

Respiratory Protection and Swine Influenza Viruses

Frequently Asked Questions

The following information is provided in order to assist you and answer some commonly asked questions concerning swine influenza (swine flu) and personal protective equipment (PPE). The responses are based on guidance and precautions issued by The U.S. Centers for Disease Control and Prevention (CDC) and the World Health Organization (WHO). The most current and complete set of information is available at the websites maintained by these health organizations:

CDC: <http://www.cdc.gov/flu/avian>

WHO: http://www.who.int/topics/avian_influenza/en/

What is swine flu?

Swine Influenza (swine flu) is a respiratory disease of pigs caused by type A influenza viruses that causes regular outbreaks in pigs. People do not normally get swine flu, but human infections can and do happen. Swine flu viruses have been reported to spread from person to person, but in the past, this transmission was limited and not sustained beyond three people.

Are there human infections with swine flu in the U.S.?

In late March and early April 2009, cases of human infection with swine influenza A (H1N1) viruses were first reported in Southern California and near San Antonio, Texas. Other U.S. states have reported cases of swine flu infection in humans and cases have been reported internationally as well. An updated case count of confirmed swine flu infections in the United States is kept at <http://www.cdc.gov/swineflu/investigation.htm>. CDC and local and state health agencies are working together to investigate this situation.

Is this swine flu virus contagious?

CDC has determined that this swine influenza A (H1N1) virus is contagious and is spreading from human to human. However, at this time, it is not known how easily the virus spreads between people.

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

The symptoms of swine flu in people are similar to the symptoms of regular human flu and include fever, cough, sore throat, body aches, headache, chills and fatigue. Some people have reported diarrhea and vomiting associated with swine flu. In the past, severe illness (pneumonia and respiratory failure) and deaths have been reported with swine flu infection in people. Like seasonal flu, swine flu may cause a worsening of underlying chronic medical conditions.

How does swine flu spread?

Spread of this swine influenza A (H1N1) virus is thought to be happening in the same way that seasonal flu spreads. Flu viruses are spread mainly from person to person through coughing or sneezing of people with influenza. Sometimes people may become infected by touching something with flu viruses on it and then touching their mouth or nose.

How can someone with the flu infect someone else?

Infected people may be able to infect others beginning 1 day before symptoms develop and up to 7 or more days after becoming sick. That means that you may be able to pass on the flu to someone else before you know you are sick, as well as while you are sick.

What should I do to keep from getting the flu?

First and most important: wash your hands. Try to stay in good general health. Get plenty of sleep, be physically active, manage your stress, drink plenty of fluids, and eat nutritious food. Try to not touch surfaces that may be contaminated with the flu virus. Avoid close contact with people who are sick.

Are there medicines to treat swine flu?

Yes. CDC recommends the use of oseltamivir or zanamivir for the treatment and/or prevention of infection with these swine influenza viruses. Antiviral drugs are prescription medicines (pills, liquid or an inhaler) 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. For treatment, antiviral drugs work best if started soon after getting sick (within 2 days of symptoms).

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

People with swine influenza virus infection should be considered potentially contagious as long as they are symptomatic and possibly for up to 7 days following illness onset. Children, especially younger children, might potentially be contagious for longer periods.

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 and then touches their own eyes, mouth or nose before washing their hands.

How long can viruses live outside the body?

We know that 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 getting contamination from these common surfaces.

What can I do to protect myself from getting sick?

There is no vaccine available right now to protect against swine flu. There are everyday actions that can help prevent the spread of germs that cause respiratory illnesses like influenza. 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.
- 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.
- If you get sick with influenza, CDC recommends that you stay home from work or school and limit contact with others to keep from infecting them.

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

If you are sick, limit your contact with other people as much as possible. Do not go to work or school if ill. Cover your mouth and nose with a tissue when coughing or sneezing. It may prevent those around you from getting sick. Put your used tissue in the waste basket. Cover your cough or sneeze if you do not have a tissue. Then, clean 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. Wash with soap and water or clean with alcohol-based hand cleaner. We recommend that when you wash your hands – with soap and warm water -- that you wash for 15 to 20 seconds. 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. The gel doesn't need water to work; the alcohol in it kills the germs on your hands.

What should I do if I get sick?

If you live in areas where swine influenza cases have been identified and become ill with influenza-like symptoms, including fever, body aches, runny nose, sore throat, nausea, vomiting or diarrhea, you may want to contact your health care provider, particularly if you are worried about your symptoms. Your health care provider will determine whether influenza testing or treatment is needed.

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 and experience any of the following warning signs, seek emergency medical care.

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

- 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

How serious is swine flu infection?

Like seasonal flu, swine flu in humans can vary in severity from mild to severe. Between 2005 until January 2009, 12 human cases of swine flu were detected in the U.S. with no deaths occurring. However, swine flu infection can be serious. In September 1988, a previously healthy 32-year-old pregnant woman in Wisconsin was hospitalized for pneumonia after being infected with swine flu and died 8 days later. A swine flu outbreak in Fort Dix, New Jersey occurred in 1976 that caused more than 200 cases with serious illness in several people and one death.

Can I get swine influenza from eating or preparing pork?

No. Swine influenza viruses are not spread by food. You cannot get swine influenza from eating pork or pork products. Eating properly handled and cooked pork products is safe.

Is it safe for me to travel?

At this time, CDC recommends that U.S. travelers avoid all nonessential travel to Mexico. Changes to this recommendation will be posted at <http://wwwn.cdc.gov/travel/>. Please check this site frequently for updates.

If you must travel to an area that has reported cases of swine flu, stay informed:

- Check updates from the:
 - [Centers for Disease Control and Prevention](#)
 - [Secretaria de Salud](#)
 - [World Health Organization](#)
- Monitor announcements from Mexico's Ministry of Health and local government including information about affected areas, as not all areas are equally affected.
- Follow local public health guidelines, including any movement restrictions and prevention recommendations.
- Be aware that Mexico is checking all exiting airline passengers for signs of swine flu. Exit screening may cause significant delays at airports.

What are safe practices in situations for people who may be in a situation to be exposed to the Virus?

Personal protection for Health Care Providers and Visitors

Healthcare providers should practice Standard, Airborne, Droplet and Contact precautions until directions from CDC or WHO direct otherwise. The following is a review of essentials. Use disposable protection whenever possible as the virus remains infectious on the garment for long periods of time.

- Hand hygiene: Use soap and warm water for 15 to 20 seconds and alcohol-based disposable hand wipes or gels.
- Facial protection: Because there is some evidence that H1N1 may be capable of airborne spread and the fact that it has such a high mortality rate, a fit-tested NIOSH approved disposable, particulate respirator of N-95 rating or higher is recommended at this time (NIOSH Particulate Filtration Efficiency (PFE) test challenge is approx. 0.3 micrometers). Similar respirator mask rating systems such as those designated as FFP2 or greater are utilized for airborne transmission protection in several countries. A surgical mask is a second alternative if respirators are unavailable; however, the mask should have Bacterial Filtration Efficiency (BFE) greater than 97% (ASTM F 2101 challenge aerosol is approximately 3 micrometers). However, surgical masks are not as protective as respirators. Note: Masks of cotton, gauze, wool, cloth, or paper are NOT effective barriers.
- Eye protection: Wear goggles or a face shield (note: must still wear a mask) within 3 feet of patient. Remember, if splashes, sprays, aerosols, or contaminated hands touch the eyes, the virus can cause an infection.
- Gloves: Wear clean non-sterile gloves when entering the patient's room. Wash hands immediately after removing gloves.
- Long-sleeved cuffed gown: Wear a clean, non-sterile gown with long cuffed sleeves when entering the room if substantial contact with patient, environmental surfaces or items within the room is anticipated.

- Cap: A cap is appropriate in high-risk situations where there may be increased aerosols.
- Limit patient movement: If transport is necessary, mask the patient. All individuals involved in transport should be in full personal protective equipment (PPE). Clean areas contacted by patient with 70% alcohol or disinfectant with virucidal capability.
- Patient should be placed in a private, negative pressure, airborne isolation room. Cohort if necessary (persons with the same infection placed in the same room).
- Removal of contaminated apparel: Remove carefully to reduce the risk of self contamination by remembering that the virus is alive on the surface of your PPE.

Recommendations from the CDC and WHO follow:

<u>CDC Removal Sequence</u>	<u>WHO Removal Sequence</u>
Gloves	Gown
Face shield or goggles	Gloves
Gown	Alcohol-based hand rub or wash hands
Remove respirator after leaving room (do not touch front)	Remove cap and face shield
Alcohol-based hand rub or wash hands	Remove respirator (do not touch front)
Wash or use alcohol rub any time hands become visibly contaminated	Alcohol-based hand rub or wash hands
	Leave room
	Alcohol-based hand rub or wash hands

Personal Protection for Lab Workers

H1N1 virus is considered highly pathogenic and all precautions for Biosafety Level (BSL) 3+ laboratory conditions must be implemented. Laboratories working on these viruses must be certified by the U.S. Department of Agriculture.

- Hand hygiene: Use soap and warm water for 15 to 20 seconds and alcohol-based disposable hand wipes or gels. People should wash their hands after handling infectious materials, after removing gloves, and when they leave the laboratory.
- Facial protection: A fit-tested NIOSH approved disposable particulate respirator of N-95 rating or higher is recommended when working with animals. (NIOSH Particulate Filtration Efficiency (PFE) test challenge is approx. 0.3 micrometers). Similar respirator mask rating systems such as those designated as FFP2 or greater are utilized for airborne transmission protection in several countries. Note: Masks of cotton, gauze, wool, cloth, or paper are NOT effective barriers.
- Eye protection: Wear goggles or a face shield (note: must still wear a mask). Remember, if splashes, sprays, aerosols, or contaminated hands touch the eyes, the virus can cause an infection.
- Gloves: Wear clean non-sterile disposable gloves when working with infectious agents.
- Long-sleeved cuffed gown: Wear solid front or wraparound gowns, scrub suits, or coveralls. Laboratory clothing should not be worn outside the laboratory, and should be decontaminated prior to laundering or disposal.
- Hood: A hood is appropriate in high-risk situations where there may be increased aerosols.

Personal Protection for Farm Workers/Animal Handlers

- Hand hygiene: Use soap and warm water for 15 to 20 seconds and alcohol-based disposable hand wipes or gels. People should wash their hands after close contact with infected animals, contact with contaminated surfaces and after removing gloves.
- Facial protection: A fit-tested NIOSH approved disposable particulate respirator of N-95 rating or higher is recommended at this time (NIOSH Particulate Filtration Efficiency (PFE) test challenge is approx. 0.3 micrometers). Similar respirator mask rating systems such as those designated as FFP2 or greater are utilized for airborne transmission protection in several countries. Note: Masks of cotton, gauze, wool, cloth, or paper are NOT effective barriers.
- Eye protection: Wear goggles or a face shield (note: must still wear a mask). Remember, if splashes, sprays, aerosols, or contaminated hands touch the eyes, the virus can cause an infection.
- Gloves: Wear clean non-sterile disposable gloves when involved in the culling, transport, or disposal of swine influenza-infected animals
- Long-sleeved cuffed coveralls: Wear protective clothing capable of being disinfected or disposed, preferably coveralls plus an impermeable apron.
- Hood: A hood is appropriate in high-risk situations where there may be increased aerosols.
- Boots: Because animal manure containing influenza virus can contaminate dust and soil, wear boots or protective foot covers that can be disinfected or disposed.

What is KIMBERLY-CLARK PROFESSIONAL* doing to provide customers with education and products?

KIMBERLY-CLARK PROFESSIONAL* North America has established a core team (see below) to make sure all activities and communication regarding the swine flu outbreak are coordinated. This North American team is in contact with our global teams to make sure KIMBERLY-CLARK PROFESSIONAL* has a structured approach to the outbreak of this highly pathogenic virus. Kimberly-Clark Health Care is also involved.

Customer response will be on a first-come, first-serve basis. Any new customers, or customers making abnormally large orders, will be reviewed prior to orders being released for shipment. Sales management, customer service, and product managers are aligned and will make final order decisions on a case by case basis. Once shipped, all orders are final and not returnable. Please be sure that all ordered quantities are double checked as case or each quantities.

For questions regarding orders please contact 1-888-346-GOKC (4652).

The most up-to-date KIMBERLY-CLARK PROFESSIONAL* information can be found on our website:

<http://www.kcprofessional.com/us/swineflu>



OTHER LINKS:

<http://www.who.int/csr/don/en/>

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

<http://www.cdc.gov/flu/protect/stopgerms.htm>

[http://www.webmd.com/cold-and-flu/news/20090426/swine flu 20 us cases confirmed](http://www.webmd.com/cold-and-flu/news/20090426/swine_flu_20_us_cases_confirmed)

<http://www.cdc.gov/swineflu/masks.htm>

For other questions, please email us for technical support: KIMTECH@kcc.com