Anthrax in the U.S. Postal System

Lessons That Stunned Us
U.S. Postal Service

- Delivers >200 billion pieces of mail/year to 134 million addresses
- Serves 7 million customers daily at 38,000 postal retail outlets
- Employs @800,000 career employees
- Delivers 2,300 pieces of mail/day/carrier to 500 addresses
U.S. Postal Service

- Handles 46% of world’s card and letter mail volume
- Transports mail by airplane, truck, railroad, boat, and mule (Grand Canyon)
Mail Flow in Florida, New Jersey, New York, and Washington, D.C.

48 local Post Offices including:
- Princeton PO (NJ)
- W. Trenton PO (NJ)
- Kuser Road Business

Distribution plants including:
- Bellmawr Distribution plant (NJ)
- Local Businesses including:
- Hamilton Processing Facility (NJ)

Carteret Hub & Spoke Facility (HSF) (NJ)

West Palm PO Main Branch (FL)
- Lantana PO (FL)
- Blue Lake PO (FL)
- Green Acres PO (FL)
- Lake Worth PO (FL)
- Boca Main Substation (FL)

AMI Building (FL)

Boca Main Substation (FL)

Stamp Fulfillment Kansas City, MO

All DC City Mail for Zips 20000-20099

177 Federal Agencies including:
- 56 USPS Facilities including:
- Morgan Central Postal Facility (NY)

Brentwood Mail Facility (DC)

Carteret Hub & Spoke Facility (HSF) (NJ)

Other Post Offices

Times Sq. PO (NY)

Radio City PO (NY)

Ansonia PO (NY)

Lenox Hill PO (NY)

NYC001-47 Home

Carteret Hub & Spoke Facility (HSF) (NJ)

Pataki's Office (NY)

CBS (NY)

ABC (NY)

Rockefeller Ctr PO (NY)

NBC (NY)

NYC001-47 Home

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NYC001-47 Home

Distribution plants including:
- Labor Mail Ctr, Dominic V Daniels, Hackensack, Central NJ, Performance, Monmouth, Newark Main, Patterson, West Jersey

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= Confirmed anthrax case associated with site
= Suspect anthrax case associated with site
= Environmental samples positive

November 7, 2001
New Jersey Trenton Processing and Distribution Center in Hamilton

New Jersey Department of Health
USPS Hamilton Facility
Preliminary Results Environmental Sampling

Contaminated letters went to AFCS and DBCS/OSS and then out dispatch.

Mail comes in here

DPRC sorts large and wide pieces out and letters get moved to AFCS on belt and other mail goes to FSM and SPBS.

Mail is sent out from here

Typed and barcode letters are sorted here

Written letters go to these 3 areas

Letters are stamped and sorted to face same direction

Flats (large envelopes and magazines) are sorted here

Packages are sorted here

Cases

FBI tests in the AFCS area and the DBCS/OSS area were positive on various machines. Tests by NJDHSS and CDC (NIOSH) showed that in other areas of the plant there are also positive results.

Cutaneous cases were found working on the night of October 9th in the DBCS/OSS area (env+) and in the OSS/BCS area. The suspected inhalation case worked in the ISS area (environmental tests above the workstation were positive).

Cases

NJDHSS/CDC
Preliminary Positive
FBI Samples
(some still pending)
Barcodes

- Series of vertical bars printed on mail to facilitate automated processing
- Can reveal letter’s origination and destination
Processing and Distribution Centers

- Large mail-sorting and dispatching plants
- Serve as hub for mail originating post offices, collection boxes, customer mailboxes, large volume mailers
Environmental Sampling Preliminary Results
State Annex 32

Last updated 11/19/2001 12:00 pm

Lab Results
- Negative
- Pending
- Positive
- No Data

Sample type
- HEP-A Vac
- Swipe

Area lines
- Cubicle
- File unit
- Hand sorting
- Lobby
- Mail sorter
- Mens locker
- Meter area
- Packages
- Pigeon hole
- Toledo scale
- Wood chute
- Work station
- X-ray

Created by Dabo Brantley 11/15/2001
Epidemiologic Investigations

1. Palm Beach County – 10/3
2. New York City – 10/12
3. Washington, DC – 10/15
4. Trenton, NJ – 10/17
Postal Facilities Tested for *Bacillus anthracis*
EOC International Team:
Number of Responses by Date and Type of Request
Oct. 12 – Nov. 2

Summary: 94 total requests from 61 countries

Number of Calls per Day

<table>
<thead>
<tr>
<th>Type of Request</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anthrax vaccine</td>
<td>1</td>
</tr>
<tr>
<td>Bioterrorism preparedness</td>
<td>6</td>
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<tr>
<td>Environmental/occupational request</td>
<td>11</td>
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<tr>
<td>Lab-related</td>
<td>31</td>
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<tr>
<td>Request for information</td>
<td>30</td>
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<tr>
<td>Threat</td>
<td>10</td>
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<tr>
<td>Training</td>
<td>4</td>
</tr>
<tr>
<td>Unknown</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total Requests</strong></td>
<td><strong>94</strong></td>
</tr>
</tbody>
</table>

Date of Call

Number of Calls
Postal Workers and Mailhandlers
Mail Industry

- Employs 9 million people
- Accounts for 8% gross domestic product
- Anthrax Hoax: 132 powder-laden packages sent clinics in at least three states product
Bioterrorism-associated Anthrax Cases

Inhalation Disease

- Postal worker/Mail handler
- Non mail handler

Date of Onset

- **NYC letters***
- **Senate letters***

*Postmarked date of known contaminated letters.
Epidemic Curve

NJ  | Cutaneous
NYC | Cutaneous
FL  | Inhalational

DC  | Inhalational
NJ  | Inhalational

NYC Letters

DC Letter

Date

9/16 9/19 9/22 9/25 9/28 10/1 10/4 10/7 10/10 10/13 10/16 10/19 10/22
Anthrax Cases

Cases

Date of Onset

9/17 9/21 9/25 9/29 10/3 10/7 10/11 10/15 10/19 10/23 10/27

NYC letters postmarked Trenton, NJ

Daschle letter postmarked Trenton, NJ

Daschle letter processed Brentwood facility

NYC
NJ
FL
DC
Anthrax and the Mail
IMPACT ON POSAL WORKERS AND MAIL HANDLERS

- Cases of inhalation or cutaneous anthrax
- Deaths among postal workers
- Postal facilities closed due to environmental contamination with *Bacillus anthracis*
- Numerous inquiries to CDC, health departments and US Postal Service (USPS) regarding mail and workplace safety
Anthrax and the Mail
PUBLIC HEALTH GUIDELINES

• OCTOBER 26: Investigation of Bioterrorism-Related Anthrax and Interim Guidelines for Exposure Management and Antimicrobial Therapy, October 2001
• OCTOBER 31: CDC Interim Recommendations for Protecting Workers from Exposure to *Bacillus anthracis* in Work Sites Where Mail is Handled or Processed
• NOVEMBER 4: Interim Guidelines for Investigation of and Response to *Bacillus anthracis* Exposures
EDUCATIONAL NEEDS OF POSTAL WORKERS

- Basics of anthrax
- Personal protective equipment and workplace safety
- Recognition/handling suspicious mail
- Postexposure management
Conclusions

- USPS used as vehicle for executing anthrax bioterror attack
- Intentional delivery of *B. anthracis* resulted in illness and death among mailhandlers and others, contamination and closure of postal facilities, curtailment in mail services, implementation of new security measures
Conclusions

• Partnerships with public and private sector partners is essential to adequately prepare and respond to bioterrorist attacks
“This has been a year of challenge. It has been a year of success. It has been a year of change.”

Chief Financial Officer, USPS
November 9, 2001