Lessons Learned from New Jersey's Post-Exposure Prophylaxis Program Following the Anthrax Attacks of 2001:

Application to Strategies for Use of Anti-Virals during an Influenza Pandemic

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Anthrax Precipitating Event

- Intentional release of powdered *B. anthracis* through USPS facilities and end-targets (September/October, 2001)
- Extensive contamination of the USPS Trenton Processing and Distribution Center (PDC)
- Several weeks between processing of letters and knowledge of exposure of postal employees

Basis of Initial DHSS PEP Recommendations

- Initial recommendation: go to personal physician
- No SOPs for drug distribution clinics
- No authority to require hospitals to conduct PEP clinics
- No stockpile of drugs
- No educational materials prepared

CDC PEP Recommendations

- Initial 7-day course of ciprofloxacin
- Recommendation extended to 60 days of doxycycline (sensitive)
- At end of 60 days, additional 40 days offered with or without vaccine (IND protocol required)

PEP Distribution Sites

- Three sites utilized:
  - Robert Wood Univ. Hospital at Hamilton
    (RWJUHH contracted Occupational Health Services for USPS)
  - St. Francis Medical Center – Trenton
    (Volunteered space and resources)
  - Bellmawr postal administrative offices
    (Arranged by USPS thru Cooper Hospital)

Site Selection - Hospital

Pros

- Convenient location for hospital staff assisting in effort
- Medical resources nearby
- Urgent medical care available if needed
- Secure storage of medication
- Existing infrastructure (PR staff, pharmacists, security, parking, custodial staff, food services)

Cons

- Inconvenient location for employees that live far away
- Potential for regular hospital operations to be disrupted

Site Selection – USPS office

Pros

- USPS workers familiar with the building
- Diverted possible overcrowding at local hospitals

Cons

- Difficult to maintain patient confidentiality
- Need to transport all medical personnel and supplies to the site
- No on-site emergency medical care – transport would need to be arranged

Role of Fed/State/Local Public Health Agencies

- State/Fed – NJDHSS/CDC
  - Served as lead agency
  - Procured medications
  - Planned and staffed various PEP distribution events
  - Provided staff to serve as site managers
- Local – Hamilton Twp. Health Dept.
  - Assisted in planning RWJUHH PEP distribution event
  - Provided staffing to assist at PEP distribution event

Obtaining PEP Supplies

- Antibiotics were received from CDC National Pharmaceutical Stockpile – Vendor Managed Inventory
- Meds provided in bulk bottles (required repackaging and re-labeling)
- Supplies were sufficient

Drug Distribution Issues

- Language/Literacy/Hearing Impaired
- Volume flow/functioning work stations
- Triage of ill individuals
- Mental health issues
- Staff fatigue and support
- Protecting staff with PPE
- Security

NJ Legal Response/Issue

- Adoption of the NJ Emergency Health Powers Act (2005)
- Outstanding issues:
  - Who can legally dispense medications during a PH emergency?
  - Use of IND in mass distribution?

Communication Challenges

- Politically charged public health event
- Rapidly unfolding event/changing science, guidance
- Multiple agencies involved with no prior relationship to public health
- Emergency Operations Center not updated regularly
- Initial lack of trust
- Lack of knowledge among postal employees regarding anthrax and PEP recommendations

Communication Strengths

- Exposed persons were easily identified and could receive information via regular work channels
- Health education team bridged the gap in knowledge and developed targeted interventions to enhance PEP adherence

We were lucky…

- Anthrax not communicable
- Relatively small number of people exposed and prophylaxed
- People needing PEP readily identified due to nature of exposure

Adherence Issues

- Many declined antibiotics
- Many took only a few doses
- Most completed only 60 days
- Few accepted anthrax vaccine
- High percentage with AE (99% minor)

Reasons for Non-Adherence

- Fear of side effects
- Confusion about efficacy of antibiotics
- Gaps in knowledge about anthrax
- Fear of developing antibiotic resistance
- Lack of perception of personal susceptibility to anthrax
- No illness in others not taking PEP
- Being asymptomatic and not appreciating importance of prevention
- Distrust of authorities
- IND protocol for late recommendations

Pandemic Planning Assumptions

- Highly contagious
- Little/No immunity
- Overwhelmed medical resources
- Potential lack of vaccine in early stages of pandemic
- Potential for public outrage

Applying the anthrax experience to pandemic planning

- Need for larger medication distribution venues
- Greater overall staffing needs
- Greater secure storage space for medications
- Need large, coordinated, multi-agency approach

Applying the anthrax experience to pandemic planning (cont'd)

- Training volunteers
- Delineating responsibilities
- Promoting adherence
- Evaluation of adverse effects
- Education, education, education

How to improve adherence

- Culturally appropriate, timely education
- Get input from stakeholders: focus groups
- Trusted educators/health communicators
- Multi-media approach
- Address personal concerns
- Emphasize personal benefit and benefit to others
- Eliminate need for IND protocols