

**Lessons Learned from the
2001 Intentional Anthrax Outbreak:
Perspectives from New York City's
Department of Health**

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“All Hazards” Preparedness Planning at New York City DOH, 1995-Present

- Emergency response command system
- Coordination with emerg mgmt, law enforcement, NYC hospitals and regional public health agencies
- Enhanced traditional and syndromic surveillance
- Pre-planning for large-scale field surveillance
- Enhanced laboratory diagnostic capabilities
- Pre-planning for mass antibiotic/vaccine distribution
- Emergency communications (*MD alerts, hotlines, 2-way radios*)
- Frequent tabletop exercises and drills

New York City Timeline

September 11, 2001

- 8:46 AM: Boeing 767 flew into 1 WTC
- 9:03 AM: 2nd plane hits 2 WTC
- **9:20 AM: NYCDOH Emergency Operations Center activated**
- 9:59 AM: 2 WTC collapses
- 10:29 AM: 1 WTC collapses
- ~ 5 PM: 7 WTC collapses (site of the Mayor's Emergency Operations Center)

Challenges faced by NYCDOH in Response to September 11th

- Communication challenges
 - Mayor's EOC in 7 WTC had collapsed
 - Lost our phones when hub near 7 WTC flooded
 - Completely dependent on 2-way radios and email
 - Unable to contact many of our own employees
 - Public & provider community could not easily reach us
- Needed to evacuate our main building on Sept. 12th, and relocate to our laboratory uptown

New York City Department of Health: Emergency Response to WTC Disaster

- Surveillance: ER surveillance for acute injuries
Hospital needs assessments
Rescue worker injuries
- Environmental: Monitored air, water, food safety
Rodent and vector control
- Clinical issues: Provided first aid in DOH lobby
Oversaw worker safety at site
- Communication: Media advisories; Medical alerts
Public hotlines, Websites
- Sheltering: DOH nurses staffed 12 shelters
- Mental health: Crisis hotline; Set up referrals

Enhanced Bioterrorism Surveillance in Response to 9/11

- Sept 12: Enhanced surveillance for any BT event
 - Active ON-SITE surveillance at 15 sentinel E.R.s staffed by 30 EIS officers from CDC
 - Frequent broadcast alerts to prompt reporting of unusual clusters or disease manifestations
- Oct 4: Began active surveillance for inhalational anthrax after index case in Florida reported
 - Outreach to all infection control, infectious disease, intensive care and laboratory departments

Index Case in New York City

- 38 year old F; works at major media outlet
- Sept 25th: Onset of ulcerative skin lesion on chest
- Oct 1st: Seen by Infectious Disease MD and reports handling “threat” letter at work
- Oct 3rd: Bacterial cultures of wound and Sept 25th letter test (-) for *B. anthracis*
- Oct 8th: Patient re-contacts DOH after hearing of Florida anthrax case
- Oct 9-11: Developed contingency plans with NBC

Friday, October 12, 2001

- 12 AM: CDC reports (-) PCR on biopsy/letter (9/25)
- 3 AM: CDC reports (+) tissue stain on biopsy
- 6 AM: NYCDOH's EOC re-activated
- 9 AM: NBC informed. Start epi investigation
- 12 PM: Press conference at NBC
- 3 PM: Open antibiotic distribution clinic
- 4 PM: 2nd "threat" letter (dated 9/18) found
- 11 PM: 2nd letter tests (+)

When it rains it pours....

- By the evening of October 12th, 3 additional highly suspect cutaneous cases were reported (*all associated with major media outlets*)
- As each case confirmed, multidisciplinary teams mobilized for on-site investigations

News Media Site Investigations

- Combined epidemiologic and criminal investigations
- Main features:
 - Surveillance for additional cases with rapid referral to dermatologist for biopsy
 - Reconstruct event to assess how exposure occurred (*focused on mail trail at each site*)
 - Environmental investigation and clean-up
 - Educational outreach/mental health counseling

Worksite Investigations

Site	Date Started	Interviews	Nasal swabs	Prophylaxis initiated
NBC	Oct 12	1283	1360	1283
ABC	Oct 15	732	757	None
CBS	Oct 18	357	352	None
NY Post	Oct 19	175	111	23

NYCDOH Citywide Response to Anthrax Threat

- Enhanced/Active surveillance for additional cases
- Rapid development of clinical guidelines
- Laboratory testing (>3000 *powder events*)
- Environmental testing/clean-up at affected sites
- Prioritized communication
 - Targeting providers: Broadcast alerts, MD hotline, Speakers Bureau, Website
 - Targeting public: Public Hotline, Website, Speakers Bureau, Press conferences

NYCDOH Anthrax Surveillance

- Enhanced citywide surveillance
 - Modified efforts to detect cutaneous cases
 - Targeted outreach to dermatologists
 - Set up dermatology referral system
 - Purchased LOTS of digital cameras
 - Continued to send frequent broadcast alerts
- Expanded ER syndromic system to 29 hospitals
- Employee health surveillance (Postal and subway)
- Alerts sent to veterinarians re suspect animal cases



THE CITY OF NEW YORK DEPARTMENT OF HEALTH

Rudolph W. Giuliani
Mayor

Neal L. Cohen, M.D.
Commissioner

October 25, 2001

ALERT #5: Inhalational Anthrax among Postal Workers in Washington, D.C. and New Jersey

- 1 - Update on the multi-state outbreak of intentional anthrax
 - Recent cases of inhalational anthrax in 4 postal workers in Washington, D.C. and 1 postal worker in New Jersey
 - In NYC, there are now 5 cases of cutaneous anthrax; NO cases of inhalational anthrax
- 2 - Updated information on how to report a suspect case of anthrax to the NYCDOH and arrange laboratory testing (*See Appendix*)
- 3 - INTERIM GUIDELINES for medical management of milder illness among patients in NYC at higher risk for exposure to letters contaminated with anthrax spores
- 4 - Revised guidelines on prescribing prophylactic antibiotics and nasal swab testing
- 5 - The NYCDOH is now posting all medical information on anthrax on our website at <http://www.nyc.gov/html/doh/html/cd/wtc1hcp.html>
- 6 - Reminder of the importance of starting influenza vaccinations for patients at higher risk for complications