

What is Pandemic Influenza?

A pandemic is a global disease outbreak. A flu pandemic occurs when a new influenza virus emerges for which people have little or no immunity, and for which there is no vaccine. The disease spreads easily person-to-person, causes serious illness, and can sweep across the country and around the world in very short time.

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, through measures such as border closures and travel restrictions, delay arrival of the virus, but cannot stop it.

What is the difference between a pandemic and an epidemic?

An epidemic is an outbreak of a disease that occurs in one or several limited areas, like a city, state, or country. Once the disease spreads beyond the borders of several countries and affects many countries across the globe, it is called a pandemic. In the last century, several pandemics of influenza occurred – the biggest one in 1918. During that pandemic, at least 500,000 Americans died. There were as many as 40 million deaths worldwide.

What is swine flu?

H1N1 Influenza is a respiratory disease of pigs caused by type A influenza viruses that causes regular outbreaks in pigs. People do not normally get swine flu, but human infections can and do happen. Swine flu viruses have been reported to spread from person-to-person, but in the past, this transmission was limited and not sustained beyond three people. The influenza outbreak that started in March or April 2009 has genetic material from several different known strains of swine flu as well as human flu and avian flu.

Is there a vaccine or treatment for H1N1 flu?

Development of a vaccine for the H5N1 flu began shortly after the strain was detected. It appears that sufficient doses of vaccine will be produced by early fall for a mass vaccination program in the United States.

There are antiviral medications that can be used to reduce the severity of human flu. These medicines also may be effective in treating the current H1N1 flu.

The U.S. and State governments have stockpiles of antiviral medications that are being released in response to the H1N1 outbreak. Currently, those medications have been reserved for use on hospitalized patients.

What is the Colorado Department of Public Health and Environment (CDPHE) doing to prepare for pandemic flu?

If there is a widespread flu outbreak, Colorado and every other state in the country will respond with some new procedures, and many standard, time-tested disease control methods.

- The CDPHE and local health agencies across the state monitor influenza in our communities by working with doctors, hospitals, laboratories, and nursing homes to identify unusual numbers of people with flu-like illnesses.
- The state laboratory checks samples from patients with flu-like illnesses to help identify which flu viruses are circulating in our state.
- The Department of Public Health and Environment and our local public health agency work together to plan for public health emergencies. Staff practice procedures in the plans to better prepare for disease outbreaks.

<http://www.cdphe.state.co.us/epr/pandemic.html>

What would be the effect 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 seriously 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.

Pandemics Death Toll Since 1900	
1918-1919	
U.S....	500,000+
Worldwide...	40,000,000+
1957-1958	

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.

The need for vaccine is likely to outstrip supply

U.S....	70,000+
Worldwide...	1-2,000,000
1968-1969	
U.S....	34,000+
Worldwide...	700,000+

and the supply of antiviral drugs is also likely to be inadequate early in a pandemic. Difficult decisions will need to be made regarding who gets antiviral drugs and vaccines.

Death rates are determined by four factors: the number of people who become infected, the virulence of the virus, the underlying characteristics and vulnerability of affected populations and the availability and effectiveness of preventive measures.