

**Letters from Trenton:
The Anthrax Investigation at the
Source, New Jersey, 2001**

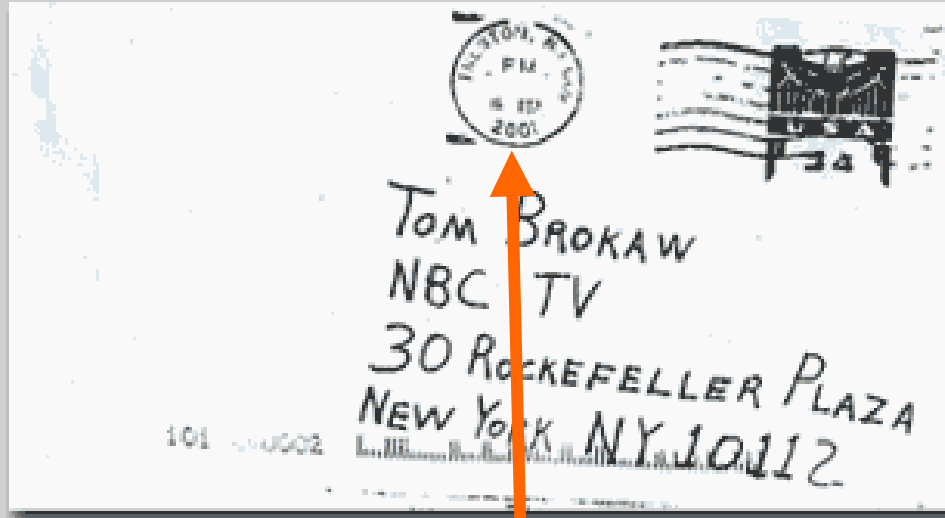
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and**

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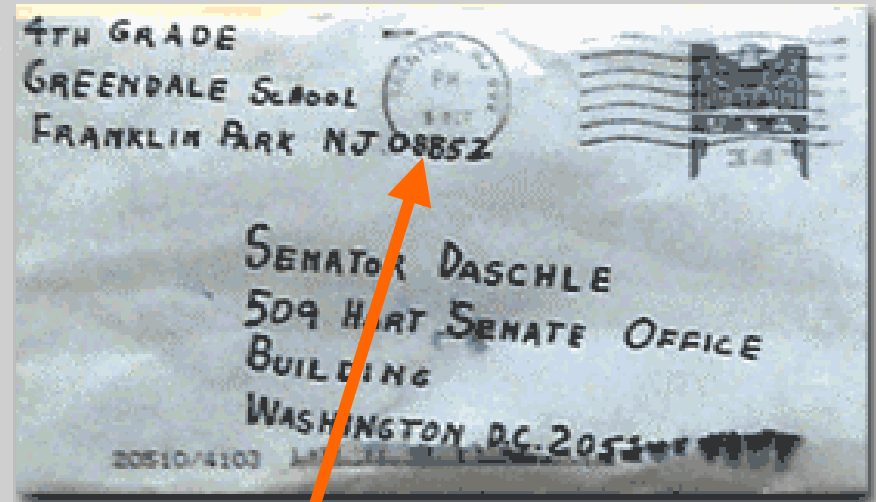




Investigating for Anthrax



FBI Director Robert Mueller said there are similarities between the letter sent to NBC anchor Tom Brokaw, left, and that sent to Senate Majority Leader Tom Daschle.



Source: Federal Bureau of Investigation

Source: CNN website

September 18th
NBC, Tom Brokaw
New York Post

October 9th
Senator Daschle
Senator Leahy



Background

- Letters postmarked at the Trenton Processing and Distribution Center (PDC)
- Letters sorted on September 18th and October 9th
- October 18th:
 - Laboratory confirmation of cutaneous anthrax in a NJ postal worker
 - Trenton PDC closed
 - First CDC team arrived



Objectives

- Determine extent of outbreak
- Assess source of *B. anthracis* exposure
- Recommend and implement control measures



Methods

- Case definition:**
- **Confirmed:** clinically compatible + isolation of *B. anthracis* or 2 positive supportive lab tests
 - **Suspected:** clinically compatible + 1 supportive lab test or an epi link to an environmental exposure

- Surveillance:**
- **Active:** 61 hospitals in NJ, PA, DE
 - **Passive:** websites, hotline

- Environmental:**
- Mail flow
 - Job duties
 - Sampling

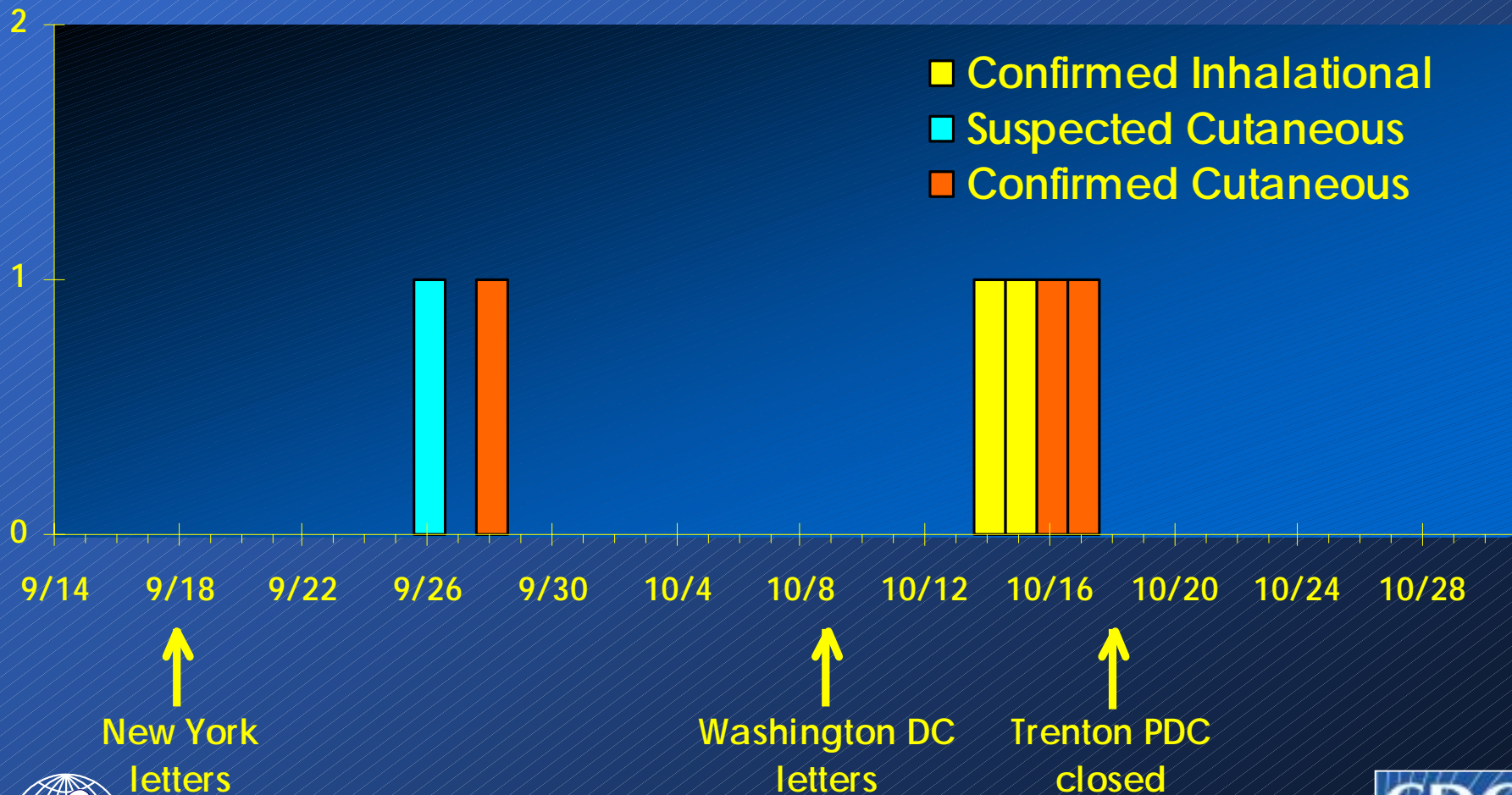


Characteristics of anthrax cases, New Jersey, 2001

- 4 cutaneous, 2 inhalational anthrax
- Average age 46 years
- 4 cases hospitalized
- None died
- 5 postal workers
- 4 worked at Trenton PDC



Anthrax cases, by date of onset, New Jersey, 2001





Trenton PDC

300,000 sq. feet

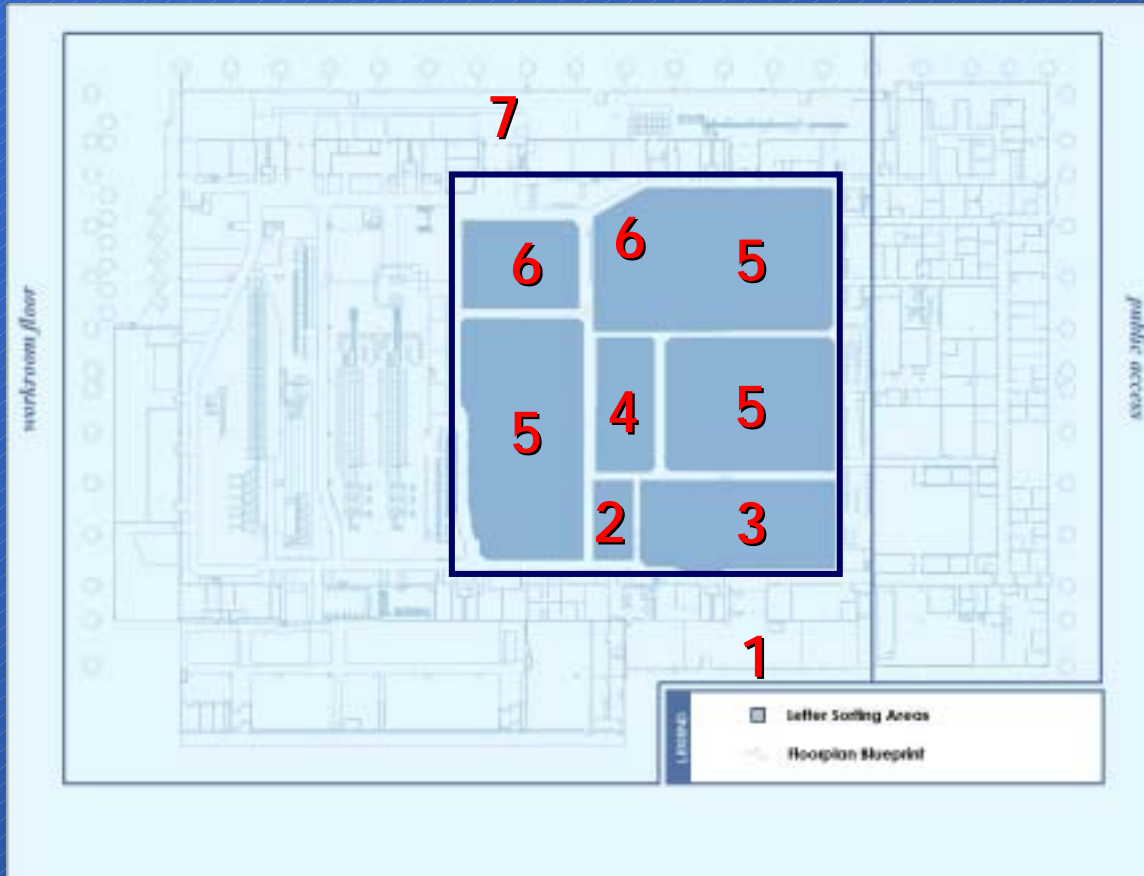
1200 employees

1 million pieces/day

13,500 / hour / machine



Trenton P&DC, letter sorting path



1 entry

2 break-down

3 post mark

4 high speed sorting

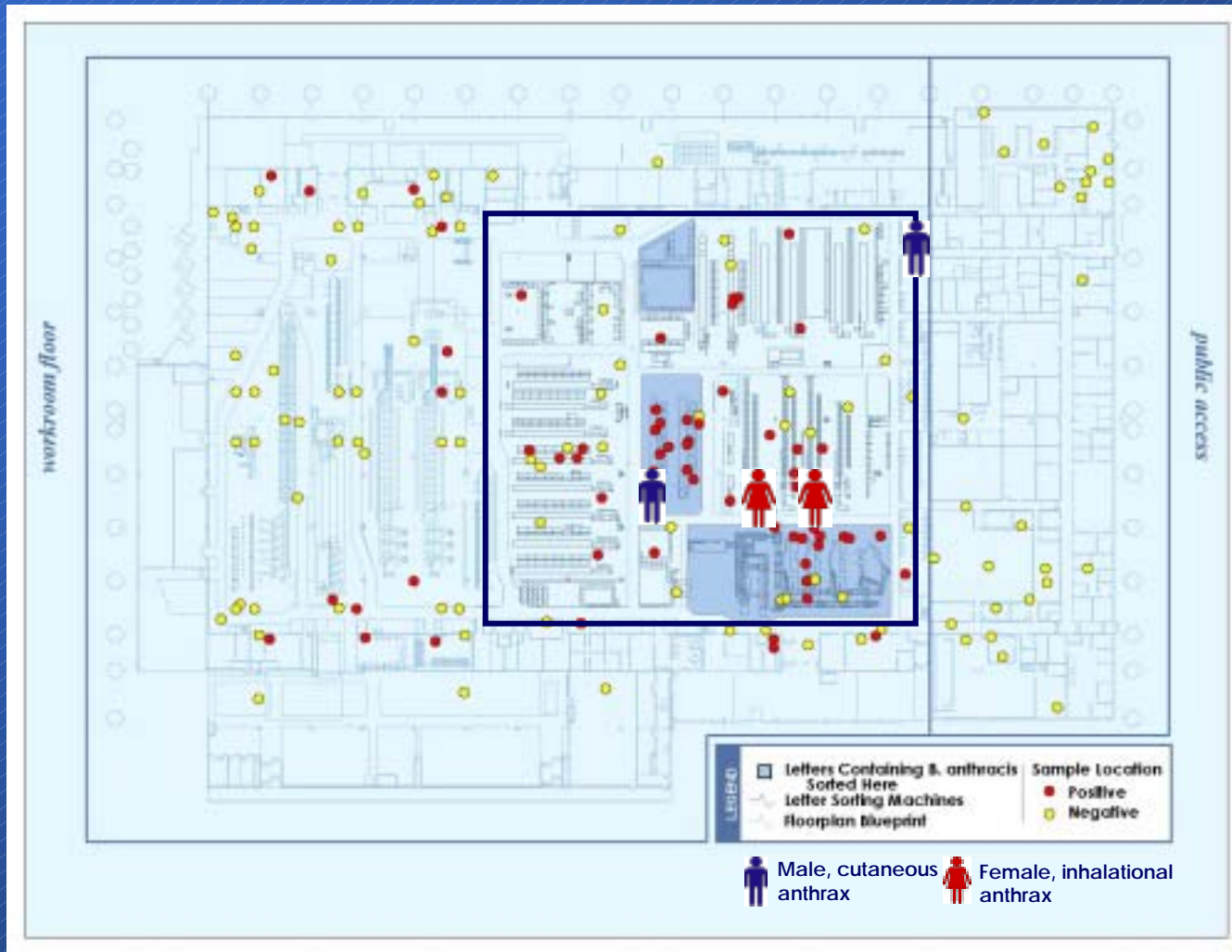
5 additional sorting

6 packing

7 exit on trucks



Trenton PDC, sampling results



63 (37%) of 171 samples positive



Source of exposure for mail carrier who did not work at Trenton PDC

- Mail carrier W. Trenton post office
- Delivered mail sorted at Trenton PDC on September 18th
- Same sorter as NY letters
- Cutaneous anthrax, onset September 28th

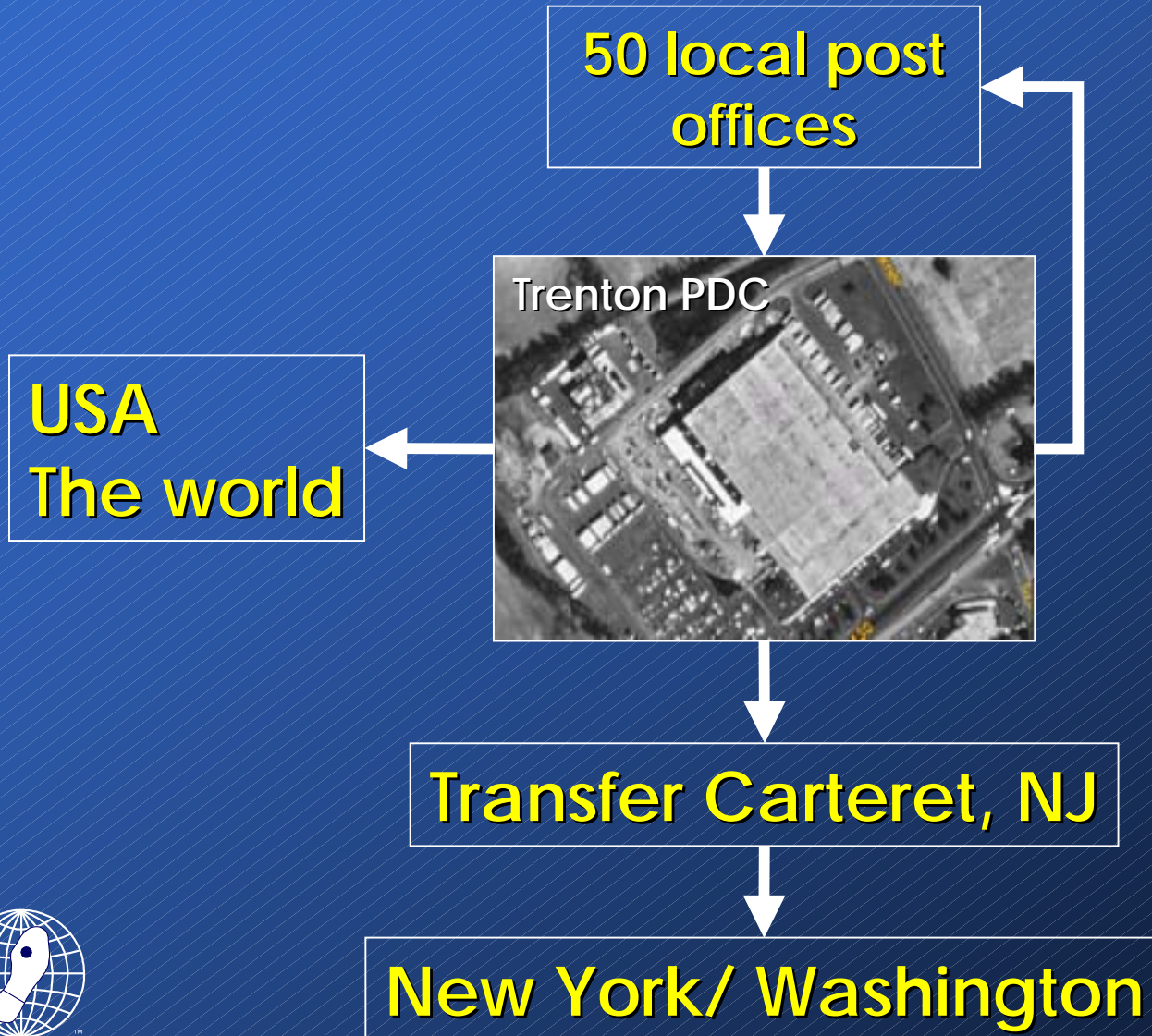


Source of exposure for office worker who did not work at Trenton PDC

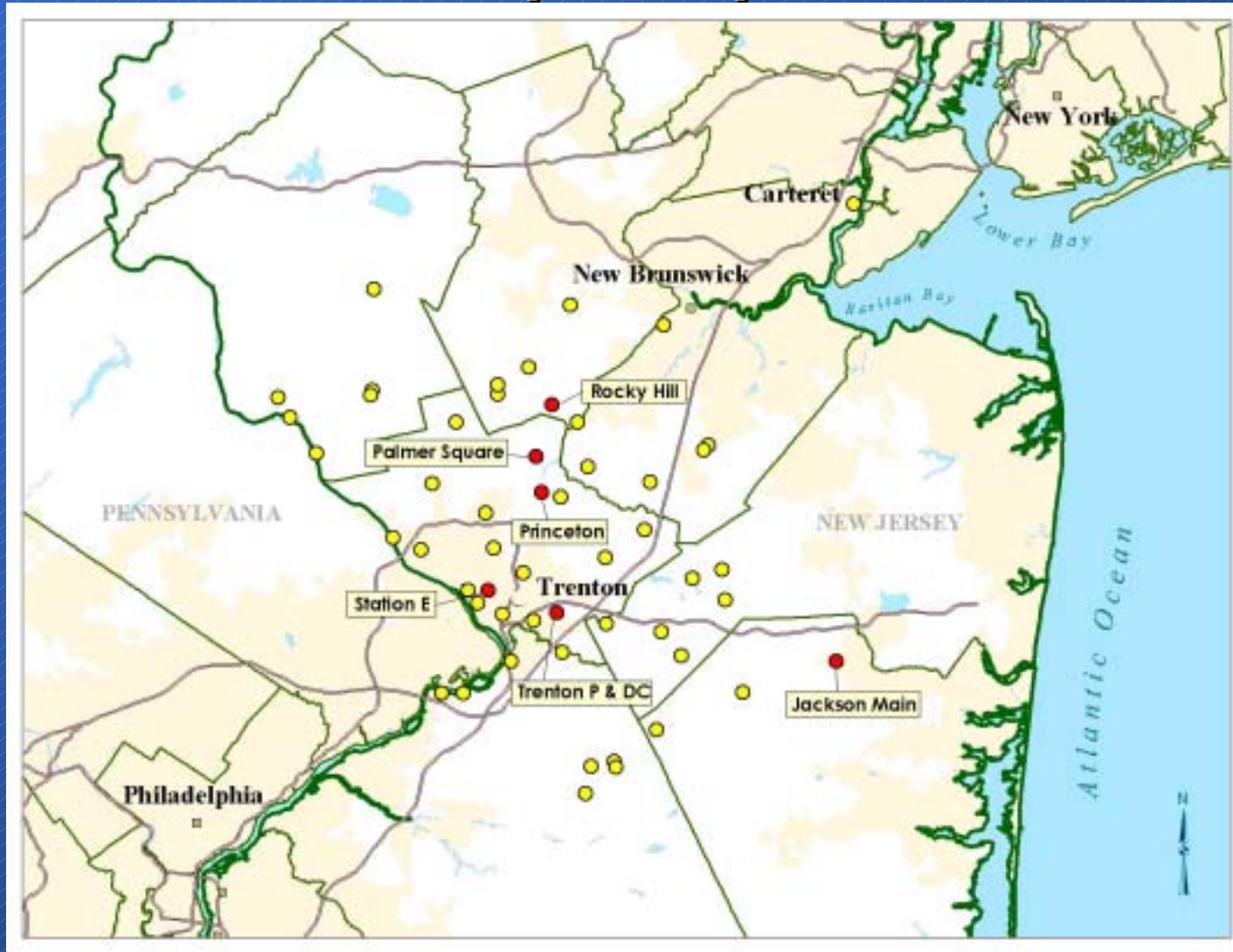
- Bookkeeper at Trenton accounting firm
- Home and work mail direct from Trenton PDC
- Samples from sorter positive
- Positive sample at workplace
- Cutaneous anthrax, onset October 17th



Mail flow to and from Trenton PDC



Other sampled post offices



Post exposure prophylaxis (PEP)

- **PEP recommended for:**
 - Workers Trenton PDC
 - Visitors Trenton PDC > 1 hour
- **1091 of 1395 people (78.3%) were provided full course of antibiotics**



Follow-up

- No anthrax cases with onset after October 17th in New Jersey
- Federal recommendations for protection of postal workers and clean-up of contaminated facilities
- Trenton PDC remains closed



Conclusions

Letters containing *B. anthracis* led to:

- Anthrax in exposed workers
- Contamination of sorting facility
- Cross contamination of letters or equipment
 - Two cutaneous cases
 - Local contamination of local post offices



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