



**Public Health**  
Prevent. Promote. Protect.

**Region IV Public Health**  
Clark, Cowlitz, Skamania, Wahkiakum counties

# About H1N1 Flu (Swine Flu)

Updated 9/1/09

## **What is H1N1 swine flu?**

H1N1 flu (swine flu) is a new influenza virus causing illness in people. This new virus was first detected in people in the United States in April 2009. This virus spreads from person to person, in much the same way that regular seasonal influenza viruses spread. Because H1N1 is a new strain of influenza, most people have little immunity to it either naturally or from previous flu vaccines.

On June 11, 2009, the World Health Organization declared the worldwide spread of H1N1 flu a global pandemic. So far, H1N1 flu has been a mild to moderate illness but may be severe in a minority of individuals resulting in hospitalization and death. Large outbreaks of the virus are possible this fall and winter and could cause illness in up to 40 percent of the population, leading to workforce shortages and high absenteeism in schools.

This virus is sometimes called “swine flu” because laboratory testing showed that many of the genes in this new virus were very similar to influenza viruses that normally occur in pigs (swine) in North America.

## **What are the signs and symptoms of H1N1 swine flu in people?**

Symptoms are the same as those caused by seasonal flu and include fever, cough, sore throat, runny or stuffy nose, body aches, headache, chills and fatigue. Some people also experience diarrhea and vomiting. Severe illnesses and death have occurred as a result of illness associated with this virus.

## **How does H1N1 swine flu spread?**

Spread of H1N1 virus occurs in the much same way that seasonal flu spreads. Flu viruses are spread mainly from person to person when people with flu cough or sneeze near other people. People may also become infected by touching something – such as a surface or object – with flu viruses on it and then touching their mouth, nose, or eyes.

**How severe is illness associated with H1N1 flu virus?**

Illness with the new H1N1 virus has ranged from mild to severe. While most people who have been sick have recovered without needing medical treatment, hospitalizations and deaths from infection with this virus have occurred. Most people who have been hospitalized with H1N1 virus have had one or more medical conditions that also place them at risk of serious seasonal flu-related complications. This includes pregnancy, diabetes, heart disease, asthma and kidney disease.

One thing that appears to be different from seasonal influenza is that adults older than 64 years do not yet appear to be at increased risk of H1N1-related complications, possibly because more people in this age group have antibodies against H1N1 virus.

**How does H1N1 flu compare to seasonal flu in terms of its severity and infection rates?**

Seasonal influenza can cause mild to severe illness, and at times can lead to death. Each year, about 36,000 people in the U.S. die from flu-related complications and more than 200,000 people are hospitalized from flu-related causes. Of those hospitalized, 20,000 are children younger than 5 years old. Over 90% of deaths and about 60 percent of hospitalization occur in people older than 65.

H1N1 flu appears to create greater disease burden in people younger than 25 years of age than among older people. At this time, there are few cases and few deaths reported in people older than 64 years old, which is unusual when compared with seasonal flu. However, pregnancy and other previously recognized high risk medical conditions from seasonal influenza appear to be associated with increased risk of complications from H1N1. These underlying conditions include asthma, diabetes, suppressed immune systems, heart disease, kidney disease, neuromuscular disorders and pregnancy.

**How long can an infected person spread this virus to others?**

People infected with seasonal and H1N1 flu shed virus and may be able to infect others from 1 day before getting sick to 5 to 7 days after. This can be longer in some people, especially children and people with weakened immune systems and in people infected with the new H1N1 virus.

**What is Public Health doing now?**

Clark County Public Health is working with other health jurisdictions in Cowlitz, Skamania, and Wahkiakum counties to respond to the possibility of an increase in H1N1 influenza cases this fall and winter. Public health officials from each county are:

- Sharing information and resources with community partners including emergency management agencies, hospitals, schools, and community based organizations.
- Working with the state of Washington and local health care providers in each of the four counties to distribute antivirals and, seasonal flu vaccine, and when available, H1N1 vaccine.
- Meeting with schools and childcare centers to determine the best approaches to administering vaccine to school age and pre-school children.

- Working with schools to establish guidelines for excluding ill children and staff from school.
- Providing health education to the community to prevent the spread of germs.
- Working with health care organizations to increase influenza vaccination among health care providers.
- Working with employers and business to assure continuity of operations.

## H1N1 Influenza Vaccine

### **When will H1N1 vaccine be available?**

H1N1 vaccine is expected to be available in the fall. More specific dates cannot be provided at this time as vaccine availability depends on several factors including manufacturing time and time needed to conduct clinical trials

### **Will the seasonal flu vaccine also protect against H1N1 flu?**

The seasonal flu vaccine is not expected to protect against H1N1 flu.

### **Can the seasonal flu vaccine and the H1N1 flu vaccine be given at the same time?**

It is anticipated that seasonal flu and H1N1 vaccines may be given at the same time. However, seasonal flu vaccine will be widely available in September, while H1N1 vaccine won't be available until mid-October or later. People should get their seasonal flu shots as soon as it is available to protect themselves against seasonal flu.

### **Who will be recommended to receive the 2009 H1N1 vaccine?**

The Centers for Disease Control and Prevention has recommended that certain groups receive the H1N1 vaccine when it first becomes available. These target groups include pregnant women, people who live with or care for children younger than 6 months of age, healthcare and emergency medical services personnel, persons between the ages of 6 months and 24 years old, and people ages of 25 through 64 years of age who are at higher risk for 2009 H1N1 because of chronic health disorders or compromised immune systems.

H1N1 vaccine is expected to be available for everyone. However, the vaccine may be available in limited quantities initially. If so, CDC recommends that the following groups receive the vaccine before others: pregnant women, people who live with or care for children younger than 6 months of age, health care and emergency medical services personnel with direct patient contact, children 6 months through 4 years of age, and children 5 through 18 years of age who have chronic medical conditions.

Once these priority groups receive vaccine, programs and providers should begin vaccinating everyone from ages 25 through 64. Studies show that people 65 and older have a lower risk of H1N1 infection than younger age groups. Therefore, CDC recommends people 65 and older be offered H1N1 vaccine as supply and demand for vaccine among younger age groups is being met.

**Why has the CDC recommended these priority groups to receive H1N1 vaccine?**

These groups of people have been identified as being at higher risk of complications from H1N1, based on what we've seen during the spring H1N1 outbreak and recent H1N1 activity in the southern hemisphere, during their winter season.

**Where will the vaccine be available in Clark County?**

Public Health is working with community partners on vaccine distribution plans. Vaccine is likely to be available in a variety of locations including healthcare provider offices, pharmacies, and some businesses. Schools might also offer vaccinations for students and staff.

**Will people need just one dose of H1N1 vaccine?**

Preliminary studies show one dose of the H1N1 vaccine will be effective for healthy adults. We don't know for sure yet about older children, pregnant women and adults with chronic conditions, but we believe that one dose of vaccine will probably protect these groups as well. We also don't know yet about young children, especially children younger than 9. Previous experience with seasonal flu vaccine tells us that young children may still require two doses. At this point, the CDC has not changed its recommendations regarding the two-dose requirement for H1N1 vaccine for either adults or children. Please continue to check our Web site for updates as the studies continue and we receive new information.

**Will vaccination against the new H1N1 influenza be mandatory?**

No. People may refuse any vaccination for themselves or their children on the basis of personal beliefs, religious beliefs, or health status. As health officials make recommendations for who should receive H1N1 vaccine, people who choose vaccination for themselves or their children will be screened for possible negative reactions to vaccination (such as an allergy to eggs ) and will receive information sheets on the vaccine's risks and benefits.

**How long can an infected person spread H1N1 swine flu to others?**

People with H1N1 swine influenza virus infection are contagious 1 day before they experience symptoms and for up to 7 days after they get sick. Children, especially younger children, may be contagious for longer periods.

**How long can viruses live outside the body?**

Some viruses and bacteria can live 2 hours or longer on surfaces like cafeteria tables, doorknobs and desks. Frequent handwashing will help you reduce the chance of picking up the flu virus from these common surfaces.

**Prevention**

**What can I do to protect myself and others from getting sick?**

There are everyday actions that can help prevent the spread of germs that cause respiratory illnesses like influenza. A vaccine to protect against H1N1 virus will not be available until sometime this fall. However, a vaccine is now available to protect against

seasonal influenza. Everyone is encouraged to get vaccinated against seasonal flu as soon as possible this year.

Take these everyday steps to protect your health:

- Cover your nose and mouth with a tissue when you cough or sneeze. Throw the tissue in the trash after you use it. Then wash your hands.
- Wash your hands often with soap and water, especially after you cough or sneeze. Alcohol-based hand cleaners are also effective.
- Avoid touching your eyes, nose or mouth. Germs spread this way.
- Try to avoid close contact with sick people.
- Try not touch surfaces that may be contaminated with the flu virus.
- If you get sick with influenza, stay home from work or school and limit contact with others to keep from infecting them. If you are sick with flu-like illness, CDC recommends that you stay home for at least 24 hours after your fever is gone except to get medical care or for other necessities. (Your fever should be gone without the use of a fever-reducing medicine like acetaminophen, Tylenol, ibuprofen, Alleve, or aspirin. Do not give aspirin to children under 18.) Keep away from others as much as possible to keep from making others sick.
- Follow public health advice regarding school closures, avoiding crowds and other social distancing measures.
- 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 sanitizer, tissues and other related items might be useful and help avoid the need to make trips out in public while you are sick and contagious.

### **What is the best way to keep from spreading the virus through coughing or sneezing?**

If you are sick with flu-like illness, stay home for at least 24 hours after your fever is gone except to get medical care or for other necessities. (Your fever should be gone without the use of a fever-reducing medicine like acetaminophen, Tylenol, ibuprofen, Alleve, or aspirin. Children under 18 should not get aspirin due to the risk of Reye's syndrome.)

- Keep away from others as much as possible.
- Cover your mouth and nose with a tissue when coughing or sneezing. Put your used tissue in the waste basket. Then, wash or sanitize your hands, and do so every time you cough or sneeze.

### **What is the best technique for washing my hands to avoid getting the flu?**

Washing your hands often will help protect you from germs and viruses that cause illness. Wash your hands with soap and warm water for 15 to 20 seconds (long enough to sing Happy Birthday twice).

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. If using gel, rub your hands until the gel is dry. Don't use water with gel sanitizers; the alcohol in it kills the germs on your hands.

Video: [Proper handwashing prevents the spread of disease](#) (1 minute)

### **Should I wear masks?**

No. The only people who should wear masks are people who are suspected or confirmed cases of H1N1 swine flu who need to leave their homes for medical visits (otherwise they should stay home). Health care providers who take care of people suspected or confirmed with flu should wear masks for routine care. Fitted respirator masks are recommended when performing certain high risk procedures that involve direct exposure to respiratory secretions.

### **Should people with HIV/AIDS take special precautions?**

Suggestions for persons with HIV/AIDS include:

- Avoid sick people, wash hands frequently, take medications as prescribed, maintain healthy habits around eating, sleeping and exercising.
- Get a seasonal flu shot and make sure you are up to date on Pneumovax (vaccine to prevent bacterial pneumonia that can be a complication of the flu).
- As H1N1 spreads in the community, avoid crowded settings. If such settings can't be avoided, consider using a facemask.
- If you become ill with flu symptoms or have contact with someone with confirmed H1N1, your health care provider may prescribe antiviral medicine for you. You should report any adverse effects of such medication to your health care provider.
- People with HIV are in the initial target group for H1N1 vaccine and should plan on being vaccinated as soon as the H1N1 vaccine is available.
- More info at [http://www.cdc.gov/h1n1flu/guidance\\_HIV.htm](http://www.cdc.gov/h1n1flu/guidance_HIV.htm)

### **How can employers protect themselves, their families, and their employees?**

Businesses should urge their employees to stay home if they are sick, especially if they have signs or symptoms of H1N1 swine flu. The health of employees during an outbreak such as H1N1 influenza plays a critical role in the continued operations of a business.

More information and flu resources for business and employers is available at

<http://www.cdc.gov/h1n1flu/business/>

## Treatment

### **What should I do if I get sick?**

If you become ill with influenza-like symptoms, including fever, body aches, runny nose, sore throat, nausea, or vomiting or diarrhea, you may want to contact your health care provider, particularly if you are worried that your symptoms are severe. Your health care provider will determine whether influenza testing or treatment is needed.

Unless you need urgent medical care, please phone first rather than going directly to a doctor's office, clinic, or hospital. Your healthcare provider will determine if you need to be seen or treated for your symptoms. If you go to see your healthcare provider, you should be offered a mask as soon as you enter the waiting room to protect others from getting sick.

If you are sick, you should stay home and avoid contact with other people as much as possible to keep from spreading your illness to others.

If you become ill, are not worried that your symptoms are severe, and would not normally contact your healthcare provider, there is no need to do so.

**In children, emergency warning signs that need urgent medical attention:**

- Fast breathing or trouble breathing.
- Bluish skin color.
- Not drinking enough fluids.
- Not waking up or not interacting.
- Being so irritable that the child does not want to be held.
- Flu-like symptoms improve but then return with fever and worse cough.
- Fever with a rash.

**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.

**If I have a family member at home who is sick with H1N1 flu, should I go to work?**

Employees who are well but who have an ill family member at home with H1N1 flu can go to work as usual. These employees should monitor their health every day, and take everyday precautions including washing their hands often with soap and water, especially after they cough or sneeze. If they become ill, they should notify their supervisor and stay home. For more information see <http://www.cdc.gov/h1n1flu/business/guidance/>.

**Are there medicines to treat swine flu?**

Most people recover from H1N1 swine flu without any specific treatment. In certain circumstances, the CDC recommends the use of antiviral medications oseltamivir or zanamivir (brand names Tamiflu and Relenza) to treat or prevent H1N1 swine influenza. Antiviral drugs 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 prevent serious flu complications. During the current pandemic, the priority use for antiviral drugs is to treat severe influenza illness (for example hospitalized patients) and people who are sick who have a condition that places them at high risk for serious flu-related complications.

**Can I get Tamiflu to have on hand now in case I get sick?**

No. Tamiflu is a prescription drug that requires a health care provider's prescription. It should only be taken by people with severe influenza. Most of the people who have already had H1N1 swine flu recovered on their own without Tamiflu or other antiviral medication. If too many people without severe influenza take Tamiflu, we could see the development of H1N1 swine flu that is resistant to Tamiflu.

**Can I take preventive antivirals?**

The best way to prevent getting influenza is to wash hands, cover your cough etc. When influenza gets into a community, it can circulate for several months. It would not be practical to treat everyone with preventive antiviral medications; in addition, by doing so, we increase the risk of resistant influenza viruses.

**When can I take antivirals?**

If you have symptoms, you should be evaluated by a health care provider to see if your symptoms fit the case definitions for H1N1 swine flu. CDC recommends considering the use of antivirals for confirmed, suspected or probable cases of H1N1 swine flu with priority given to people who are hospitalized or severely ill or at high risk of complications. CDC recommends preventive use of antivirals for household contacts of a confirmed or probable case of swine flu, especially those household contacts who are at high risk of medical complications if they contract influenza. High risk individuals include children younger than 5, pregnant women, people 65 or older, and persons with chronic medical conditions. Health care providers can consider preventive use of antivirals for people who have been exposed to or who are in close contact with someone who is a probable case of H1N1 swine flu.

**Is it safe to...****Eat or prepare pork?**

Yes. H1N1 swine flu viruses are not spread by food. You cannot get H1N1 swine flu from eating pork or pork products. Eating properly handled and cooked pork products is safe.

**Keep my children in school?**

Yes. If the situation changes and there are outbreaks associated with schools, Public Health will work closely with schools to implement preventive measures, which may include school closures.

**Go to church?**

There is no recommendation to avoid or stop church services, school functions, or other public events at this time. If you are feeling ill, stay home in order to keep from spreading germs.

**Drink the water?**

Tap water that has been treated by conventional disinfection processes does not pose a risk for transmission of influenza viruses.

**Use swimming pools, spas, water parks, interactive fountains, and other treated recreational water venues?**

Influenza virus infection is not associated with water exposure. Influenza viruses such as H1N1 virus are likely disinfected by chlorine. However, recreational water venues are no

different than any other group setting so people need to remember that H1N1 flu can be spread from person to person through coughing or sneezing.

### **Travel?**

Any travel recommendations related to this pandemic will be posted on [the CDC Travelers' Health website](#). See <http://wwwn.cdc.gov/travel/>.

## Contamination & Cleaning

### **How long can influenza virus remain viable on objects (such as books and doorknobs)?**

Studies have shown that influenza virus can survive on environmental surfaces and can infect a person for 2 to 8 hours after being deposited on the surface.

### **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), 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.

### **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.

### **What household cleaning should be done to prevent the spread of influenza virus?**

Wipe surfaces such as bedside tables, bathroom surfaces, kitchen counters, computer keyboards, toys, etc.) with a household disinfectant according to directions on the product label.

### **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 they should not be shared without washing thoroughly first.

Bed sheets and towels should be washed and tumble-dried on a hot setting. Avoid “hugging” laundry before washing it, and wash hands after handling dirty laundry.