

Coordinating Community Response: Public Health, Hospitals, Law Enforcement, and Emergency Management Services

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Initial NYC Bioterrorism Preparedness Planning Activities

- DOH and OEM collaboration began in 1997
- Mayoral support
- NYC DOH with dedicated staff in 1998
- By 2000:
 - Dedicated unit with 5 staff
 - Largest local public health BT unit
 - Within active Communicable Disease Bureau

NYCDOH Transition To a First Responder Agency



Initial Activities Building and Setting the Table

- Meeting partners from other agencies and jurisdictions
- Identifying major issues and concepts
 - Presentation and response to BT is different than chemical terrorism
 - First responders not NYPD and FDNY
 - DOH the lead agency for detecting and responding to BT, but all operational agencies involved in response

Key BT Preparedness Partners

- Other health departments
- Emergency management
- Law enforcement
- Healthcare sector (especially hospital-based)
- Academia

Initial Activities

Clarifying Agency Responsibilities

- **DOH**
 - Disease surveillance & investigation
 - Public health policy (e.g., instituting quarantine)
- **Law enforcement**
 - Counterterrorism surveillance & investigation
 - Public safety policy (e.g., enforcing quarantine)

Initial Activities

Identifying Common Objectives

- **Determining time and place of event**
 - For DOH:
 - Identify risk factors
 - Focus public health interventions on those at-risk
 - For law enforcement:
 - The crime scene
 - Catching the bad guys

Collaborations Between DOH and Law Enforcement

- Discussions began in 1999
- Included General Counsels from respective agencies
- Major issues:
 - Determining when to share information (i.e., notification)
 - Joint epidemiologic and criminal investigations
 - Draft documents on September 10, 2001

Secondary Gains From These Collaborations

- **Trust**
- **Familiarity with institutional cultures**
- **Personal relationships**

September 11, 2001

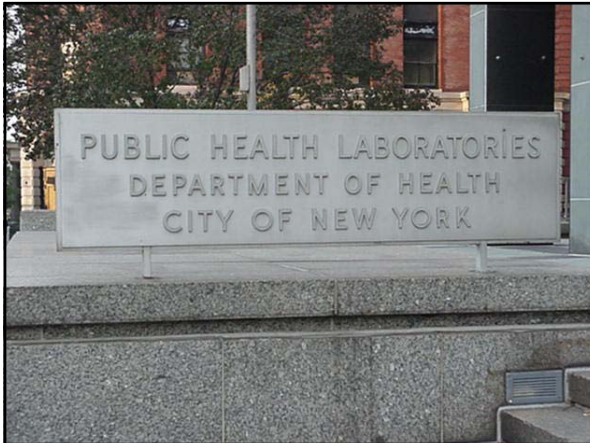


Anthrax 2001: No Explosion and No Sirens



Simultaneous Media Investigations

Site	Interviews	Nasal Swabs	Prophylaxis initiated
NBC	1283	1360	1283
ABC	732	757	None
CBS	357	352	None
NY Post	175	111	23
Hospital	232	28	1923



Evidence Intake at NYC DOHMH Public Health Laboratory



NYC DOHMH Public Health Laboratory's BSL-3 Suite

Joint Investigations

- All patient interviews done with NYPD/FBI and DOH/CDC personnel
- All information shared between agencies
- DOH/CDC liaisons to criminal investigation

Joint Investigations

NYC

- Local personnel
- Minimal conflict
- Open and efficient

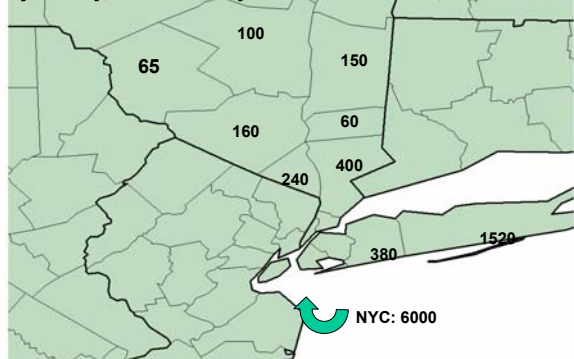
Other location

- CDC and FBI
- Initial conflict
- Distrust

At local level, there is an opportunity to build relationships with counterparts that can improve the ultimate response to emergencies

...but the aim must be to build sustainable relationships between agencies that are not dependent upon personalities within these agencies

Approximate Total Number of Public Health Workers by County, New York City and New York State, 2001



Simple Local Public Health Principles to Consider

- Be proactive
- Be opportunistic
- Be realistic

Public Health Responses to a Covert Biological Release

- Detection
- Notification of key partners/public
- Rapid epidemiologic response to:
 - Confirm diagnosis
 - Identify risk factors
 - Keep track of the impact
- Coordinated interventions
 - Mass treatment/mass prophylaxis

Syndromic Surveillance

- Initial presentation of:
 - Anthrax
 - Plague
 - Brucellosis
 - Tularemia
 - Q Fever
 - Glanders
 - Smallpox
 - Viral hemorrhagic fevers
- Fever
 Headache
 Muscle pain
 Malaise
 "Influenza-like illness"

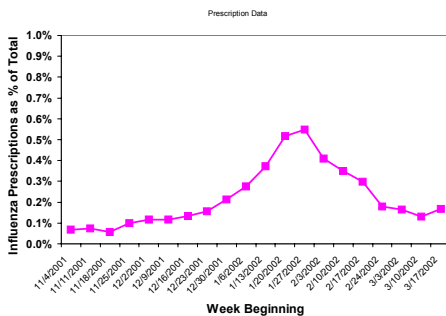
Potential Detection Data Sources

Day 0-exposure occurs
 Day 1- feels fine
 Day 2- headaches, fever- buys OTC meds
 Day 3- develops cough- calls provider
 Day 4- Sees private doctor: "flu"

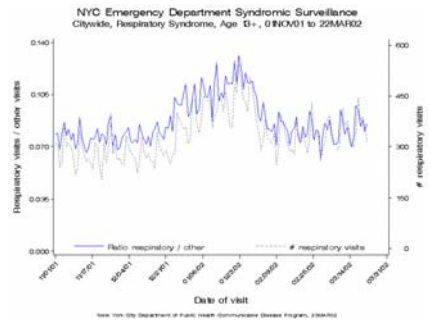
Potential Detection Data Sources

Day 5- Worsens- calls ambulance
 • Seen in ED
 Day 6- Admitted- "pneumonia"
 Day 7- Critically ill- ICU, lab tests +
 Day 8- Expires- "respiratory failure"

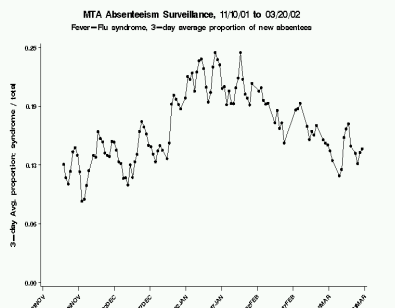
Pharmacy Antiviral Rx



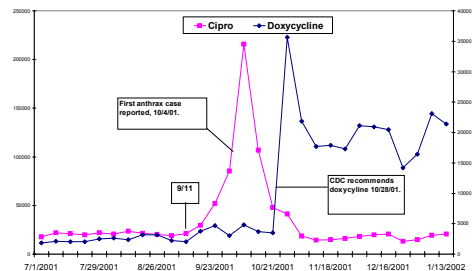
ED respiratory visits



Subway worker - "flu"



Drug sales following anthrax



Dual Use or “Double Green Stamps Value” for Overall Public Health Preparedness



Good ‘Ole Fashion Provider Reporting

- Inhalational anthrax case, 2001
- Bubonic plague cases, 2002

Both reported within 1-2 hours after presentations to hospitals

Biosurveillance



False positive results can have negative consequences



Public Health Responses to a Covert Biological Release

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Hospital Preparedness Treating Mass Casualties

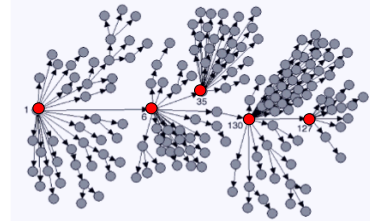
- Significant activity after 9/11
 - Emergency Coordinating Council
 - Briefings
- All-hazards planning
 - Incident management structure
 - Enhanced internal and external communication

Hospital Preparedness Treating Mass Casualties (cont)

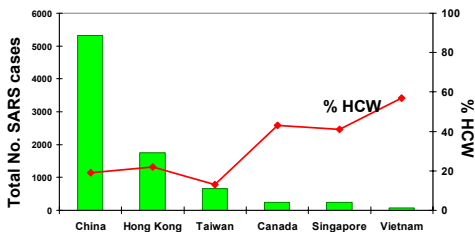
- Biological and chemical terrorism
- Dedicated federal funding since 2002
- Smallpox vaccination program

"It just takes that one combination of a highly infectious person and an unprotected exposure to start a chain of transmission."

Julie Gerberding, MD,
CDC Director



Total SARS Cases and % Healthcare Workers by Country, 2003



Hospital Preparedness Treating Mass Casualties – 2

- SARS contingency planning
 - Triage and facility access
 - Surveillance and reporting
 - Patient placement, isolation and cohorting
 - Infection control and worker protection
 - Engineering controls
 - Staffing and supplies
 - Tiered responses calibrated to SARS activity



IMPORTANT NOTICE TO ALL PATIENTS



Please tell the nurse or staff **immediately** if:



1 You have traveled outside of the United States in the past 2 weeks

OR You live with a person who traveled outside the United States in the past 2 weeks and was ill with fever and cough

AND



2 You are here to see the doctor because you are having fever, cough or breathing trouble

The City of New York
DEPARTMENT OF HEALTH AND MENTAL HYGIENE

Last Smallpox Outbreak in NYC - 1947



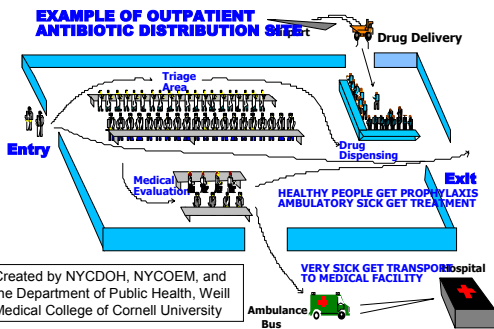
Prophylaxing An Entire City More Than A DOHMH Affair

- How would it be distributed?
 - ~ 200 sites throughout city
- How many people would be needed for this mission?
 - ~ 50,000
- How quickly would it be distributed?
 - Within 48 hours

Partial SNS Push Package



EXAMPLE OF OUTPATIENT ANTIBIOTIC DISTRIBUTION SITE



Post 9/11: Obstacles in the Trenches



Altered Local Landscape

- Personnel and infrastructure losses
- Major infusion of new funding
- Relentless ongoing demands





Risk of Inhalation Anthrax from Letters was Underappreciated

- "...because energy is required to aerosolize anthrax spores, *opening a letter, even if it contained anthrax, would be unlikely to place a person at substantial risk.* For these reasons, postexposure prophylaxis may not be necessary in many cases of threatened anthrax dissemination."
- From "Clinical and Epidemiologic Principles of Anthrax" in *Emerg Infect Dis* 1999; vol. 5, p. 554.

THE NEW YORK CITY DEPARTMENT OF HEALTH and MENTAL HYGIENE

NYC Health

SEARCH FOR:

March 12, 2003 9:26 am

Learn About My Community

I want to ...

- Apply for a Birth Certificate
- Apply for a Death Certificate
- Apply for a Dog License
- Register a Patient Complaint
- Learn About Restaurants
- Get a Flu Shot
- Apply for Health Insurance

Browse Health Topics

- Agent Safety and Control
- Diseases and Conditions
- Environmental Health
- Family Health
- Health Care and Insurance
- Mental Health
- Public Health Services
- Substance Abuse

Agency Information

- Calendar of Events
- Job Opportunities
- Contract Opportunities
- Public Testimony
- Organizational Chart
- The Commissioner

Publications

- HealthTrac
- NYC.gov

Last updated on 02/29/2003

Public Health Emergency Preparedness

New York City AWARE is a program designed to help keep New York City residents up to date about the New York City Department of Health and Mental Hygiene's preparedness for possible public health emergencies, including those caused by terrorism.

This site currently features information about Smallpox and the Smallpox vaccine, as well as a general Bioterrorism Q&A. There are also links to additional fact sheets in the Agents and Threats section.

This website is in development and will be updated regularly. It is a part of our ongoing effort to promote awareness about these issues among New Yorkers.

New York City AWARE

- Bioterrorism Q&A
- About Smallpox
- Agents and Threats
- Medical Provider Information
- Additional Resources

Get the Facts about potential agents and threats.

Read more about the voluntary smallpox vaccination program for health workers.

Check out NYC's Household Preparedness Guide provided by the Office of Emergency Management.

Información en español

Related Topics

- Public Health Emergency Preparedness
- Communicable Diseases
- Environmental Health Topics
- Office of Emergency Management

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Target of Terrorism is Public's Mental Health

"Panic" "Don't Panic"

Causes of Ambivalence Within Public Health Sector

- Relentless demands
- Uncertain threats
- New federal mandates
- Vulnerability of other programs
- Uncertain improvements in readiness

Summary Recommendations for Public Health BT Preparedness

- Identify all players.
- Build effective relationships with response partners
- Identify agency/sector roles and common goals

Summary Recommendations for Public Health BT Preparedness

- Schedule discussions regularly and conduct drills during the work week
- Practice patience and calmness with the staff and in all emergency situations.
- Test, try, fail, adjust, perfect plans.