

## PANDEMIC INFLUENZA UPDATE-Influenza A H1N1

### Summary

***What is pandemic influenza (flu)?*** Pandemic influenza is a global outbreak of disease that occurs when a new strain of influenza virus appears, which causes serious illness and death in humans and is easily spread from person to person. In recent weeks, there have been multiple cases of Swine-origin Influenza Type A/H1N1. This new strain is unique; and has not been recognized before in the United States or elsewhere. The concern is that this new strain of flu virus will develop the ability to spread easily from person to person.

***Who is at risk?*** It is assumed that people will not have immunity to a new strain of flu virus and therefore everyone can become infected and ill.

***Are there laws to protect workers?*** There are currently NO laws that specifically protect workers from pandemic influenza. There are only voluntary guidelines.

### ***WHAT IS PANDEMIC INFLUENZA?***

Influenza, more commonly known as the flu, is a contagious respiratory illness caused by influenza viruses. The seasonal flu that appears each year causes a range of symptoms that can include fever, headache, runny and/or stuffy nose, muscle aches, fatigue, cough, sore throat, and stomach problems such as nausea, vomiting, and diarrhea. Seasonal influenza can cause serious complications and on average, kills about 36,000 people in this country each year, mostly individuals over the age of 65 or children under 2.

An influenza pandemic is a much more severe type of flu outbreak. Pandemic influenza occurs when a new strain of influenza virus appears, which causes serious illness in humans and is easily spread from person to person worldwide. The disease is very contagious because people have no immunity. If a pandemic flu outbreak occurred, it is estimated that 25 to 35 percent of the U.S. population would become ill. In a worst case scenario, it is predicted there would be 90 million illnesses, 9.9 million hospitalizations, and 1.9 million deaths. There could be tens of millions of deaths worldwide.

Past influenza pandemics have led to high levels of illness, death, social disruption, and economic loss. In the last century there were three such pandemics. The influenza outbreaks of 1918, 1957, and 1968 killed at least forty million, two million, and one million people worldwide, respectively.

## ***WHY IS THIS OUTBREAK OF SWINE FLU OF SUCH CONCERN?***

Although a new influenza virus could appear at any time, this flu is unique because it contains genetic information from four different sources:

- North American swine flu viruses;
- North American avian (bird) flu viruses;
- human flu viruses and;
- swine flu viruses from Asia and Europe

The World Health Organization (WHO) has raised the pandemic influenza alert level to phase 5. The increase in the pandemic alert phase indicates that the likelihood of a pandemic has increased. At this time, this strain of influenza has been confirmed in the following countries: Mexico, United States, Australia, Canada, Germany, Israel, New Zealand, Spain, and the United Kingdom. At this time, only the United States and Mexico have confirmed deaths related to this strain of influenza. The most recent update can be found at:

[http://www.who.int/csr/don/2009\\_04\\_29/en/print.html](http://www.who.int/csr/don/2009_04_29/en/print.html)

## ***HOW IS INFLUENZA SPREAD?***

Flu viruses are transmitted in three ways - droplet, airborne, and contact - although it is not known to what extent that influenza is spread by each route. Infected individuals spread droplets through coughing and sneezing and even talking. Flu viruses are also spread through the air by much smaller infectious particles (droplet nuclei). People can also become infected by touching something with flu viruses on it and then touching their mouth or nose. Most healthy adults may be able to infect others before symptoms develop and up to several days after becoming sick. Therefore, people can spread the flu before they know they are sick, as well as while they are sick. The current estimate is persons are assumed infectious one day before symptoms appear, and then for up to eight days. Although influenza A/H1N1 is a type of swine influenza, there is NO risk of infection from the consumption of well-cooked pork and pork products.

## ***WHAT ARE THE SYMPTOMS?***

Symptoms of this influenza infection are similar to those of seasonal flu, and can include:

- high fever (100° or higher)
- headache
- extreme fatigue/exhaustion
- cough
- sore throat
- nasal congestion
- extreme muscle aches
- nausea, vomiting, diarrhea

A person is thought to be infectious for up to eight days after symptoms appear. Children may be infectious longer.

In adults, emergency warning signs that need urgent medical attention include:

- Difficulty breathing or shortness of breath
- Pain or pressure in the chest or abdomen
- Sudden dizziness
- Confusion
- Severe or persistent vomiting

### ***WHO IS AT RISK?***

Pandemic influenza refers to a new strain of virus. Therefore, it is assumed that there is no existing immunity in the human population and that all people can become infected and ill. Currently, there is no vaccine that can provide immunity.

### ***WHAT CAN BE DONE TO PROTECT WORKERS?***

Emergency preparedness, by definition, means taking steps to prevent illness *before* there is a crisis. In the event of a pandemic influenza outbreak it is likely that schools, public and commercial buildings, and businesses would close or alter normal activities. By contrast, health care workers, emergency responders and other essential personnel will be expected to come to work. For clinicians and other healthcare workers, the CDC has put out guidance on identifying and treating Influenza A/H1N1:

<http://www.cdc.gov/swineflu/guidance/>

Currently there is no vaccine to protect against pandemic flu. This year's flu shot is not believed to provide protection against this strain of flu. Antiviral prescription medications have limited effectiveness against swine influenza. If you do get sick, antivirals can make your symptoms milder, and may prevent some of the serious influenza complications. In order to be effective, these drugs must be given within the first 48 hours of the onset of symptoms. Influenza antivirals can also be given to prevent illness, with a 70-90 percent effective rate. The CDC currently recommends Oseltamivir (Tamiflu®) and Zanamivir (Relenza®) to both treat and possibly prevent Influenza A/H1N1 infection:

<http://www.cdc.gov/swineflu/eua/>

In order to prevent workers from becoming infected and, in turn, infecting family, co-workers, and others, it is essential that basic infection control/worker protection measures are in place. These include:

- Developing a written exposure control plan *before* there is an outbreak to determine which workers are at risk and what will be done to prevent exposure.
- Cover mouth and nose when sneezing or coughing.
- Use tissues, and throw them away.
- Wash your hands often, with soap and hot water for at least 20 seconds. If soap is not available, use an alcohol based (at least 60%) hand sanitizer.
- Housekeeping and environmental cleaning to reduce sources of infection. Concentrate on the high touch, common areas.
- When possible, avoid crowded areas.
- Training and communication of hazards through the use of signs and other means.
- If you become ill-*stay at home and rest.*

For more recommendations and general information, go to:

[http://www.cdc.gov/swineflu/?s\\_cid=swineFlu\\_outbreak\\_001](http://www.cdc.gov/swineflu/?s_cid=swineFlu_outbreak_001)

***WHAT LAWS ARE THERE TO PROTECT WORKERS?***

There are currently NO laws that specifically protect workers from pandemic influenza. AFSCME, along with the AFL-CIO and a number of its affiliated unions, petitioned OSHA for an emergency temporary standard to protect health care workers, emergency responders and other essential personnel at risk on the job. That petition was denied. California is currently preparing a state law on airborne transmitted disease. AFSCME is calling for stronger worker protections than the recommendations contained in the U.S. Health and Human Services Pandemic Influenza Plan.

For more information, visit the AFSCME Health and Safety Issues Web Page at: <http://www.afscme.org/issues/73.cfm>

April 2009

For more information about protecting workers from workplace hazards, go to <http://www.afscme.org/healthandsafety> or contact the AFSCME Health and Safety Program at (202)429-1228, or 1625 L Street, N.W., Washington, DC 20036.