

Introduction

How to Respond to an Anthrax Threat in a Mail Center

The mail center is a major gateway into any business or government agency. Each day, the typical mail center handles hundreds or thousands of packages from routine letters to confidential documents, high value parcels, and even money. Despite this, many managers overlook security and training for this critical nerve center. An effective mail center security program should have two components, a plan for what to do in a common situation and training for all employees.

This training module will give you, the Mail Manager, the tools to prepare your staff for how to respond to an anthrax threat in a mail center.

We generally tend to think of the mail as safe. The U.S. Postal service delivers approximately 208 billion pieces of mail per year. Of the mail processed in 40,000 postal facilities there were relatively few incidents.

Training for what to do if an anthrax threat is received in a mail center will show that effective countermeasures are available against anthrax and enable staff to take steps to defend and protect against these threats.

In this course you will learn about:

- **A history of chemical and biological warfare and why it is a current threat;**
- **Indicators of possible biological weapon use;**
- **Overview of bacterial agents;**
- **Forms anthrax may take;**
- **Symptoms and effects of an anthrax exposure;**
- **Treatment if exposed to anthrax;**
- **Steps to take immediately if anthrax is suspected;**
- **Resources available to help in the event of a threat.**

Why Do I Need to be Concerned About Biological Weapons If I Work In A Mail Center?

A little known fact for most people is that chemical and biological warfare (CBW) is the number 1 choice of terrorists today.

Some forms of BW can be mailed! Even if the threat is a hoax, it can disrupt the operations of an agency.

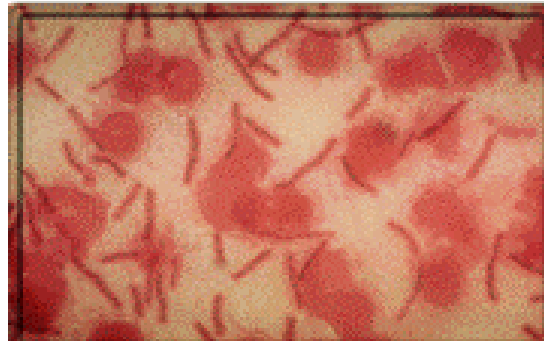
A delivery system for a BW agent can consist of just about anything that can produce an aerosol, including a wide variety of commercially available objects.

The most likely form for dissemination of anthrax as a biological terrorist agent is aerosolization of spores.

Unlike nuclear and chemical agents, biological agents are not detectable with the five human senses. You would never realize you may have been exposed to a biological agent until you started becoming sick with certain symptoms.

What is Anthrax

Anthrax is a bacterial, zoonotic disease caused by *Bacillus Anthracis*. Anthrax occurs in domesticated and wild animals, including goats, sheep, cattle, horses and deer, but other animals may be infected. Anthrax is an invisible bacteria that can live in soil, water, and dead animals.



Picture of an Anthrax Spore

Screening Procedures for Letters and Packages

Past training in security planning for suspected letter and parcel bombs reminded us that since all government agencies receive mail, a letter and parcel bomb security plan is an essential component of this process. For that reason, screening procedures for postal items should be in place.

Incoming mail in any organization follows much the same pattern.

- Bundles or bags of mail, as well as parcels, are delivered to a centralized mail center for distribution.
- The actual initial sorting of the mail for delivery to units, divisions, or individuals must be done by hand, with each item being picked up, its address read, and the mail item placed into its proper distribution box for delivery.
- This is the point where screening of incoming mail for suspect items should occur and those individuals who normally handle this mail sorting should perform the screening action.
- This is critical because those individuals are most likely to notice postal items that are contrary to normal mail.

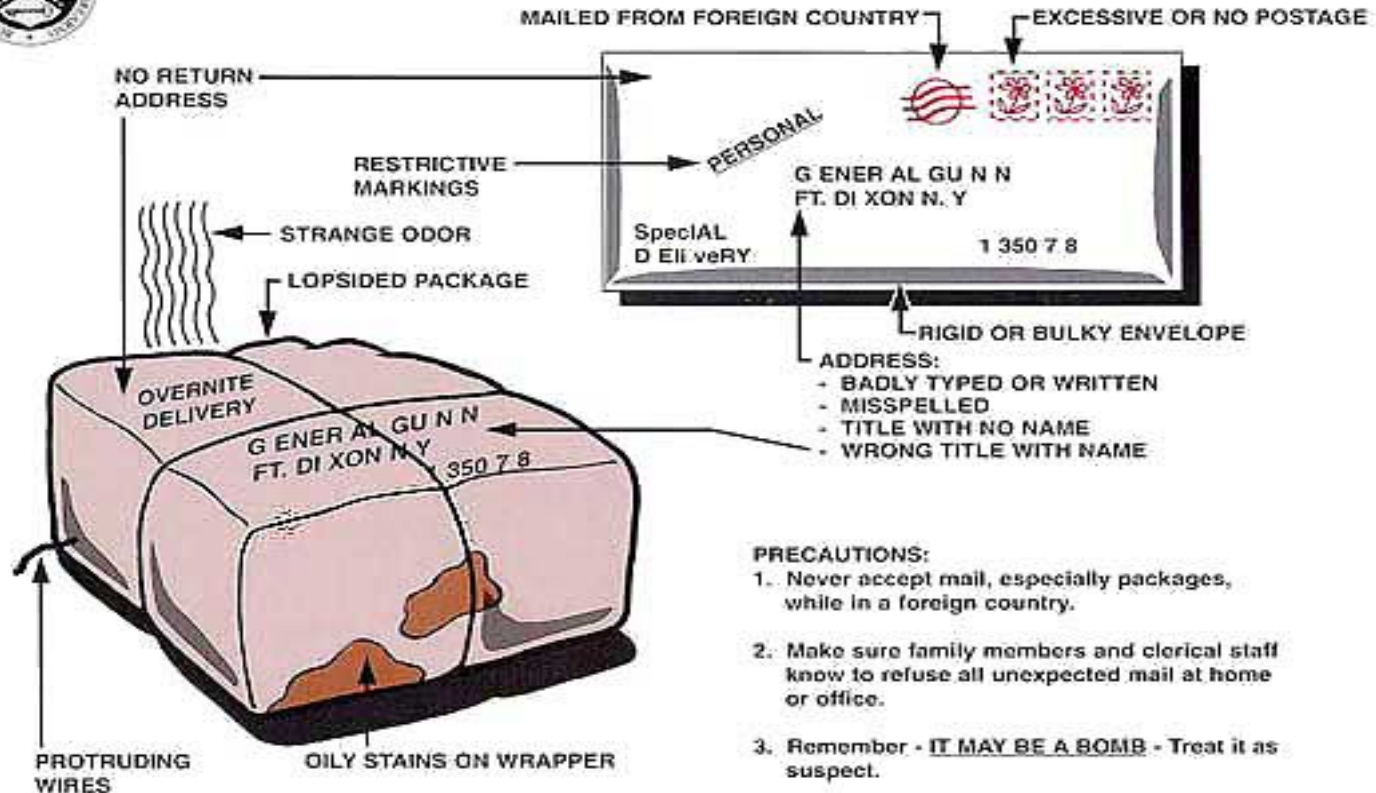
What constitutes a suspicious letter or parcel?

Some typical characteristics which ought to trigger suspicion include letters or parcels that:

- Excessive postage, no postage, or non-canceled postage
- No return address or fictitious return address
- Improper spelling of addressee names, titles, or locations
- 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 with soft spots, bulges, or excessive weight
- Protruding wires or aluminum foil
- Visual distractions



WARNING! Suspect Letter and Package Indicators



FOR MORE INFORMATION ON BOMB SECURITY OR BOMB THREATS, CONTACT YOUR LOCAL ATF OFFICE.

ATF I 3324.1 (6/95)

Picture of package with suspect and package indicators

Courtesy of ATF <http://www.atf.treas.gov/explarsen/information/indic.htm>

What Should You Do If You Receive an Anthrax Threat?

These threats require prompt action by health, law enforcement and laboratory personnel. Coordination and communication across agencies are necessary to protect the public and first responders from agents such as anthrax.

If you opened a letter that claims to have contaminated you with anthrax and there is **no substance in the letter or envelope, no one including the person opening the letter, is at risk. No decontamination or treatment is necessary. Notify your supervisor and they will notify the appropriate officials.**

If you opened a letter that claims to have contaminated you with anthrax and there is a substance in the letter or envelope the Centers for Disease Control and Prevention (CDC) in Atlanta recommends the following steps:

1. Do not shake or empty the contents of any suspicious envelope or package;
2. Double bag the letter or package in zipper-type or zip-lock type plastic bags using latex gloves, or some other type of container to prevent leakage of contents; If you do not have any container, then COVER the envelope or package with anything (e.g., clothing, paper, trash can, etc.). DO NOT REMOVE THIS COVER;
3. Then LEAVE the room and CLOSE the door, or section off the area to prevent others from entering (i.e., keep others away);
4. **Notify your immediate supervisor and both local police and the FBI, who will arrange to collect the letter/package and assess the threat situation;**
5. WASH your hands with soap and water to prevent spreading any powder to your face;
6. Ensure that all persons who have touched the letter wash their hands with soap and water;
7. LIST all people who were in the room or area when this suspicious letter or package was recognized. Give this list to both the local public health authorities and law enforcement officials for follow-up investigations;
8. Place all items worn at the time in plastic bags and keep them available for law enforcement; If possible change clothing in the workplace and DO NOT let anyone else touch the clothing.
9. Shower with soap and water;
10. Notify Center for Disease Control (CDC) Emergency Response at 770-488-7100 for any questions of if you require further information. Also you can access their web site at:
http://www.cdc.gov/ncidod/dbmd/diseaseinfo/anthrax_g.htm

What Are the Clinical Features of Anthrax?

Anthrax is an acute bacterial infection of the skin, lungs, or gastrointestinal tract. Infection occurs most commonly via the skin route and only very rarely via the others.

The cutaneous or skin form occurs most frequently on the hands and forearms of persons working with infected livestock or contaminated animal products and represents 95% of cases of human anthrax. It is initially characterized by a papule which progresses to a fluid filled blister with swelling at the site of infection. The scab that typically forms over the lesion can be black as coal, hence the name anthrax, which is Greek for coal. With treatment, the case fatality rate should be less than 1% among cutaneous cases. The fatality rate for **untreated inhalational or intestinal anthrax is over 90%.**

The skin form of the human disease may be contracted by handling contaminated hair, wool, hides, flesh, blood or excreta of infected animals and from manufactured products such as bone meal. Infection is introduced through scratches or abrasions of the skin, wounds.

The spores are very stable and may remain viable for many years in soil and water. They will resist sunlight for varying periods.

The inhalation form is contracted by inhalation of the spores, occurs mainly among workers handling infected animal hides, wool, and furs. Under natural conditions, inhalation anthrax is exceedingly rare, with only 18 cases having been reported in the United States in the 20th century.

The gastrointestinal form of form of anthrax may be contracted by eating insufficiently cooked, infected meat. This form has not been seen in the U.S. for decades.

Anthrax is not contagious, therefore quarantine and general decontamination of an entire building or office are not necessary. Thorough cleaning is necessary for any area where the spores may have been released.

What Are the Symptoms and Effects of Anthrax?

After an incubation period of 1-7 days, the onset of inhalation

anthrax is gradual. Possible symptoms include:

- fever
- malaise
- fatigue
- cough
- mild chest discomfort followed by severe respiratory distress

A mild illness can progress rapidly to respiratory distress and shock in 2-4 days. This is followed by a range of more severe symptoms including difficulty breathing, exhaustion, tachycardia and cyanosis. Shock and death occur within 24-36 hours after onset of severe symptoms.

What Is the Treatment for Anthrax?

Treatment with antibiotics beginning one day after exposure to a lethal aerosol challenge with anthrax spores (8,000 - 22,000 spores) has been shown to provide significant protection against death in monkeys, especially when combined with active immunization. Penicillin, doxycycline, ciproflaxin, are all effective against most strains of B anthracis. Penicillin is the drug of choice for naturally occurring anthrax.

If untreated, inhalation anthrax is fatal. For post-exposure prophylaxis the administration of antibiotics should be continued for at least 4 weeks in those exposed and if available, those exposed should receive 3 doses of vaccine before antibiotics are discontinued.

What Is the Treatment for Anthrax?

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A vaccine is available and consists of a series of 6 doses over 18 months with yearly boosters. This vaccine, while known to protect against anthrax acquired through the skin, is also believed to be effective against inhaled spores.

Effective decontamination can be accomplished by boiling contaminated articles in water for 30 minutes or longer and using common disinfectants. Chlorine is effective in destroying spores and vegetative cells. Remember, anthrax spores are stable, able to resist sunlight for several hours and able to remain alive in soil and water for years.

How Is Anthrax Made Into a Weapon?

Biological agents can be prepared and used either in liquid or dry form. Procedures and equipment for preparing *liquid* biological agents are simple, but the resulting product is difficult to disseminate into small-particle effective aerosols. Conversely, procedures for producing *dried* biological agents, such as anthrax spores are complex and require more sophisticated equipment, yet this product is readily disseminated by any number of devices.

If an organization has the capability to produce viruses by means of tissue culture technology, then it could process a liquid agent into a dry powder. The dried agent might have the consistency of bath powder. An ideal dry agent should have free-flowing properties. If the powder were derived from a highly sophisticated process, however, it would contain very small particles and be highly charged with static electricity. A less sophisticated process yields a coarse-appearing powder comprised of large particles (10-20 microns) and is not particularly difficult to handle.

Unlike nuclear and chemical agents, biological agents are not detectable with the five human senses. You would never realize you may have been exposed to a biological agent until you started becoming sick with certain symptoms.

What Sources are Available to Help Me?

There are a variety of resources available to help federal Mail Managers cope with these threats and develop better means of responding:

The **Awareness of National Security Issues and Response (ANSIR)** Program is the FBI's National Security Awareness Program. It is the "public voice" of the FBI for espionage, counterintelligence, counter terrorism, economic espionage, cyber and physical infrastructure protection and all national security issues. The program is designed to provide unclassified national security threat and warning information to U.S. corporate security directors and executives, law enforcement, and other government agencies. It also focuses on the "response" capability unique to the FBI's jurisdiction in both law enforcement and counterintelligence investigations.

To report suspected illegal intelligence or terrorism activity against the interest of the United States, telephone the ANSIR Coordinator at the FBI Field Office nearest you: <http://www.fbi.gov/contact/fo/info.htm>

What Sources are Available to Help Me?

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The Centers for Disease Control and Prevention(CDC) is responsible for coordinating all public health and would be contacted at the Emergency Preparedness and Response Branch, National Center for Environmental Health to report an incident at 770-488-7100. Their web site is <http://cdc.gov/>.

The Federal Protective Service (FPS) is part of the General Services Administration (GSA) that is responsible for security in all federally leased space.

GSA Life Threatening Emergency Contact List:

http://www.gsa.gov/Portal/content/offerings_content.jsp?contentOID=116045&contentType=1004

What Sources are Available to Help Me?

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The U. S. Postal Inspection Service is the law enforcement branch of the U.S. Postal Service, empowered by federal laws and regulations to investigate and enforce federal statutes related to crimes against the U.S. Mail, the Postal Service and its employees. The Postal Inspection Service extends full cooperation to all federal, state and local authorities in law enforcement matters to ensure greater protection to the public. For assistance with postal-related problems, contact the nearest Inspection Service Division listed in your local telephone directory.

The web site is [http://www.framed.usps.com/postal inspectors](http://www.framed.usps.com/postal_inspectors).

Post-Decontamination Considerations:

Law enforcement personnel should interview all potential victims and document their names, addresses, and phone numbers;

- **Decisions to provide treatments for Biological Threat Agents should be made by public health authorities;**

- **Consider mental health counseling for potentially exposed persons;**

- **It is important that sample results be relayed to exposed persons once available to either initiate additional medical procedures if tests are positive or to eliminate fears and anxiety if tests are negative;**

- **If explosive devices are ruled out and the evaluation for potential chemical, biological, or radioactive source material is negative, then response continues as a law enforcement investigation.**