items from this list, should draw the attention of your employees.

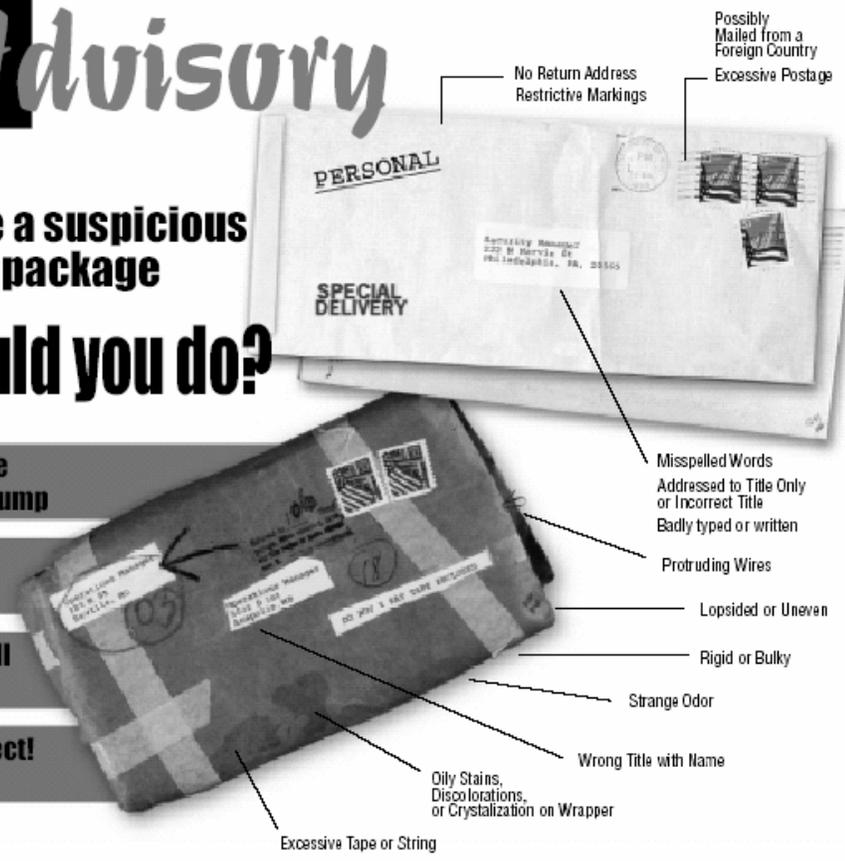
Characteristics of suspicious packages or letters include:

- Excessive postage, no postage, or non-canceled postage
- No return address or obvious fictitious return address
- Packages that are unexpected or from someone unfamiliar to you
- Improper spelling of addressee names, titles, or locations
- Packages that are addressed to someone no longer with your organization or are otherwise outdated
- Unexpected envelopes from foreign countries
- Suspicious or threatening messages written on packages
- Postmark showing different location than return address
- Distorted handwriting or cut and paste lettering
- Unprofessionally wrapped packages or excessive use of tape, strings, etc.
- Packages marked as "Fragile - Handle with Care", "Rush - Do Not Delay", "Personal" or "Confidential"
- Rigid, uneven, irregular, or lopsided packages
- Packages that are discolored, oily, or have an unusual odor or ticking sound
- Packages that have any powdery substance on the outside
- Packages with soft spots, bulges, or excessive weight
- Protruding wires or aluminum foil
- Visual distractions
- Suspicious objects visible when the package is x-rayed.

FBI *Advisory*

If you receive a suspicious letter or package What should you do?

- 1** Handle with care
Don't shake or hump
- 2** Isolate and look for indicators
- 3** Don't Open, Smell or Taste
- 4** Treat it as Suspect!
Call 911



- No Return Address
- Restrictive Markings
- Possibly Mailed from a Foreign Country
- Excessive Postage
- Misspelled Words
- Addressed to Title Only or Incorrect Title
- Badly typed or written
- Protruding Wires
- Lopsided or Uneven
- Rigid or Bulky
- Strange Odor
- Wrong Title with Name
- Oily Stains, Discolorations, or Crystallization on Wrapper
- Excessive Tape or String

If parcel is open and/or a threat is identified...

For a Bomb
Evacuate Immediately
Call 911 (Police)
Contact local FBI

For Radiological
Limit Exposure - Don't Handle
Distance (Evacuate area)
Shield yourself from object
Call 911 (Police)
Contact local FBI

For Biological or Chemical
Isolate - Don't Handle
Call 911 (Police)
Wash your hands with soap and warm water
Contact local FBI



Police Department _____

Fire Department _____

Local FBI Office _____

(Ask for the Duty Agent, Special Agent Bomb Technician, or Weapons of Mass Destruction Coordinator)

GENERAL INFORMATION BULLETIN 2000-3
Produced by: Bomb Data Center
Weapons of Mass Destruction Operations Unit

Appendix C: Protocol For Managing Credible Anthrax Threats in the Washington DC metropolitan area

Every mail processing location should have at least two signs posted, in a place that makes them easy to read. One sign should specify the appropriate law enforcement to call in the event of an emergency, and the other should provide a list of suspicious characteristics (such as the FBI poster above). In most federally owned buildings and leased buildings occupied entirely by federal tenants, the appropriate law enforcement is the Federal Protective Service. In others, it may be the agency's own law enforcement or the local police.

A law enforcement officer, with the appropriate training and equipment, should evaluate every apparently credible anthrax threat.

1. If you have identified a suspicious letter, package, or object:

- Remain calm.
- Do not open the letter or package.
- Do not shake or empty the contents of a suspicious letter or package.
- Do not carry the letter or package, show it to others, or allow others to examine it.
- Put the envelope or package on a stable surface; do not sniff, touch, taste, or look closely at it or any contents that may have spilled.
- Alert others in the area about the suspicious letter or package.
- Ask a supervisor or designated mail center worker to confirm that the letter or package is suspicious.
- The supervisor should attempt to resolve the identification by contacting the addressee or the sender as indicated on the suspicious package's return address.
- Notify the designated security officer or law enforcement official. Give your name, location, phone number and description of letter or package. Remain available to answer questions.
- Leave the area, close any doors to prevent others from entering the area. If possible, shut off the ventilation system.
- **Wash hands with soap and water.**
- List all persons who were in the room or area when this suspicious letter or package was recognized and a list of persons who may have handled the letter or package. Local public health authorities and law enforcement officials may request the list.
- Write down or photograph the visible information on the letter or package.
- All suspicious items should be maintained as evidence as part of a criminal investigation until released by the appropriate law enforcement entity.

2. When called to investigate an apparent anthrax threat, the law enforcement officer should:

- Determine if the ventilation system can be turned off to limit any other exposures and remain turned off until the test results are back.
- If any suspicious powder is visible on the victims' clothes, the clothes should be removed carefully, to avoid suspending the powder in air, and placed in a plastic bag.
- Check for the presence of high-speed mail processing equipment and use of engineering controls such as: high-efficiency particulate air (HEPA) filters for cleaning high-speed, mail processing equipment; HEPA-filtered exhaust hoods installed in areas where dust is generated; air curtains (laminar air flow) installed in areas where large amounts of mail are processed. Presence of controls will affect evacuation procedures.
- If powder is visible or other evidence suggest possible criminal activity, the law enforcement officer should consider closing the immediate area as a potential crime scene. Do not publicize any decision to close the area.
- If the threat appears credible, the law enforcement officer should immediately consult with representatives from management, security, and the mail center, to share any decision about evacuation.

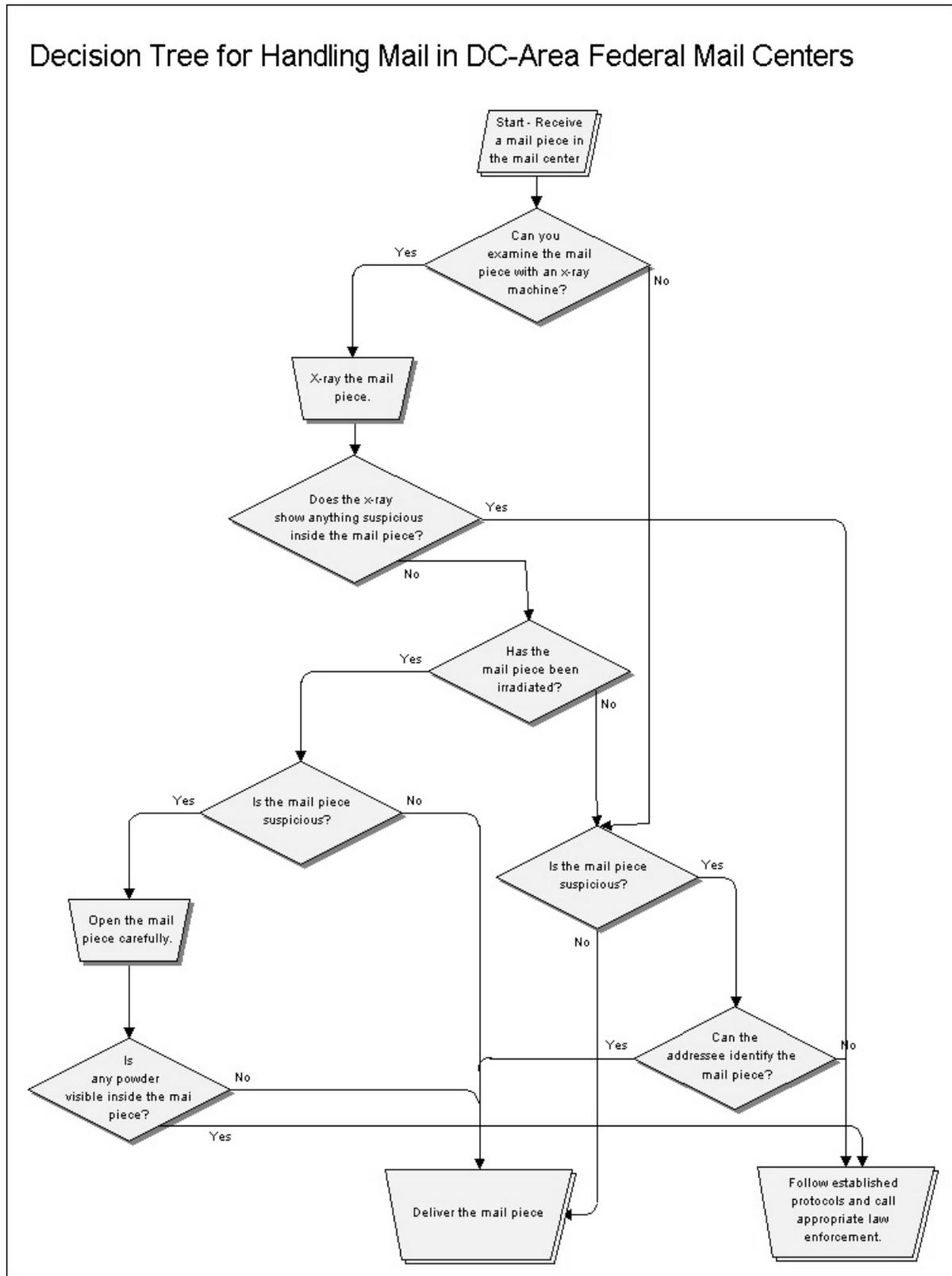
If the law enforcement officer determines that there is a credible anthrax threat, he or she will arrange to transport the letter or package to the designated LRN laboratory. If the origin of the suspect letter or package is unknown, or if it has not been x-rayed, the law enforcement officer should consider whether it might be a potential explosive, radioactive, or chemical threat, and treat it accordingly.

The LRN laboratory will culture the samples that are suspected of containing anthrax spores and will inform local public health that they are testing a credible threat. Preliminary results will be available within 12 to 24 hours after culturing begins. The laboratory will inform the law enforcement contact, the designated facility point of contact, and local public health of the results, either positive or negative.

If a positive culture is obtained, the law enforcement contact must call the Federal Bureau of Investigation and the local police. The FBI is responsible for the criminal investigation. Local public health is responsible for coordinating the response, in accordance with the National Response Team's (NRT) "Technical Assistance for Anthrax Response." Access to federal agency resources and support can be obtained by contacting the National Response Center at 1-800-424-8802.

Appendix D

Decision Tree for Handling Mail in DC-Area Federal Mail Centers



Appendix E

STATEMENT BY THE DEPARTMENT OF HEALTH AND HUMAN SERVICES Regarding Hand-Held Assays for Identification of *B. Anthracis* Spores

Purpose

To provide law enforcement, fire services, emergency managers and other first responders with guidance regarding the purchase and use of hand-held assays used for detecting anthrax spores and other biological agents.

Summary

The U.S. Department of Health and Human Services at this time recommends against use by first responders of hand-held assays to evaluate and respond to an incident involving unknown powders suspected to be anthrax or other biological agents.

Background

In recent months, Federal, State and local first responders have had to evaluate numerous samples of white powdery substances to determine if *B. anthracis* (anthrax) spores are present. In some cases, field tests showed an apparent “positive” result and this led to the quarantine, isolation or decontamination of people. When these samples were referred to a reference lab in the Laboratory Response Network (LRN), they were found to be negative through microbiological culturing and molecular methods. The devices used for the initial field tests included tickets and strips from at least four vendors. Problems resulted from a variety of factors, such as testing of caustic or harsh chemicals or the performance of tests by inadequately trained personnel.

Discussion

Biological agent field test kits are, at this time, not sufficiently accurate for on-scene decision making in the field. Besides the high number of false positive results, hand-held assays also yield negative results on samples that are truly positive (false negatives). In formal terms, the sensitivity of such assays are in the range of 100,000 spores whereas a culture may detect one spore.

In contrast to situations with chemical exposure where rapid decision making (minutes) can be crucial to the protection and treatment of individuals, there are no examples of biological exposure where decision-making cannot wait for the results of validated laboratory procedures (1-2 days). Any perceived benefit of using currently available hand-held assays fall short of the costs of unnecessary remedial actions and amplified public concern.

No Federal agency certifies or approves these devices. The FBI and CDC have recently evaluated commercially available hand-held assays for the detection of *B. anthracis*. These studies confirm the low sensitivity of such assays and their potential to produce false-positive results with non-anthrax bacteria and chemicals. The performance of handheld assays for the detection of biological agents other than *B. anthracis* has not been evaluated and their use is also not recommended at this time.

Conclusions

Until results are obtained that would warrant the use of hand-held assays, DHHS recommends:

- (1) hand-held assays systems not be used for the assessment of suspected biological samples;
- (2) Whenever a biological agent is suspected, a unified command should assess the credibility of the situation and determine an appropriate response. The unified command should include fire services, public health, the FBI's Weapons of Mass Destruction Coordinator, and law enforcement;
- (3) Substances that are found to be a credible public health threat by the unified command should be screened in the field for volatile organic compounds (VOC), pH, explosives, and radiation, and then sent to an appropriate laboratory in the Laboratory Response Network (LRN) for testing. First responders and local public health programs need to establish protocols to provide this support and logistics of the response. Besides testing of samples in an LRN laboratory, the protocol should include a system for identification and follow-up of the potentially exposed population and a joint communication plan for the public and media relations. Since exposure to airborne anthrax spores is potentially life threatening, all credible threats should be handled appropriately in a timely manner.

References:

1. "CDC Health Advisory: Hand-Held Immunoassays for Detection of Bacillus anthracis Spores." October 18, 2001
<http://www.bt.cdc.gov/DocumentsApp/Anthrax/10182001HealthAlertPM/10182001HealthAlertPM.asp>
2. "Use of Onsite Technologies for Rapidly Assessing Environmental Bacillus anthracis Contamination on Surfaces in Buildings." CDC MMWR Vol 50 Number 48. December 7, 2001. <http://www.cdc.gov/mmwr/PDF/wk/mm5048.pdf>
3. "Approved Tests for the Detection of Bacillus anthracis in the Laboratory Response Network." <http://www.bt.cdc.gov/DocumentsApp/Anthrax/ApprovedLRNTests.asp>

Appendix F: Useful Websites

U.S. Department of Labor (DOL), Occupational Safety and Health Administration (OSHA) - www.osha.gov

Workplace Risk Pyramid, OSHA - www.osha.gov/bioterrorism/anthrax/matrix

Centers for Disease Control (CDC) - www.bt.cdc.gov

Office of Personnel Management - publishes questions and answers on federal employees personnel issues, etc. - www.opm.gov

Federal Bureau of Investigation (FBI) – www.fbi.gov

Federal Emergency Management Agency (FEMA) – www.fema.gov

Bureau of Alcohol, Tobacco and Firearms (BATF) – www.atf.treas.gov

DA PAM 25-52, [Mail Facility Security and Handling Suspicious Mail](http://www.usapa.army.mil/pdffiles/p25_52.pdf) – www.usapa.army.mil/pdffiles/p25_52.pdf

Council on Foreign Relations - Homeland Security Questions and Answers on Biological Attacks - www.terrorismanswers.com/security

General Services Administration (GSA) – www.gsa.gov

GSA Mail Communications Policy Office - www.gsa.gov/mailpolicy

GSA Federal Protective Service - www.gsa.gov/federalprotectiveservice

Security Assessment – www.oca.gsa.gov (Note – you will need to obtain a password to use the resources on this site)

US Postal Service (USPS) – www.usps.com

USPS Suspicious Mail Alert Poster (downloadable) - <http://www.usps.com/news/2001/press/mailsecurity/security.htm>

USPS and FBI Reward Poster - www.usps.com/news/pdf/25m_poster.pdf

USPS Postal Inspection Service - www.usps.com/postalinspectors

Stephen A. Perry
Administrator of General Services