



ESRD NETWORK # 15

Pandemic Flu Readiness

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“We cannot seek or attain health, wealth, learning, justice or kindness in general. Action is always specific, concrete, individualized, unique.”
Benjamin Jowett

Many scientists believe it is only a matter of time until the next influenza pandemic occurs. The severity of the next pandemic cannot be predicted, but modeling studies suggest that the impact of a pandemic on the United States could be substantial. In the absence of any control measures (vaccination or drugs), it has been estimated that in the United States a “medium-level” pandemic could cause 89,000 to 207,000 deaths, 314,000 to 734,000 hospitalizations, 18 to 42 million outpatient visits, and another 20 to 47 million people being sick. Between 15% and 35% of the U.S. population could be affected by an influenza pandemic, and the economic impact could range between \$71.3 and \$166.5 billion. (Centers for Disease and Prevention, CDC)



Don't Panic, Be Prepared

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Stages of a Pandemic

The World Health Organization (WHO) has developed a global influenza preparedness plan, which defines the stages of a pandemic, outlines the role of WHO, and makes recommendations for national measures before and during a pandemic. The phases are:

Interpandemic period

Phase 1 : No new influenza virus subtypes have been detected in humans. An influenza virus subtype that has caused human infection may be present in animals. If present in animals, the risk of human infection or disease is considered to be low.

Phase 2: No new influenza virus subtypes have been detected in humans. However, a circulating animal influenza virus subtype poses a substantial risk of human disease.

Pandemic alert period

Phase 3: Human infection(s) with a new subtype but no human-to-human spread, or at most rare instances of spread to a close contact.

Phase 4: Small cluster(s) with limited human-to-human transmission but spread is highly localized, suggesting that the virus is not well adapted to humans.

Phase 5: Larger cluster(s) but human-to-human spread still localized, suggesting that the virus is becoming increasingly better adapted to humans but may not yet be fully transmissible (substantial pandemic risk).

Pandemic period

Phase 6: Pandemic: increased and sustained transmission in general population.

FLU FACTS

Seasonal Flu

The flu is a contagious respiratory illness caused by influenza viruses. It can cause mild to severe illness, and at times can lead to death. Symptoms may include: fever (usually high), headache, extreme tiredness, dry cough and sore throat. According to the Centers for Disease Control (CDC) (2005) approximately 5 to 20% of the population get the flu each year. More than 200,000 people are hospitalized due to flu complications and about 36,000 people die from the seasonal flu.

Avian Influenza Viruses and Human Infection

Avian influenza is an infectious disease of birds caused by A strains of the influenza virus. All birds are susceptible to avian viruses and these viruses occur naturally among birds. Although avian influenza A viruses usually do not infect humans, more than 100 confirmed cases of human infection with avian influenza viruses have been reported since 1997. Most cases of avian influenza infection in humans have resulted from direct contact with infected poultry (e.g., domesticated chicken, ducks, and turkeys) or surfaces contaminated with secretion/excretions from infected birds.

The Influenza A (H5N1) virus, a subtype of “avian flu virus”, occurs primarily in birds. This virus is highly contagious among birds, and can be deadly to them. Health professionals are concerned that the continued and expanded spread of the highly pathogenic avian H5N1 virus across eastern Asia and other countries represents a significant threat. The H5N1 virus has raised concerns about a potential human pandemic because: it is especially virulent, it is being spread by migratory birds, it can be transmitted from birds to mammals and in some instances to humans and like other viruses it continues to evolve.

Pandemic Flu

An influenza pandemic is a global outbreak of disease that occurs when a new influenza A virus appears or “emerges” in the human population, causes serious illness, and then spreads easily from person to person worldwide. Pandemics are different from seasonal outbreaks or “epidemics” of influenza. Seasonal outbreaks are caused by subtypes of influenza viruses that already circulate among people, whereas pandemic outbreaks are caused by new subtypes, that have never circulated among people, or by subtypes that have not circulated among people for a long time. Past influenza pandemics have led to high levels of illness, death, social disruption, and economic loss. CDC

PREVENTION

- Avoid close contact
Avoid close contact with people who are sick. When you are sick, keep your distance from other people to prevent them from getting sick, too.
- Stay home when you are sick.
When you are sick, or have flu symptoms, stay home, get plenty of rest and check with a health care provider as needed.
- Cover your mouth and nose.
Cover your mouth and nose with a tissue when sneezing or coughing.
- Wash your hands.
Washing your hands will help protect you from germs. When soap and water are not available, alcohol-based disposable hand wipes or gel sanitizers may be used.
- Avoid touching your eyes, nose or mouth.
Germs are spread when a person touches something that is contaminated with germs and then touches their eyes, nose, or mouth.



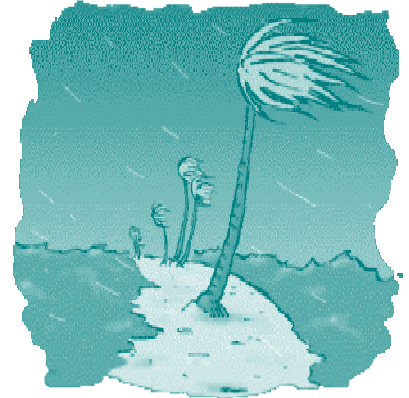
“An Ounce of Prevention is Worth a Pound of Cure”

Benjamin Franklin

CONDITIONS FOR PANDEMIC

Three conditions must be met for a pandemic to start: 1) a new influenza virus subtype must emerge; 2) it must infect humans and causes serious illness; and 3) it must spread easily and sustainedly (continue without interruption) among humans. The H5N1 virus in Asia and Europe meets the first two conditions: it is a new virus for humans (H5N1 viruses have never circulated widely among people), and it has infected more than 100 humans, killing over half of them.

However, the third condition, the establishment of efficient and sustained human-to-human transmission of the virus, has not occurred. For this to take place, the H5N1 virus would have to change in such a way that it could spread more easily among humans. This could occur either by “reassortment” or adaptive mutation.



**“I am prepared for the worst,
but hope for the best.”**

Benjamin Disraeli

PREPARATIONS

The United States has been working closely with other countries and the World Health Organization (WHO) to strengthen systems to detect outbreaks of influenza that might cause a pandemic.

The effects of a pandemic can be lessened if preparations are made ahead of time. Planning and preparation information and checklists are being prepared for various sectors of society, including information for individuals and families. See the Business Pandemic Influenza Planning Checklist (www.cdc.gov/flu/pandemic/business.htm).

HHS and other federal agencies are providing funding, advice, and other support to your state to assist with pandemic planning and preparation. Information on state/federal planning and cooperation, including links to state pandemic plans, is available on this site. See State & Local Planning. (See next page for Network # 15 state contact information).

The federal government will provide up-to-date information and guidance to the public through the public media and the web site <http://pandemicflu.gov/plan/stateplans.html> should an influenza pandemic unfold.

The CMS manual “Emergency Preparedness for Dialysis” may help you prepare for a pandemic. This manual is available from ESRD Network # 15.

The U.S. Department of Health and Human Services (HHS) supports pandemic influenza activities in the areas of surveillance (detection), vaccine development and production, strategic stockpiling of antiviral medications, research, and risk communications. In May 2005, the U.S. Secretary of HHS created a multi-agency National Influenza Pandemic Preparedness and Response Task Group. This unified initiative involves CDC and many other agencies (international, national, state, local and private) in planning for a potential pandemic. HHS has worked with organizations and professional associations at international, federal, state, and local levels to develop a comprehensive Pandemic Influenza Plan in conjunction with the President’s [National Strategy for Pandemic Influenza](#).

Network 15 State Preparedness Directory

**Serving: Arizona,
Colorado, New
Mexico, Nevada,
Utah, and Wyoming**



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Arizona Department of Health Services

www.azdhs.gov

Contact person: Laura Erhart
Phone: 602-364-3674
Fax: 602-364-3199

Colorado Department of Public Health

www.cdph.state.co.us

Contact person: Diana Harris
Phone: 303-692-2677
Fax: 303-691-7811

Nevada State Health

www.health2k.state.nv.us

Contact Person: Jeff Quinn
Phone: 775-684-4228
Fax: 775-684-5951

New Mexico Department of Health

www.health.state.nm.us

Contact Person: Dr. C. Mack Sewall
Phone: 505-827-0006
Fax: 505-827-2530

Utah Department of Health

www.health.utah.gov

Contact Person: Dr. Robert Rolf
Phone: 801-538-6191
Fax: 801-538-9923

Wyoming Department of Health

wdh.state.wy.us

Contact Person: Dr. Tracy Murphy
Phone: 307-777-7716
Fax: 307-777-5573

Visit our web
site for more
information
www.esrdnet15.org



“Fail to plan, plan to fail”
Carl W. Buechner

In the event of pandemic influenza, businesses will play a key role in protecting employees' health and safety as well as limiting the negative impact to the economy and society. Planning for pandemic influenza is critical. To assist you in your efforts, the Department of Health and Human Services (HHS) and the Centers for Disease Control and Prevention (CDC) have developed the following checklist for large businesses. It identifies important, specific activities large businesses can do now to prepare, many of which will also help you in other emergencies. Further information can be found at www.pandemicflu.gov and

**Information
contained in this
newsletter provided
by Centers for
DiseaseControl &
Prevention . Visit the
CDC web site for
more in-depth flu
information
www.cdc.gov**