

H1N1 (Human Swine Influenza)
for Use by Health Care Professionals to Answer Questions from the Public
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1. What is swine influenza?

Swine influenza (sometimes called swine flu) is a respiratory illness of pigs caused by type A influenza that regularly causes outbreaks of influenza among pigs. Swine influenza viruses do not normally infect humans; however, human infections with swine influenza do occur, and cases of human-to-human spread of swine influenza viruses have been documented.

Human swine influenza is a respiratory illness that causes symptoms similar to those of the regular human seasonal influenza.

2. What are the symptoms?

Symptoms of human swine influenza are similar to the symptoms of regular human seasonal influenza infection. They include fever, fatigue, cough, runny nose, general body aches and sore throat. Some people with human swine influenza have also reported vomiting and diarrhea.

3. How does it spread between people?

Influenza viruses can be directly transmitted from pigs to people as “zoonotic” disease agents, and vice versa, from people to pigs. Human infections with influenza viruses from pigs are most likely to occur when people are in close proximity to infected pigs, such as in pig production barns and livestock exhibits at fairs. Although human-to-human transmission of swine influenza is rarely reported, it causes the same symptoms as seasonal influenza and is likely spread the same way.

Influenza and other (severe) respiratory infections are transmitted from person to person via the respiratory route. Coughs and sneezes release the germs into the air where they can be breathed in by others. Germs can also rest on hard surfaces like counters and doorknobs, where they can be picked up on hands and transmitted to the respiratory system when someone touches their mouth and/or nose.

4. What is the incubation period?

At this time it is believed that the incubation period is seven days.

5. How can an influenza virus spread from pigs to people?

Different strains of influenza are commonly circulating in our environment, including strains that can cause illness in humans, birds and pigs.

Sometimes, humans and animals can pass strains of influenza back and forth to one another through direct close contact. For people in close contact with pigs, the recommendations to avoid infection are the same as for regular seasonal influenza – washing your hands frequently, getting an annual influenza shot, coughing and sneezing into your sleeve and staying home when ill.

When a swine influenza virus does affect humans, there is also a risk that the animal influenza can mutate and then spread directly between humans.

6. Can you get human swine influenza from eating pork?

No. Proper cooking of pork products would kill any viruses. Make sure pork is cooked through, not pink in the middle. Use a food thermometer to confirm pork has been heated though to 71 degrees Celsius (160 degrees Fahrenheit).

7. Is human swine influenza contagious?

Yes, this virus is contagious. Since some of the people who have become ill in the United States and Mexico have not been in direct contact with pigs, we know that the virus has spread from person to person.

More investigation is needed on how easily the virus spreads between people, but it is believed that it is spread the same way as regular seasonal influenza.

8. Have any Nova Scotians been affected so far?

Yes. These cases are mild. At this point we are not seeing severe cases, like what is being experienced in Mexico.

9. How can people avoid contracting the human swine influenza?

Nova Scotia Health Promotion and Protection advises Nova Scotians to:

- Wash hands thoroughly with soap and warm water, or use hand sanitizer;
- Cough and sneeze in your arm or sleeve;
- Get your annual influenza shot;
- Keep doing what you normally do, but stay home if sick;
- Talk to a health professional if you experience severe influenza-like symptoms.

10. Should Nova Scotians take any extra measures like wearing surgical masks to avoid catching human swine influenza?

Nova Scotians should continue to take normal precautions to protect themselves as they would from a regular influenza. While we are investigating to learn more about how this virus spreads, our best advice is for Nova Scotians to wash their hands frequently, cover coughs and sneezes, stay home when ill.

The Public Health Agency of Canada (PHAC) does not recommend that members of the general public wear surgical masks to protect against contracting human swine influenza. Evidence shows that this is not effective in preventing transmission of influenza in the general public. People often use masks incorrectly, or contaminate them when putting them on and taking them off, which could actually increase the risk of infection.

11. Will antivirals work against this strain of human swine influenza?

Laboratory tests from the first cases indicate that this strain of human swine influenza is susceptible to the antivirals we have. These antivirals will lessen the symptoms.

12. What is the difference between an antiviral and a vaccine?

Antivirals are drugs used for the prevention and early treatment of influenza. Antivirals work by reducing the ability of the virus to reproduce but do not provide immunity against the virus. The human swine influenza H1N1 can be treated with two different antivirals, oseltamivir (Tamiflu®) and zanamivir (Relenza®).

A vaccine is any preparation intended to produce immunity to a disease by stimulating the production of antibodies. Vaccines are the primary means to prevent illness and death from influenza. They stimulate the production of antibodies against the flu virus components included in the vaccine, providing immunity against the virus.

In order to provide the best protection, a vaccine must be tailored to fight off specific strains of influenza.

13. If people have been to affected areas where human swine influenza has been confirmed or in contact with someone who has human swine influenza, and are feeling sick, what should they do?

If people have recently been to the affected areas and are exhibiting symptoms of a respiratory illness, they should isolate themselves, and see a health care professional to discuss their symptoms. They should also tell their health care professional about their travel history.

14. If people have travel plans to Mexico, what should they do?

As of April 27, 2009, PHAC is recommending Canadians postpone elective or non-essential travel to Mexico until further notice. This information can be found at www.phac-aspc.gc.ca

If you are traveling to affected areas, you should do the same things you would normally do to protect yourself and others during normal influenza season. Wash your hands, cover coughs and sneezes, stay in if you are sick, and get a yearly influenza immunization.

Public Health in Nova Scotia is encouraging all travelers going to Mexico (who have not received the influenza vaccine this influenza season; November 2008- present) to be vaccinated. Even though the yearly influenza vaccine may not protect against the human swine influenza, there is still seasonal influenza in Mexico and the vaccine will help protect you from getting seasonal human influenza.

15. Are cases of human swine influenza common in Canada?

Human swine influenza cases are not common in Canada. Over the past few years, we have seen about one case per year of the North American strain of human swine influenza.

16. What is the difference between seasonal influenza, avian influenza, human swine influenza and an influenza pandemic?

Influenza viruses are commonly circulating in our environment. Different strains can cause illness in humans, birds and pigs.

Regular seasonal influenza is a human strain of the influenza virus. Humans have some natural immunity to the strains that are in common circulation, and this immunity can be bolstered by immunization with a seasonal influenza vaccine.

Avian influenza is an influenza virus that commonly affects birds, and swine influenza is a strain of the virus that usually affects pigs.

These illnesses all elicit the same respiratory symptoms in their hosts.

Sometimes, humans and animals can pass strains of influenza back and forth to one another, such as when humans become ill with avian or human swine influenza, usually from direct contact with animals that are ill. When this happens, there is a risk that the animal influenza virus can mutate and gain the ability to spread between humans. This mutated virus can develop into a new strain of influenza that humans don't have any immunity against.

An influenza pandemic is defined as a new influenza virus that spreads easily between humans. When new influenza viruses are introduced into the environment, humans don't have any natural immunity to protect against them. Therefore, there is a risk that new influenza viruses could develop into a pandemic if the virus passes easily from human-to-human.

17. Is this the next influenza pandemic?

Pandemic influenza is defined as a new influenza virus that spreads easily between humans. The H1N1 human swine influenza that has been identified appears to be a new virus, and there is some evidence of human-to-human transmission. However, more investigation and information is needed to determine the severity of the illness and the ease with which it can spread. These investigations are ongoing.

The Director-General of the World Health Organization (WHO) is the decision maker in terms of declaring influenza pandemic and elevating the global stages of pandemic alert. In order to determine whether or not these cases of human swine influenza should be considered by WHO as a potential pandemic, Public Health Agency of Canada is working in close collaboration with the United States, Mexico and other international partners to help determine what risk this situation poses to global public health.