

PANDEMIC FLU OVERVIEW

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March 2, 2007

Presented to:

Greenville County (SC) VOAD

Education

Pandemic Influenza: What You Should Know

Kim Eller of the American Red Cross delivered a presentation to the group regarding PanFlu that included the following information:

Influenza 101

- Epidemic
 - A local outbreak of an illness in higher numbers than usually expected.
- Pandemic
 - A disease outbreak that spreads rapidly around the globe affecting many people worldwide. Pandemics can occur when a new strain of flu emerges to which people have little or no resistance.
- Avian Influenza
 - A virus that occurs naturally in wild birds. Avian influenza viruses can infect other birds and mammals (including humans).
- Pandemic Influenza is not Seasonal Flu.
 - Pandemics behave unpredictably and spread rapidly.
 - Pandemics can occur at any time and tend to unfold in waves.
 - Pandemics often cause disease in non-traditional age groups.
 - Most pandemics originate in Asia.
 - The impact of vaccines on pandemics is still unproven.
 - A threat anywhere is a threat everywhere.
- Seasonal Flu
 - Each year in the United States:
 - 5-20% of Americans get seasonal flu.
 - More than 200,000 people are hospitalized.
 - Around 36,000 people die from the flu. (The mortality rate is usually .1-.25%)
 - There is approximately \$37.5 billion in economic impact.

Spanish Flu (H1N1), 1918-19

- Occurred in three major waves each lasting 4-6 weeks.
- 40-100 million deaths worldwide in less than a year.
- 500,000-675,000 deaths in the United States.
- 1/3 of the world's population was infected.
- 1 of every 16 people in the world died.
- 5% mortality rate.
- Greatest impact--people ages 20-40. (99% of deaths occurred in people under age 65.)

Current Concerns

- Avian Influenza (H5N1)
 - Has spread from wild birds to domestic birds (and to some mammals) and from domestic birds to humans.
 - Has spread from person to person in isolated cases. (Spread from person to person to person within one family in Sumatra.)

- Four of the eight gene mutations found in this virus match those of the 1918 Spanish Flu.
- Humans have not been exposed to a virus with an H5 virulence factor before.
- This strain has proven particularly virulent so far to humans who have contracted it, and it has caused an historically unprecedented disease outbreak in poultry.
- **Avian Influenza (H5N1) Epidemiology**
 - 50% of cases documented to date are in people under 20 years old.
 - 90% of cases are in people under 40.
 - Overall case fatality rate is 60%.
 - Mortality rate is highest in people 10-40.
 - Median time to death: 9 days.
- **Avian Influenza Projections Nationwide**
 - 90 million infected.
 - 865,000-9,900,000 hospitalizations.
 - 128,750-1,485,000 requiring intensive care.
 - 209,000-1,903,000 deaths.
 - Up to 40% of the population impacted.
 - Multiple waves of illness each lasting up to 2-3 months.

Potential Community Impact

- **Social Disruption**
 - School closings, suspension of public gatherings, social distancing, isolation, quarantine, travel restrictions, disruptions to the daily routine.
- **Health Care Overload**
 - "Parking lot" medicine, sick wards in non-medical facilities, home care for ill family members.
- **Economic Loss/Service Disruptions**
 - High worker absenteeism (up to 40%); disruptions in supply, production, and transportation.
 - Disruptions in services provided by stores, banks, government offices, first responders.
 - US Projected Economic Loss of \$100-200 billion.

Can a Pandemic be Prevented?

- **Vaccines**
 - No vaccine is currently available for H5N1 influenza.
 - A vaccine cannot be developed until scientists know the particular strain of influenza targeted.
 - The process then takes 6-12 months and only a limited supply would be available at first.
- **Antivirals (Tamiflu and Relenza)**
 - Primarily used to lessen symptoms once a person is infected.
 - They must be taken in the first 2-3 days once symptoms are evident.
- **Monitoring and Containment**

Government/Community Preparedness

- **Federal Government Planning**
 - Stockpiling of antivirals to treat 25% of the US population to be completed by December 2008.
 - Monitoring and surveillance.
- **State Government Planning**
 - Additional stockpiling of antivirals to treat 25% of SC population.
- **Local Government Planning**
 - Local plans being developed in each county.

Each community should plan to respond to a pandemic as if it is an island unto itself.

What You Can Do

- **Personal Preparedness**
 - Practice healthy hygiene.
 - Practice good cough etiquette.
 - Create a family pandemic plan.
 - Prepare supplies you may need at home.
 - Food and Water
 - Medical Supplies
 - Tools and sanitation supplies
 - Items for special needs (infants, elderly, etc.)

- **Prepare your agency or organization.**
 - Plan for continuity of operations.
 - Develop procedures to address:
 - Employees who are sick or who have sick family members in the household.
 - Sick leave, benefits, and wages when employees must stay home.
 - Work-at-home policies.
 - Educate staff and volunteers on the continuity of operations plan and test the plan.
 - Train staff and volunteers in family/personal preparedness.

- **Determine what role your agency or organization could have in the community response to a pandemic.**
 - Can you help meet community needs during a pandemic? How?

- **Participate in community pandemic planning.**

- **Avoid complacency.**

For More Information...

www.pandemicflu.gov

www.who.int/csr/disease/avian_influenza

www.scdhec.gov/panflu

www.cdc.gov/flu/avian

www.hhs.gov

www.redcross.org/news/ds/panflu