

## Stay at Arm's Length from Persons Coughing or Sneezing, Avoid Gathering and Wash your Hands Frequently To Check H1N1 spread

### Homeopathy Can Help

<b>Feature</b>
<b>Health</b>

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Influenza – A (H1N1) (earlier know as swine flu) is a new influenza virus causing illness in people. First detected in Mexico in April, 2009, it has spread to many countries in the World.

Swine flu is basically a misnomer. This was originally referred to as “swine flu” because laboratory testing showed that many of the genes in this new virus were very similar to those found in pigs in North America. Further on, it has been found that this new virus has gene segments from the swine, avian and human flu virus genes. The scientists calls this a ‘**quadruple reassortant**’ virus and hence this new (novel) virus is christened “influenza-A (H1N1) virus.”

#### Swine Flu / Pig Flu

Is an infection caused by any one of several types of swine influenza viruses that is endemic in pigs. As of 2009, the known strains include influenza C and the subtypes of influenza A known as H1N1, H1N2, H2N1, H3N1, H3N2, and H2N3. Swine influenza virus is common throughout pig populations worldwide. Transmission of the virus from pigs to humans is not common and does not always lead to human flu, often resulting only in the production of antibodies in the blood. If transmission does cause human flu, it is called zoonotic swine flu. People with regular exposure to pigs are at increased risk of swine flu infection.

#### History

Swine influenza was first thought to be a disease related to human flu during the 1918 flu pandemic, when pigs became ill at the same time as humans. For the following 60 years, swine influenza strains were almost exclusively H1N1. Then, between 1997 and 2002, new strains of three different subtypes and five different genotypes emerged. The H1N1 form of swine flu is one of the descendants of the strain that caused the 1918 flu pandemic. After persisting in pigs, the descendants of the 1918 virus have also circulated in humans through the 20th century, contributing to the normal seasonal epidemics of influenza. However, direct transmission from pigs to

humans is rare.

## Transmission

Influenza is quite common in pigs; the main route of transmission is through direct contact between infected and uninfected animals. These close contacts are particularly common during animal transport, Intensive farming. Transmission may also occur through wild animals, such as [wild boar](#).

People who work with poultry and swine, especially those with intense exposures, are at increased risk of [zoonotic](#) infection with influenza virus endemic in these animals, and constitute a population of human hosts in which [zoonosis](#) and [reassortment](#) can co-occur. Other professions at particular risk of infection are veterinarians and meat processing workers, although the risk of infection for both of these groups is lower than that of farm worker.

## Signs and symptoms

In pigs, influenza infection produces [fever](#), [lethargy](#), [sneezing](#), [coughing](#), [difficulty breathing](#) and decreased appetite. Although mortality is usually low (around 1–4%), the virus can produce [weight loss](#) and [poor growth](#), causing economic loss to farmers.

Direct transmission of a swine flu virus from pigs to humans is occasionally possible ([zoonotic](#) swine flu). In humans the symptoms of "swine flu" H1N1 virus are similar to those of [influenza](#) and of [influenza-like illness](#) in general. Symptoms include [fever](#), [cough](#), [sore throat](#), body aches, headache, chills and [fatigue](#). Because these symptoms are not specific to swine flu, a [differential diagnosis](#) of *probable* swine flu requires not only symptoms, but also a high likelihood of swine flu due to the person's recent history. A diagnosis of *confirmed* swine flu requires laboratory testing of a respiratory sample (a simple nose and throat swab).

The most common cause of death is [respiratory failure](#). Other causes of death are [pneumonia](#) (leading to [sepsis](#)), high fever (leading to neurological problems), [dehydration](#) (from excessive vomiting and [diarrhea](#)), [electrolyte imbalance](#) and [kidney failure](#). Fatalities are more likely in young children and the elderly.

## Diagnosis

The CDC recommends [real time PCR](#) as the method of choice for diagnosing H1N1. The oral or nasal fluid collection and RNA virus preserving filter paper card is commercially available. This method allows a specific diagnosis of novel influenza (H1N1) as opposed to [seasonal influenza](#)

## Spread of infection

Prevention of swine influenza has three components: prevention in swine, prevention of transmission to humans, and prevention of its spread among humans.

Methods of preventing the spread of influenza among swine include facility management, herd management, and vaccination. Facility management includes using disinfectants and ambient temperature to control viruses in the environment. They are unlikely to survive outside living cells for more than two weeks, except in cold (but above freezing) conditions, and are readily inactivated by disinfectants. The virus survives in healthy carrier pigs for up to three months, and can be recovered from them between outbreaks.

## **In humans**

### **Prevention of pig-to-human transmission**

The transmission from swine to humans is believed to occur mainly in swine farms, where farmers are in close contact with live pigs. Although strains of swine influenza are usually not able to infect humans, this may occasionally happen, so farmers and veterinarians are encouraged to use face masks when dealing with infected animals. The use of vaccines on swine to prevent their infection is a major method of limiting swine-to-human transmission.

### **Prevention of human-to-human transmission**

Influenza spreads between humans when infected people cough or sneeze, then other people breathe in the virus or touch something with the virus on it and then touch their own face, eyes, nose or mouth. **Swine flu cannot be spread by pork products, since the virus is not transmitted through food.** The swine flu in humans is most contagious during the first five days of the illness, although some people, most commonly children, can remain contagious for up to ten days.

### **Prevention**

How to keep away from getting the flu? First and most important is follow simple steps as cough etiquettes (covering mouth & nose with handkerchief or tissue paper while coughing), stay at least an arm's length from persons coughing or sneezing, avoid gathering and wash your hands frequently. 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. Cover your nose and mouth with a tissue when you cough or sneeze; throw the tissue in the trash after you use it. Wash hands often with soap and water, especially after cough or sneeze; avoid touching eyes, nose or mouth and try to avoid close contact with people having respiratory illness.

If one gets sick with influenza, one must stay at home, away from work or school and limit contact with others to keep from infecting them.

## **Treatment**

If one is having any respiratory distress, one should report to a nearby hospital. If a person becomes sick with swine flu, antiviral drugs can make the illness

milder and make the patient feel better faster. They may also prevent serious flu complications. For treatment, antiviral drugs work best if started soon after getting sick (within two days of symptoms). Beside antiviral, supportive care at home or in a hospital focuses on controlling fevers, relieving pain and maintaining fluid balance, as well as identifying and treating any secondary infections or other medical problems. Use of [oseltamivir](#) (Tamiflu) or [zanamivir](#) (Relenza) for the treatment and/or prevention of infection with swine influenza viruses is recommended. However, the majority of people infected with the virus make a full recovery without requiring medical attention or antiviral drugs.

### **Present Outbreak in India**

It is noted that that during the period 1 Jan 2015-10 February 2015, the total number of H1N1 cases is 5157 and number of deaths is 407. Largely the cases are from Delhi, Gujarat, Rajasthan, Karnataka, Madhya Pradesh, Maharashtra, Tamil Nadu and Telangana whereas largely the deaths due to H1N1 are in Maharashtra, Madhya Pradesh, Gujarat, Rajasthan and Telangana. Now even cases have been reported from West Bengal. The status of H1N1 influenza being monitored daily by the union M/O Health & Family Welfare.

Various health institutions treating H1N1 cases are being advised for vaccination against H1N1 influenza for the concerned health workers in the hospitals in contact with H1N1 patients. This will be in addition to the proper personal protective measures being followed at the hospitals. Guidelines are being drafted for vaccination of healthcare workers and these will be shared with the states for dissemination to all health institutions.

The Government of India has already placed an order for enhancing stock of diagnostic kits to be supplied to the lab network under Integrated Disease Surveillance Programme (IDSP) being used for testing H1N1 influenza. To enhance the level of preparedness, additional 60,000 Oseltamivir medicines and 10,000 N-95 masks are being procured. In addition, NCDC has floated a tender for additional 10,000 diagnostic kits. In case of need, labs under ICMR have been identified across the country to provide additional testing facilities. In order to prevent panic and inconvenience to people, and to encourage only those cases requiring H1N1 testing are actually taken up for testing, it was decided that the communication strategy should create awareness among the general public regarding this aspect.

### **Homeopathy for Swine Flu**

At the instance of the Department of AYUSH, the Central Council for Research in Homoeopathy (CCRH) had convened a meeting of a Group of Experts in Homoeopathy, who has recommended that the homoeopathic medicine Arsenicum album could be taken as prophylactic medicine against flu like illnesses. It has recommended Arsenicum album 30, one dose (4 pills of size 30 by adults and 2 pills by children) daily, on empty stomach, for 3 days. The dose should be repeated after one month by following the same schedule in case flu like conditions prevails in the area.

## **India Made Vaccine**

The testing of the Pandemic influenza H1N1 vaccines was undertaken by the Central Drug Laboratory, Kasuali (National Control Laboratory) and declared to be of Standard quality. The H1N1 vaccine (Brand Name: VaxiFlu S) is manufactured by M/s Zydus Cadila Health Care Limited; live attenuated H1N1 vaccine (Brand Name: Nasovac) manufactured by M/s Serum Institute of India Limited, Pune; inactivated H1N1 vaccine is also manufactured by M/s Serum Institute of India. However, Vaccination is not a recommended intervention for Swine flu infected patients.

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