

DEFINITION OF SWINE INFLUENZA (SWINE FLU/H1N1 FLU)

Swine influenza (swine flu) is a respiratory disease of pigs caused by type A influenza viruses that regularly cause outbreaks of influenza in pigs. Swine influenza viruses may circulate among swine throughout the year, but most outbreaks occur during the late fall and winter months similar to outbreaks of seasonal influenza in humans. When an influenza virus that normally circulates in swine (but not people) is detected in a person, it is called a “variant influenza virus.” A few months after the first cases of swine flu were reported, rates of confirmed H1N1-related illness were increasing in almost all parts of the world. As a result, the World Health Organization declared the infection a global pandemic. That official designation remained in place for more than a year, until the pandemic was declared over in August 2010. Currently, H1N1 is still circulating in humans as a season flu virus and is included in the seasonal flu vaccine. Another strain of swine flu – H3N2 variant – has also made its way into humans. This flu contains a gene from the H1N1 virus. So far, the virus has only been transmitted through human exposure to swine, not from human to human.

Swine flu viruses do not normally infect humans however, sporadic human infections with influenza viruses that normally infect swine have occurred. Most commonly, human infections with variant viruses have occurred in persons exposed to infected pigs (e.g. children near pigs at fair or workers in the swine industry). In addition, there have been documented cases of multiple persons becoming sick after exposure to one or more sick pigs. Also cases of limited person-to-person spread of variant viruses have occurred.

CAUSES, INCIDENCES, AND RISK FACTORS

Influenza viruses infect the cells lining your nose, throat, and lungs. The virus enters your body when you inhale contaminated droplets or transfer live virus from a contaminated surface to your eyes, nose, or mouth.

If you have traveled to an area where a lot of people are affected by swine flu H1N1, you may have been exposed to the virus, particularly if you spent time in large crowds. Swine farmers and veterinarians have the highest risk of true swine flu because of their exposure to pigs. In addition, exposure to swine at seasonal fairs has also been linked to human H3N2 variant infection.

SYMPTOMS

- Fever
- Cough
- Sore throat
- Body aches
- Headache
- Chills
- Fatigue
- Diarrhea
- Vomiting

Swine flu symptoms develop about one to three days after you have been exposed to the virus and continue for about eight days, starting one day before you get sick and continuing until you have recovered.

PREVENTION

The Centers for Disease Control and Prevention (CDC) now recommends flu vaccination for all Americans older than 6 months of age. The vaccine developed to prevent infection with the 2009 H1N1 virus is one component of the seasonal flu shot for 2012-2013. The flu shot also protects against two other influenza viruses that are expected to be the most common during the 2012-2013 flu season.

These measures also help prevent H1N1 swine flu and limit its spread:

- Stay home if you're sick. If you do have H1N1 swine flu, you can give it to others starting about 24 hours before you develop symptoms and ending about seven days later.
- Wash your hands thoroughly and frequently. Use soap and water, or if they're unavailable, use an alcohol-based hand sanitizer. Flu viruses can survive for two hours or longer on surfaces, such as doorknobs and countertops.
- Contain your coughs and sneezes. Cover your mouth and nose when you sneeze or cough. To avoid contaminating your hands, cough or sneeze into a tissue or the inner crook of your elbow.
- Avoid contact. Stay away from crowds if possible. And if you're at high risk of complications from the flu — for example, you're younger than 5 or age 65 or older, you're pregnant, or you have a chronic medical condition such as asthma — consider avoiding swine barns at seasonal fairs and elsewhere.
- Reduce exposure within your household. If a member of your household has H1N1 swine flu, designate one other household member to be responsible for the ill person's close personal care.

TREATMENT

Most cases of flu, including H1N1 flu, need no treatment other than symptom relief. If you have a chronic respiratory disease, your doctor may prescribe additional medication to decrease inflammation, open your airways and help clear lung secretions.

The antiviral drugs oseltamivir (Tamiflu) and zanamivir (Relenza) are sometimes prescribed to reduce the severity of symptoms, but flu viruses can develop resistance to them. Some researchers recommend further study on both of these drugs due to uncertainty about their effects beyond the initial reduction in symptoms.

To make development of resistance less likely and maintain supplies of these drugs for those who need them most, antivirals are reserved for people at high risk of complications.