

Pandemic Influenza Planning

Broward County Health Department

All Hazards Plus SNS

Florida DOH Pandemic Annex Version 9.1

Influenza events

- “Normal” influenza season
 - May have areas of wide spread infection in 1 state/country
 - US: 200,000 hospitalizations; 36,000 deaths
- Pandemic influenza=worldwide outbreak
 - Unique virus that all are susceptible
 - Virus easily transmitted person to person

Flu Pandemics in past 100 years

Estimated Deaths due to Influenza during the last three Influenza Pandemics

	YEAR		
	1918	1957/58	1968
Worldwide	40 million	2 million	1 million
US	500,000	70,000	34,000

Source: US Department of Health & Human Services

Next Pandemic

- Timing cannot be predicted
- History suggests we will face one
- Will it be H5N1?***
 - Bird infections 47 countries
 - Human cases (8 countries/186 cases/105 dths)
 - DOES NOT CURRENTLY EXIST IN THE US

**** Since December 2003 and as of 3/28/2006. From CDC and WHO**

Pandemic Concerns

- Morbidity & Mortality
- Economic Disruption
- Social Disruption

Preparedness-National Strategy

1. Stopping or limiting the spread of pandemic to US
2. Limiting the domestic spread of pandemic, mitigating disease & death
3. Sustaining infrastructure & mitigating impact to economy and society

<http://www.whitehouse.gov/homeland/pandemic-influenza.html>

Preparedness--Local

“All disasters are local”

- Reduce influenza morbidity and mortality
 - Disease Surveillance
 - Distribution & supply of vaccine (if we have) and anti-virals (only limited supply)
 - Education/Risk communication

Threat & Assumptions

- Novel virus—susceptibility will be universal
- May occur during time periods not normally associated with usual flu season
- Health care system overwhelmed—must consider self isolation & quarantine as well as alternative treatment sites
- State EOC activated
- Will occur in two waves, each lasting 6-8 weeks

Threats & Assumptions

Influenza Pandemic Impact, Broward County 2006*

	%	Broward
Attack Rate	35%	595,000
Seeking Treatment	75%	446,250
Hospitalization Rate	10%	59,500
Mechanical Ventation	7.5%	4500
Fatality Rate	5%	29,750

*Based on estimates from HHS Pandemic Influenza Plan, November 2005

Preparedness-Issues

- Disease Control Tools
 - Infection control
 - Isolation
 - Quarantine
 - Social distancing
 - Vaccine (not available or not enough)
 - Anti-virals (not enough)
- Communication
 - Intra-
 - Inter- with State, CDC, Quarantine Division
 - Risk (Education)

Preparedness-Issues

- Security
- Alternative Treatment Sites
 - For hospitals
 - For dispensing
- Travel restriction

Components

- Inter-Pandemic Period – Phases 1 and 2
 - No new influenza virus
 - Develop plans and exercise them
 - Educate the public (throughout all phases)
 - Vaccinate public
 - Surveillance

Animal Surveillance

- Florida Dept of Agriculture & Consumer Services
 - Routine testing for H5/H7
 - Two labs/35 agents/40-150 samples/day
- Florida Fish & Wildlife—dead bird database

Human Surveillance

- Sentinel physicians
- ESSENCE
- BIOSENSE
- EpiCom
- Vital Statistics
- School absenteeism

Components

- Pandemic Alert Period—Phase 3
 - Human infection with a new subtype/no human to human spread
 - Monitor the situation via surveillance systems and communication with Florida DOH
 - Communicate with community partners

Components

- Pandemic Alert Period—Phase 3
 - ?Stockpile masks, hand-sanitizer, anti-virals
 - Nationally—encouraging the development of vaccine
 - Nationally—develop more rapid testing methods
 - State-Increase surge capacity of laboratories

Components (con)

- Pandemic Alert Period—Phase 4
 - Limited human to human transmission
- Isolate/treat the sick
- Vaccinate/treat close contacts
- Encourage self-quarantine

Components (con)

- Pandemic Alert Period—Phase 5
 - Larger clusters but still localized
 - Adjust and maximize resources—
questionable use of points of distribution
(drugs are trickling in)
 - If available deploy prototype vaccine
 - Questionable use of points of distribution
 - Decision on who to vaccinate (ethics?)

Components (con)

- Pandemic Alert Period—Phase 5
 - Assess staffing issues
 - Travel restrictions
 - Social distancing

Components (con)

- Pandemic Period-Phase 6
 - Increased and sustained transmission
 - Alternative treatment sites
 - Ventilator decisions
 - State resources for aid
 - Continue risk management
 - Maintain surveillance, including deaths
 - Morgue surge capacity
 - Funeral supplies may be limited

Components

- Between waves
 - Ensure staff recovery
 - Re-stock supplies/medications
 - Lessons learned to improve

References

- <http://www.cdc.gov/flu/avian/index.htm>
- <http://www.who.int/csr/disease/influenza/pandemic/en/index.html>
- <http://www.whitehouse.gov/homeland/pandemic-influenza.html>