

Pandemic Influenza

- | A pandemic occurs when a new strain of virus emerges that is readily transmissible from person to person.
- | There is wide geographic spread.
- | Avian flu (H5N1) normally infects wild birds, and does not normally make them sick.
- | When it infects domestic poultry, the disease rates are very high.
 - Normally H5N1 does not infect humans, but _____ people have been infected worldwide. This may be the next pandemic virus.

Pandemic Influenza

- | The ability of the virus to spread rapidly worldwide.
- | People may be asymptomatic while infectious.
- | Simultaneous out breaks will limit mutual aid.
- | Enormous demands on the health care system.
- | Delays and shortages in vaccines and antiviral drugs.
- | Potential disruption of critical infrastructure.

Past Influenza Pandemics

Pandemic	Mortality in the USA	Populations Affected
1918-19 Spanish flu	500,000	<65 yo
1957-58 Asian Flu	70,000	Infants, elderly
1968-69 Hong Kong Flu	36,000	Infants, Elderly
1977-78 Russian Flu	8,300	< 20 yo

Pandemic Influenza

- | So far the virus has not passed readily from person to person.
- | There have been _____ deaths worldwide.
- | There have been no human cases in the United States.

Signs and Symptoms

- | Seasonal Flu
- | Fever
- | Muscle Aches
- | Malaise
- | URI
- | Avian Flu=Seasonal +
- | Eye Infections
- | Pneumonia
- | Severe Respiratory Complications
- | Life threatening Complications

How Does Flu Spread?

- | Respiratory droplets caused by coughing and sneezing.
- | Mostly spreads from person to person. Can occur from touching a surface with respiratory droplets and then touching your nose or mouth.
- | Most healthy adults may infect others 1 day before symptoms, and up to 5 days after becoming sick.
- | Therefore, you can transmit the virus before and while you are sick.

CENTER OF DISEASE CONTROL Predictions

- | In USA alone, in the worst case scenario, up to 200 million infected.
- | Presently the death rate is greater than 50%.

Different from Other Public Health Emergencies

- | Suddenly Cause Illness In A Large Number Of People.
- | May overwhelm the healthcare system
- | High Level Of Absenteeism
- | Could jeopardize essential community services
- | Could Last For Months
- | Could Take 6-8 Months For A Vaccine

WORLD HEALTH ORGANIZATION

Pandemic Phases

- | PHASE 1-No new influenza virus in humans .
Influenza virus may be in animals, but risk of human infection is low.
- | PHASE 2-No new influenza virus in humans.
Circulating animal virus poses a substantial risk to humans.

World Health Organization Pandemic Phase Three

- | This is the phase we are in now.
- | PHASE 3- Human infections are occurring, but no human spread, or at most rarely to a close contact.

WORLD HEALTH ORGANIZATION

Pandemic Phases

- | PHASE 4- Small cluster of human infection, but not readily transmitted person to person
- | PHASE 5- Larger cluster(s) of human infection, but human spread is localized, suggesting the virus is becoming better adapted to humans, but not yet fully transmissible.

WHO Pandemic Phases

- | PHASE 6- Pandemic is declared. Increased sustained trans mission in the general population.

Public Health Phase Response

Phase 1	Strengthen preparedness, Monitor data
Phase 2	Detect and report transmission. Limit to humans.
Phase 3	Characterize virus. Early response to cases.
Phase 4	Contain and delay spread. Vac. production
Phase 5	Maximize efforts to contain spread.
Phase 6	Implement response measures including social distancing.

Public Health Pandemic Response Underway

- | Develop county-wide disease surveillance and coordinate with state and federal efforts to detect pandemic strains in animals and humans.
- | Ensure mass vaccine plans are in place to rapidly administer vaccines. (11/05 exercise)

Public Health Pandemic Response Underway

- | Establish guidelines for use of antiviral medication for treatment and prevention.
- | Implement non-medical measures.
 - infection control in health facilities, work, and community settings
 - Voluntary isolation of ill
 - Voluntary quarantine of exposed
 - Social distancing

Public Health Pandemic Response Underway

- | Communicate and educate the public about consequences of a pandemic, and what all community entities need to do to prepare.

Countermeasures

Pandemic Vaccine

- Months to produce
- May take multiple doses
- Must be developed after the specific virus is identified.

Antiviral medication for prophylaxis and treatment

- limited supply
- need to prioritize risk groups and prophylaxis vs. treatment.

Continued State Planning Underway

- | State exercise to improve operational plans for a pandemic. (October-delivery of medications to localities and local distribution)
- | Decrease the time it takes to detect and report an influenza outbreak with pandemic potential.
- | Improve timeliness and accuracy of communications regarding the threat posed by an influenza outbreak with pandemic.

Continued State Planning

- | Decrease the time to understand modes of transmission, risk groups, risk factors, and appropriate interventions.
- | Decrease the time needed to implement rapid outbreak response actions, countermeasures, risk communication, and health interventions.

Local Public Health Pandemic Planning

- | Participate in the local government pandemic planning. Public Health Pandemic Plan.
- | City Readiness Initiative (Rapid deployment of medication in a non-medical model)
- | Metropolitan Medical Response Plan (local cache of medications)

Local Public Health Pandemic Planning

- | Outreach worker-preparedness material to the public, state pandemic DVD (CDC grant)
- | Special Needs Populations (MOUs, Research, Contacts)
- | Health Department Web-Site with pandemic and preparedness information.
- | Staff preparedness and pandemic health information and meetings.

Local Public Health Pandemic Planning

- | Mass Fatality Planning with funeral directors.
- | Consider encourage personal preparedness such as wills, power-of-attorney, advanced medical directives, burial desires.
- | October 13 public health pandemic tabletop.
- | September, CSB to provide Crisis Management conference for public health staff.

Local Public Health Pandemic Planning

- | Participate with Loudoun Health District in a Mass Vaccine Distribution exercise.
- | Plan drive-through flu vaccine clinic in October or November depending upon availability of vaccine.
- | Planning and mutual aid agreements in the NCR.
- | Participate in state exercise.
- | SURVEILLANCE for Influenza