

Facts about pandemic influenza

What is pandemic influenza (flu)?

A pandemic is a global disease outbreak. A flu pandemic occurs when a new influenza virus emerges for which people have little or no natural protection (immunity), and for which there is no vaccine. Flu spreads easily from person-to-person and sweeps across the country and around the world in a very short time.

How is it different from other flu viruses?

Seasonal flu, avian flu and pandemic flu are not the same.

- **Seasonal** (or common) flu is a viral respiratory illness that occurs every winter and is easily transmitted from person to person. Most people have some immunity, and a vaccine is available.
- **Avian** (bird) flu is caused by influenza viruses that occur naturally among wild birds. The H5N1 variant is deadly to domestic fowl and to date has rarely been transmitted from birds to humans. There is no human immunity and no vaccine is currently available.
- **Pandemic** flu is new strain of human flu (that usually starts out as a strain of bird flu) that causes a global outbreak, or pandemic, of influenza. Because there is little natural immunity, it can cause serious illness including in previously healthy persons. Because it takes time to make a vaccine, in the early stages of a pandemic there is no effective vaccine. Currently, there is no pandemic flu.

What is the concern about pandemic flu?

It is difficult to predict when the next influenza pandemic will occur or how severe it will be. Wherever and whenever a pandemic starts, everyone around the world is at risk. Countries might be able to delay the arrival of the virus through measures such as closing their borders and restricting travel but these measures will not stop the pandemic.

Is pandemic flu related to bird flu?

All human influenza viruses at some point came from bird flu viruses. Health professionals are concerned that the continued spread of a highly pathogenic avian H5N1 virus across eastern Asia and other countries could become a threat to humans. The H5N1 virus has raised concerns about a potential human pandemic because:

- It is especially virulent.
- It is spread by migratory birds.
- It can be transmitted from birds to mammals and in some limited circumstances to humans.
- Like other influenza viruses, it continues to evolve and could adapt itself to humans and then be spread easily from person to person.

Have any people gotten the H5N1 bird flu?

Since 2003, there have been fewer than 300 human cases reported from Asia, Europe and Africa (246 cases as of 9/14/06). More than half of these people have died. Almost all these cases are believed to have been caused by direct exposure to infected poultry. There has been no sustained human-to-human transmission of the disease yet.

Are bird flu viruses generally a threat to people?

The risk from avian influenza is generally low to most people because the viruses do not usually directly infect humans. H5N1 is one of the few avian influenza viruses to have crossed the species barrier to directly infect humans. So far, the spread of the H5N1 virus from person to person has been limited and has not continued beyond one person. Nonetheless, because all influenza viruses have the ability to change, scientists are concerned that the H5N1 virus could adapt to be able to infect humans and then spread easily from one person to another.

What are the symptoms of the H5N1 flu?

Symptoms of H5N1 influenza have ranged from typical human influenza-like symptoms (e.g., fever, cough, sore throat and muscle aches) to diarrhea, pneumonia, severe respiratory diseases and other severe and life-threatening complications.

Is there a vaccination against the H5N1 virus?

There currently is no H5N1 virus vaccine available. A pandemic vaccine cannot be produced until a new pandemic influenza virus emerges and is identified. However, the U.S. Department of Health and Human Services (HHS), through its National Institute of Allergy and Infectious Diseases (NIAID), is addressing the problem in a number of ways. These include the development of pre-pandemic vaccines based on current strains of H5N1, doing research in the development of new types of influenza vaccines and new manufacturing techniques, working to increase the nation's vaccine production capacity and seeking ways to expand or extend the existing supply.

Is there any treatment for the H5N1 virus?

Laboratory studies suggest that some of the prescription medicines approved in the United States for human influenza viruses could work in treating avian influenza infection in humans. However, influenza viruses can become resistant to these drugs, so these medications may not work.

What would be the impact of a pandemic?

A pandemic may come and go in waves, each of which can last for six to eight weeks.

An especially severe influenza pandemic could lead to high levels of illness, death, social disruption and economic loss. Everyday life would be disrupted because so many people in so many places become very ill at the same time. Impacts can range from school and business closings to the interruption of basic services such as public transportation and food delivery.

A substantial percentage of the world's population will require some form of medical care. Health care facilities can be overwhelmed, creating a shortage of hospital staff, beds, ventilators and other supplies. Surge capacity at non-traditional sites such as schools may need to be created to cope with demand.

How is the United States preparing?

The United States has been working closely with other countries and the World Health Organization (WHO) to strengthen surveillance systems to detect outbreaks of influenza and human cases of H5N1 that might lead to a pandemic. Planning includes the preparation of information and checklists for various sectors of society, including information for individuals and families. HHS and other federal agencies are providing funding, advice

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and other support to your state to assist with pandemic planning and preparation.

Is there any way I can protect myself and my family?

Yale New Haven Health System has printed a free pocket-sized information wallet card with helpful information about signs, symptoms and treatment of flu and how to protect and prepare yourself and your family for a seasonal and/or pandemic flu. Getting the flu vaccine every year is a good way to help protect yourself from seasonal flu. Call the YNHHS Call Center at 203-688-2000 or toll-free 1-888-700-6543 for a free card.