

Five Useful Things to Know about the 2009 H1N1 Outbreak

1. What is the difference between the 2009 H1N1 Influenza Virus, regular swine influenza, avian influenza, seasonal influenza, and pandemic influenza?

- **Swine influenza** is a common respiratory disease caused by a strain of the influenza virus (H1N1) that mostly infects pigs, but has infected people in the past, particularly if they have been in close contact with pigs (for instance, on a farm).
- Like all influenza viruses, swine flu viruses change constantly. Sometimes pigs can be infected with more than one virus type at a time, which can allow the genes from these different viruses to mix and create a new virus. The **2009 H1N1 Influenza Virus** is an example of this: it is a mix of avian, human and swine flu viruses that have “reassorted” to form a new flu virus – causing the 2009 H1N1 Influenza Outbreak that is currently causing global concern.
- **Avian influenza** is a strain of the influenza virus (H5N1) that is generally found in birds, and in some cases the virus has infected people, most of whom have had close contact with infected birds.
- **Seasonal** outbreaks of the flu are caused by flu viruses that are already circulating among people, so humans may already have some resistance to them.
- An **influenza pandemic** occurs when a new form of an influenza virus forms and starts spreading. Because it is a new virus, people have no resistance to it and it therefore is transmitted easily from person to person worldwide. People are also more likely to become seriously ill in a short period of time. Previous influenza pandemics have led to widespread disease and death.

2. How Can People Become Infected with the 2009 H1N1 Influenza Virus and What Are the Symptoms?

The virus has been spreading from person-to-person in many of the same ways that regular, seasonal flu is transmitted: by coughing, sneezing, or touching something that has come in contact with the virus from people’s sneezes or coughs. One person can give influenza to another person if they are in close contact (generally within an arm’s length), so influenza can spread easily in places where there are many people in close contact.

People do NOT become infected with the 2009 H1N1 virus from eating pork or pork products. The virus is killed by cooking temperatures of 160°F/70°C.

The symptoms of the 2009 H1N1 Influenza Virus in people are similar to the symptoms of regular, human seasonal influenza. These include fever, lethargy, lack of appetite and

coughing. Some people with the virus also have reported runny nose, sore throat, nausea, vomiting and diarrhea.

3. How Can the 2009 H1N1 Influenza Virus Be Treated in People?

Currently, there are two medications (antivirals) that are usually given to people with seasonal flu that reduce symptoms like aches and pains; they may also shorten the length of the illness and help to prevent its spread. These medications' brand names are Tamiflu and Relenza and their generic names are oseltamivir and zanamivir. So far, these drugs seem to be effective in treating symptoms of the 2009 H1N1 flu virus.

Vaccines for the 2009 H1N1 Influenza Virus are not yet available, but scientists have already begun trying to develop a vaccine that matches the virus that is circulating. It is doubtful that existing seasonal flu vaccines can provide any cross protection from the current H1N1 virus.

4. Could the 2009 H1N1 Influenza Virus Lead to a Pandemic?

For a virus to be considered a pandemic virus, it needs to meet three criteria:

- 1) A new strain of influenza virus emerges
- 2) That strain is easily spread from person to person
- 3) The virus causes serious illness in humans

The current virus has met all of these conditions. So far, all of the cases outside of Mexico have been mild, and public health experts are investigating why the cases of 2009 H1N1 flu virus in Mexico seem to be more severe than in the U.S. and elsewhere.

The World Health Organization has called the outbreak a "public health emergency of international concern." This situation, however, may change quickly. Flu viruses are extremely unpredictable, and new information can emerge every day. That is why it is important to stay informed and follow instructions given by your local and national health authorities.

5. What Can People Do to Protect Themselves from the 2009 H1N1 Influenza Virus?

To protect yourself, do what you would normally do to protect yourself against a regular flu virus:

- Avoid close contact with people who appear unwell and who have fever and cough.
- Wash your hands with soap and water frequently and thoroughly.
- Practice good health habits including getting adequate sleep, eating nutritious food, and keeping physically active.

If there is an ill person at home:

- Try to provide the ill person with a separate section in the house. If this is not possible, keep the sick person at least 2 meters in distance from others.
- Cover your mouth and nose when caring for the ill person. Masks can be bought commercially or made using readily available materials, but must be disposed of or cleaned properly.
- Wash your hands with soap and water thoroughly after each contact with the ill person.
- Keep the environment clean with readily available household cleaning agents (e.g., bleach solution).

If you think you have the 2009 H1N1 Influenza Virus (i.e., if you feel unwell, have high fever, cough and/or sore throat):

- Stay home from work or school to avoid spreading the disease. Do not return until two days after your symptoms have subsided.
- Rest and drink plenty of fluids.
- Cover your mouth and nose when coughing or sneezing.
- Wash your hands with soap and water frequently and thoroughly, especially after coughing or sneezing.
- Go to the hospital if you have severe symptoms such as difficulty breathing, but if your symptoms are mild stay home to avoid spreading the virus to others at the hospital.

If you do seek medical attention, make sure to explain to your health care provider why you think you may have the 2009 H1N1 Influenza Virus (for example, if you have recently traveled to an area where there the 2009 H1N1 Influenza Virus has been confirmed in humans).

For more information on the 2009 H1N1 Influenza Virus, visit the following web sites:

World Health Organization Swine Flu Frequently Asked Questions:
http://www.who.int/csr/swine_flu/swine_flu_faq_26april.pdf

World Health Organization:
<http://www.who.int/>

U.S. Government Pandemic Preparedness:
<http://www.pandemicflu.gov/>