Pandemic Influenza: Involving Community Partners in Planning

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“Although exactly when and where the next influenza virus will emerge is not known, it is likely that the outcome will vary from serious to catastrophic…”

Pandemic Influenza Preparedness and Response Plan, Department of Health and Human Services

Influenza

- "Flu season" happens every year: Seasonal influenza
- Respiratory disease, spread mainly by respiratory droplets
- Once infected, immune from that strain
- Virus keeps changing, in drifts and shifts
- Drift – small change flu A, occurs on ongoing basis
- Shift – flu A - sudden change, new virus, no one immune – may cause pandemic

Influenza Pandemics

- Worldwide epidemic of influenza
  - New subtype after antigenic shift
  - Ability in infect humans
  - Sustained person-to-person transmission
- Pandemics: 1918, 1957, 1968
  - Most severe in 1918 with 20-50 million deaths
- Pandemic scares: 1976, 1997, 1999
  - 2005?

H5N1 Asian Epizootic: Avian flu

- Dec 2003 to present
  - Poultry outbreaks in Cambodia, China, Indonesia, Japan, Laos, Republic of China, Vietnam, Thailand, and Russia – millions culled
  - Infected birds in Turkey, Greece, Romania, Croatia
  - 122 human cases in Cambodia, Thailand, Vietnam, Indonesia (as of Nov 1, 2005)
    - 62 deaths (51%)
- Historically unprecedented
  - Geographical scope
  - Economic consequences

H5N1

- Criteria for pandemic:
  - √ Novel strain that is not recognized by the human immune system
  - √ Causes increased sickness and death
  - X Sustained person-to-person transmission
- Concern that virus will change to increase person-to-person transmission

Unique Features of Pandemic Flu

- Multiple areas affected at the same time
  - More difficult to borrow resources
- Could go on for months in a community, with 2-3 different waves over 18-24 mo
- Healthcare workers will be affected
- Preventive and therapeutic agents delayed and in short supply
  - Vaccine must be made for the pandemic virus

Issue: Vaccine

- Several supply stages:
  - No vaccine available for 4-6 months- Community control measures important
  - Limited vaccine supply- Doses released in batches - Focus on vaccine priority groups
  - Adequate vaccine supply- Expand coverage
- Priorities may shift as supply increases

Questions: Vaccine

- Who should get it first?
- Who decides and conveys the decisions?

Healthcare workers?	To maintain quality care
High risk individuals?	To protect those at greatest risk
Children?	To prevent spread to high risk persons
Essential service providers? (define)	To maintain community services

Issue: Antivirals

- Good news: Can be used for prophylaxis (prevention) and for treatment (to reduce illness duration and severity)
- Bad news: Supplies are very limited; virus could develop resistance
- Need to establish priority groups and determine whether to recommend for treatment only or allow for prophylaxis
  - Consider impact on absenteeism

Questions: Antiviral Agents

- Who should receive limited supply?
- Prophylaxis vs therapy?
- Who decides and conveys the decisions?

Healthcare workers?	To maintain quality care
Persons who are ill?	To treat disease, prevent death
Vaccine producers?	To develop/maintain vaccine supply
Essential service providers? (define)	To maintain community services

Issue: Medical Care

- Access to and provision of healthcare is critical to reduce morbidity/mortality
- Surge planning
  - Great demand for beds, intensive care, ventilators, other supplies (lab, PPE)
  - Impact of staff absenteeism
- Risk of nosocomial (hospital) outbreaks of influenza
- Issues regarding management of fatalities

Questions: Medical Care

- Would facilities prioritize/triage patients?
- How would we deal with staffing shortages?
- What protections can be offered to HCWs?
  - Vaccine?
  - Antivirals?
  - Personal protective equipment?
  - Return to work policies?
- How will mass fatalities be managed?

Issue: Community Transmission

- Goal: Slow the spread to allow time for vaccine development, manufacturing, distribution and administration…and antiviral distribution

- Barriers: Short incubation period, large proportion of asymptomatic infections, non-specific nature of clinical illness, easily transmitted, even before symptoms

Issue: Community Transmission

- Options
  - School closures
  - Recommendations about telecommuting
  - "Snow days"
  - Isolation/quarantine early in the pandemic (when to stop implementing?)
  - Discouraging/banning large gatherings (indoor/outdoor)
- Benefits and impact uncertain

Role of Isolation and Quarantine

- Isolation of ill persons, to prevent spread of disease
- Quarantine
  - Most useful early to limit geographic spread
  - Very limited, if any, value during pandemic when virus has spread widely
- Role of social distancing: limit/cancel large gatherings, school closing

Issue: Continuity of Operations - Government and Business

- Need to maintain essential services
- Plan for absence of up to 25% of workforce
  - Ill employees
  - Employees caring for ill family members
- Allow sick employees to stay home – infection control measure
- Component of Continuity of Operation (COOP) Plan

Summary

- Many complex issues
- Pandemic will happen sometime
- Could occur soon or in distant future
- With H5N1 or another strain
- We don’t now know exactly which control measures to try to control spread: for which populations, at what times, in what areas
- The topic needs more discussion

Engaging the Community in Pandemic Influenza Planning

- Range of difficult issues need to be addressed
  - Rationing of limited resources: vaccine, antiviral agents, medical supplies, healthcare staff
  - Need to maintain essential services
  - Broad societal impact: business, education, events
- Community support essential for difficult decisions made by government
- Risk communication key

Pandemic Influenza Advisory Committee: Broad Representation

- Healthcare community: healthcare providers, hospitals, longterm care facilities, outpatients facilities
- Public health: local, state
- Agriculture
- Fatality management: medical examiner, funeral homes
- Mental health community
- Ethics specialists
- Business community

Pandemic Influenza Advisory Committee: Broad Representation

- Schools
- Academic centers, including scientific experts
- Government officials: state, local
- Emergency management
- Responder communities
- Law enforcement
- Legal experts, incl OAG
- Key community leaders: faith based, minority, special needs

Pandemic Influenza Advisory Committee

- Initial meeting: education on the issues (spring, 2005)
- Workshop/tabletop exercise, scenario based (summer, 2005)
- Direct feedback on prioritization of limited resources: vaccine, antivirals, supplies (fall, 2005)

Pandemic Influenza Advisory Committee

- Continued provision of updated information via e-mail
- Feedback on federal plan: ongoing with release of federal strategy and HHS plan
- Outreach to minority and faith based communities
- Consideration of an ethics subgroup with statewide representation

Pandemic Influenza Advisory Committee

- Input on ongoing basis to state Pandemic Influenza Plan, in place since 2002 with updates on continuing basis
- Quarterly meetings to provide updated information and get continued feedback on state and federal plans
- Input on public information needs and messages

Risk Communication

- Essential at all stages, beginning before pandemic spread
- Constantly changing situation and messages must be relayed to public in appropriate and timely manner
- Recommendations will change over time
- Effective response to pandemic requires public support – decisions will not be easy but must be perceived as fair and balanced

Challenges

- Updating committee members on regular basis as information changes
- Assure broad based representation
- Feedback process concerning state plan and public messages
- Role during a pandemic: needs to be better defined
  - Mechanism to obtain feedback in a rapidly changing situation