

Pandemic Influenza Fact Sheet

- 1. What is an influenza pandemic?** Influenza viruses are constantly changing due to natural mutation. These minor year-to-year changes are why the virus is able to reappear each fall during the flu season, and why the vaccine we use to prevent disease changes each year. Every now and then a novel influenza virus (one that has not been seen before or is very different from the one that has been causing disease) appears. Humans have poor or minimal immune defenses against the new strain, and it can spread rapidly and cause severe disease. Such an event is known as an influenza pandemic.
- 2. How often do influenza pandemics occur?** Influenza pandemics are impossible to predict. In the 20th century, there were three flu pandemics in 1918, 1957, and 1969. So far, in this century there has been one, caused by the 2009 H1N1 virus.
- 3. What caused the 2009 influenza pandemic?** – The 2009 H1N1 virus is what is called a reassortant virus, meaning some parts of the genetic material of the virus were from human flu strains, some from flu strains normally seen in pigs, and some from flu strains normally seen in birds. The virus was first detected in April 2009 in California and Texas. The virus quickly spread and disease was soon identified throughout the country. The first confirmed case occurred in Pennsylvania in late April 2009. The World Health Organization declared a world-wide pandemic in June 2009.
- 4. Why was it named a swine flu?** – The pH1N1 virus was incorrectly named a swine flu by the media because initial laboratory testing noted that parts of its genetic material were similar to influenza viruses normally seen in pigs.
- 5. Why do animals and humans share influenza viruses?** - Influenza viruses are found in many different animals, including ducks, chickens, pigs, whales, horses and seals. Pigs are noteworthy because they can be infected at the same time with human, bird, and swine flu viruses. When more than one flu virus infects an animal at the same time, the genetic material can mix together and recombine into a new virus.
- 6. What are the signs and symptoms of this virus?** - The symptoms of 2009 H1N1 virus were similar to the symptoms of seasonal flu and included fever, cough, sore throat, runny or stuffy nose, body aches, headache, chills and fatigue. The major difference between the 2009 H1N1 pandemic strain and normal flu is that it mostly affected young people and much of the severe disease occurred in children and pregnant women. In contrast, most seasonal flu strains hit the elderly and infants the hardest.
- 7. How did the virus spread?** - The 2009 H1N1 virus spread in the same ways that seasonal flu usually spreads. Human influenza viruses are generally spread person to person through coughing or sneezing by infected people. People may also become infected by touching a contaminated surface and then touching their eyes, mouth, or nose.

8. **What can people do to protect themselves from a novel respiratory virus?** – Since there probably will be no effective vaccine available to protect against an emerging novel influenza virus, the public health following actions are recommended to help prevent the spread of this respiratory illnesses.
- a. Take these five common sense steps to protect your health:
 - (1) Cover your nose and mouth with a tissue when you cough or sneeze. Throw the tissue in the trash after you use it.
 - (2) Wash your hands often with soap and water, especially after you cough or sneeze. Alcohol-based hand cleaners are also effective.
 - (3) Avoid touching your eyes, nose or mouth. Germs spread this way.
 - (4) Try to avoid close contact with sick people.
 - (5) Stay home if you are sick for 7 days after your symptoms begin or until you have been symptom-free for 24 hours, whichever is longer. This is to keep from infecting others and spreading the virus further.
 - b. Two other important public health actions that you can take are:
 - (1) Follow public health advice regarding school closures, avoiding crowds and other social distancing measures.
 - (2) Be prepared in case you get sick and need to stay home for a week or so; a supply of over-the-counter medicines, alcohol-based hand rubs, tissues and other related items might could be useful and help avoid the need to make trips out in public while you are sick and contagious.
9. **What is the best way to keep from spreading influenza virus?** - If you are sick, stay home and limit your contact with other people as much as possible. In general, stay home for seven days after your symptoms begin or until you have been fever-free for 24 hours without the use of over-the-counter fever reduction medication: e.g. Tylenol, etc.
10. **If I have a family member at home sick with influenza, should I go to work or school?** –
- a. Those who are well but who have an ill family member at home can go to work or school as usual. However, they should monitor their health every day, and use the above five common sense steps to protect their health at home and at work.
 - b. Concerned persons, especially those with an underlying medical condition or who are pregnant, should call their health care provider for advice, because they might need to receive influenza antiviral drugs to prevent illness.

11. What is the best technique for washing my hands to avoid getting the flu? - Washing your hands often will help protect you from infection. Wash with soap and water or clean with alcohol-based hand cleaner.

- a. When you wash your hands with soap and warm water, thoroughly do so for 15 to 20 seconds using some memory to measure time: e.g. reciting the alphabet twice.
- b. When soap and water are not available, alcohol-based disposable hand wipes or gel sanitizers may be used. You can find them in most supermarkets and drugstores.
- c. If using gel, rub your hands until the gel is dry. The gel doesn't need water to work; the alcohol in it kills the germs on your hands.

12. What should I do if I get sick?

- a. If you become ill with influenza-like symptoms, including fever, body aches, runny or stuffy nose, sore throat, nausea, or vomiting or diarrhea, you should stay home and avoid contact with other people. Staying at home means that you should not leave your home except to seek medical care. This means avoiding normal activities, including work, school, travel, shopping, social events, and public gatherings.
- b. Contact your health care provider or seek medical care. Your health care provider will determine whether flu testing or treatment is needed.
- c. If you or a child become ill and experience any of the following warning signs, seek emergency medical care.

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

- (a) Difficulty breathing or shortness of breath,
- (b) Pain or pressure in the chest or abdomen,
- (c) Sudden dizziness,
- (d) Confusion,
- (e) Severe or persistent vomiting, or
- (f) Flu-like symptoms improve but then return with fever and worse cough

(2) In children, emergency warning signs that need urgent medical attention include:

- (a) Fast breathing or trouble breathing,
- (b) Bluish or gray skin color ,

- (c) Not drinking enough fluids,
 - (d) Severe or persistent vomiting,
 - (e) Not waking up or not interacting,
 - (f) Being so irritable that the child does not want to be held, or
 - (g) Flu-like symptoms improve but then return with fever and worse cough.
13. **Are there medicines to treat 2009 H1N1 infection?** - Yes. Oseltamivir or Zanamivir may be prescribed for the treatment and/or prevention of infection with novel H1N1 flu virus. Antiviral drugs are prescription medicines (pills, liquid or an inhaled powder) that fight against the flu by keeping flu viruses from reproducing in your body. If you get sick, antiviral drugs can make your illness milder and make you feel better faster. They may also prevent serious flu complications.
14. **How long can influenza virus remain alive on objects?** - Studies have shown that influenza virus can survive on environmental surfaces and can infect a person for up to 2-8 hours after being deposited on the surface.
15. **What kills influenza virus?** - Influenza virus is destroyed by heat (167-212°F [75-100°C]). In addition, several chemical germicides, including chlorine, hydrogen peroxide, detergents (soap), iodophors (iodine-based antiseptics), and alcohols are effective against human influenza viruses if used in proper concentration for a sufficient length of time. For example, wipes or gels with alcohol in them can be used to clean hands. The gels should be rubbed into hands until they are dry.
16. **What surfaces are most likely to be sources of contamination?** - Germs can be spread when a person touches something that is contaminated with germs and then touches his or her eyes, nose, or mouth. Droplets from a cough or sneeze of an infected person move through the air. Germs can be spread when a person touches respiratory droplets from another person on a surface like a desk, for example, and then touches their own eyes, mouth or nose before washing their hands.
17. **How should waste disposal be handled to prevent the spread of influenza virus?** - To prevent the spread of influenza virus, it is recommended that tissues and other disposable items used by an infected person be thrown in the trash. Additionally, persons should wash their hands with soap and water after touching used tissues and similar waste.
18. **What household cleaning should be done to prevent the spread of influenza virus?** - To prevent the spread of influenza virus it is important to keep surfaces (especially bedside tables, surfaces in the bathroom, kitchen counters and toys for children) clean by wiping them down with a household disinfectant according to directions on the product label.

19. **How should linens, eating utensils and dishes of persons infected with influenza virus be handled?** - Linens, eating utensils, and dishes belonging to those who are sick do not need to be cleaned separately, but importantly these items should not be shared without washing thoroughly first.
- a. Linens (such as bed sheets and towels) should be washed by using household laundry soap and tumbled dry on a hot setting. Individuals should avoid “hugging” laundry prior to washing it to prevent contaminating themselves.
 - b. Individuals should wash their hands with soap and water or alcohol-based hand rub immediately after handling dirty laundry.
 - c. Eating utensils should be washed either in a dishwasher or by hand with water and soap.
20. **For more information about novel H1N1 please see:**
<http://www.cdc.gov/h1n1flu/update.htm>