

# Swine Flu

## What Is Swine Flu?

Swine flu, also known as the H1N1 virus, made headlines in 2009 when it was declared a pandemic. Pandemics are contagious diseases affecting people throughout the world or on multiple continents at the same time. H1N1 has already been seen in 74 countries across the globe.

H1N1 is highly contagious, allowing it to spread quickly from person to person. A simple sneeze may cause thousands of germs to spread through the air. The virus can remain on tables and surface areas like door knobs, waiting to be picked up.

The swine flu causes many symptoms similar to regular influenza. Diagnosis can be made by testing a swab of mucus from the nose or throat. For those who have swine flu, the oral drug Tamiflu is recommended.

Injection and nasal spray vaccinations are available to prevent swine flu. The best means of dealing with swine flu is to prevent it. Hand sanitization is important to stop the spread of the virus, and staying away from infected individuals will help stop person-to-person transmission.

## Risk Factors for Swine Flu

Swine flu is unusual because it does not target the same age group as the rhinovirus (typical flu). The disease focuses on young adults. This is unusual because most flu viruses attack those who are elderly or very young. Some form of immunity to swine flu may exist in the elderly due to previous flu exposures.

Other risk factors for swine flu include:

- compromised immune system (from a disease such as AIDS)
- pregnancy
- past history of infections

## Cause of Swine Flu

The swine flu is caused by a strain of influenza virus that usually only infects pigs. Unlike typhus, which can be transmitted by lice or ticks, the main transmission is not from pigs to people, but rather from person to person.

Swine flu is very contagious. The disease is spread through saliva and mucus particles. People may spread them by:

- sneezing
- coughing
- touching a germ-covered surface and then touching their eyes or nose

## Symptoms of Swine Flu

The symptoms of swine flu are very much like those of regular influenza.

Many times, people experience symptoms such as a cough, chills, fever, or sore throat; although symptoms like mild respiratory illness to include nasal congestion without a fever, or occasional severe disease have also been reported. Additional symptoms that have been reported by people with swine flu include diarrhoea, vomiting, headache, myalgia, dyspnoea, fatigue, and chills. Some people have experienced conjunctivitis, although it is rare. More severe disease to include pneumonia and respiratory failure have also been reported in association with swine flu. A consideration in regards to SIV involves the exacerbation of other, underlying and chronic medical conditions that a person may experience, or invasive bacterial infections.

## Diagnosing Swine Flu

A diagnosis is made by sampling fluid from those with swine flu. To take a sample, a doctor or nurse may take a swab of the nose or throat.

The swab will be analysed using various genetic and laboratory techniques to identify the specific type of virus.

A confirmed case of Swine Influenza Virus (SIV) is defined as a person who is experiencing an acute respiratory illness combined with laboratory confirmation of the (SIV) virus through one of the following tests:

- Real-time RT-PCR
- Viral culture
- Four-fold rise in swine influenza A virus specific neutralizing antibodies

People who either have, or are suspected of having the Swine Influenza virus (SIV) virus, should be considered potentially contagious for a period of seven days from the date of illness onset. People who continue to exhibit symptoms of illness for a period of time that extends past seven days should be considered contagious until their symptoms have resolved. Children; younger children in particular, have the potential to remain contagious for longer periods of time. The current outbreak of SIV is affecting younger adults between the ages of twenty and forty years of age. The time a person may remain infectious varies according to the strain of swine flu involved.

## Treating Swine Flu

As recommended by researchers who are in contact with swine flu or suspected swine flu patients should take precautions. Precautions against infection include:

- wearing gloves and/or gowns
- using eye protection
- wearing face masks

In known cases of swine flu, patients should be isolated to prevent the spread of H1N1.

During the swine flu pandemic, scientists were able to produce a vaccine. The vaccine may be given through an injection or nasal spray.

Side effects are minor and may include:

- fever
- aches
- mild soreness at the injection site

The oral drug (Tamiflu) is the current recommended medication for swine flu. Oseltamivir, whose trade name is Tamiflu, is an antiviral drug used to treat influenza infections. This drug, or sometimes zanamivir (Relenza), aren't used as a preventive measure for swine flu, but are used as treatment if someone has been exposed in the last 48 hours to swine flu, or is suspected of having swine flu. The vaccine is a preventive measure.

#### **Recommendations**

When interviewing persons who are either suspected of having, or are confirmed with the SIV virus, it is recommended to:

- Keep a distance of at least 6 feet from the ill person; or use
- Personal protective equipment: fit-tested N95 respirator. If this respirator is unavailable, wear a medical-surgical mask.

When collecting respiratory specimens from an ill confirmed or suspected swine influenza virus case, the following is recommended:

- Wear a fit-tested disposable N95 respirator or a medical-surgical mask, disposable gloves, gown, and goggles.
- When completed, place all (Personal protective equipment) PPE in a biohazard bag for appropriate disposal.
- Wash your hands thoroughly with soap and water or alcohol-based hand gel.

#### **Controlling Infection**

Recommended Infection Control for a non-hospitalized patient in an Emergency Room, Clinic or Home Visit:

Separate the person in a single room, if available, until the person is asymptomatic. If the ill person needs to move to another part of the house, they should wear a mask. The ill person should be encouraged to wash their hands frequently and to follow respiratory hygiene practices. Cups and other utensils that have been used by the ill person should be thoroughly washed with soap and water before they are used by other persons.

**Infection Control for a hospitalized patients involves the following procedures:**

- Use an airborne infection isolation room (AIIR) with negative pressure air handling, if available; otherwise use a single patient room with the door kept closed.
- For suctioning, bronchoscopy, or intubation, use a procedure room with negative pressure air handling.
- Standard, Droplet and Contact precautions for 7 days after illness onset or until symptoms have resolved.
- In addition, personnel should wear N95 respirators when entering the patient room.

#### **Outlook for Swine Flu**

Severe cases of swine flu can be fatal. Most fatal cases are in those with underlying conditions, such as HIV/AIDS. The majority of people with swine flu recover and can anticipate a normal life expectancy.

#### **Preventing Swine Flu**

Easy ways to prevent swine flu (in addition to being vaccinated) include:

- Wash your hands often with soap and water, especially after you cough or sneeze. Alcohol-based hands cleaners are also effective.
- Not touching your nose, mouth, or eyes because the virus can survive on telephones, table tops, etc.
- staying home from work or school if you are ill to keep others healthy
- Cover your nose and mouth with a tissue when you cough or sneeze. Throw the tissue in the trash after you use it.
- Try to avoid close contact with sick people.
- Influenza is thought to spread mainly person-to-person through coughing or sneezing of infected people.
- Avoiding large gatherings when swine flu is in season. Flu season shifts a little bit from year to year, but it often starts in October and runs until as late as May. It is possible to get the flu year-round
- Preparedness and stockpiling may be needed if an illness is near or in your area. Social distancing is implemented to reduce the spread of the illness. Social distancing may be used to prevent large crowds of people from gathering. For example, schools and shopping centres may be closed; sporting events or other special events may be cancelled in order to protect the community from spreading illness.

Dr. Karuna Milind.  
Sr. Medical Officer (Wellness)  
Health India TPA Services Pvt. Ltd.  
Tel: +91-22-6686 7623.  
Email: karuna.ahire@healthindiatpa.com  
wellness@healthindiatpa.com