











## Swine Flu: What You Need to Know



**Dr Lavanya Nutankalva**, Consultant – Infectious Diseases, Apollo Health City, Hyderabad

### 1. What is swine flu?

Swine Influenza (swine flu) is a respiratory disease of pigs caused by type A influenza virus that regularly causes 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 flu in humans. The classical swine flu virus (an influenza type A H1N1 virus) was first isolated from a pig in 1930.

People usually do not get swine flu, though there have been a few cases reported in persons working in close proximity with pigs. Since the virus from the pigs has to mutate so it can infect humans, and because people do not usually contract the virus, they have no immunity against it. So when they do contract it, it can become hazardous.

The current 2009 swine flu outbreak is due to a new strain of the virus, which is a reassortment of different

strains endemic in humans, birds and swine. This new strain was not reported in pigs previously, and is sub typed as H1N1, though other subtypes exist. It is contagious, and spreads from human-to-human contact.

## 2. How do symptoms of swine flu differ from other types of flu?

Not much. The basic symptoms for swine flu are similar to the seasonal flu, which may include, fever, sore throat, cough, stuffy nose, chills, headache and body aches, and fatigue, and sometimes, vomiting and diarrhea.

### 3. How does it spread?

The virus is actually transmitted by airborne droplets from an infected person's sneeze or cough; or from germs on hands.

## 4. Is there medication or a vaccine for swine flu?

The vaccine is being developed and will not be available for the next several months. Medications are available not only to treat the infection but also to prevent the disease. But these medications need to be used under a physician's guidance.

## 5. How can human infections with swine influenza be diagnosed?

To diagnose swine influenza A infection, a respiratory specimen would need to be collected within the first 4 to 5 days of illness (when an infected person is most likely to be shedding virus). However, some persons, especially children, may shed virus for 7 days or longer.

Courtesy:



## 6. What can I do to prevent infection?

- Avoid contact with people who are sick
- Wash your hands frequently with soap and water
- Try to stay in good health and be physically active
- Cover your mouth when you sneeze or cough
- Stay at home if you are ill.
- If you develop symptoms suggesting the flu, stay away from work or public transportation, call and see a doctor immediately
- 7. Is there confirmation of transmission between pigs and humans?

No

## 8. Is it safe to eat pork and pork products?

Yes. The virus is killed by cooking temperatures of 160 F/ 70C

### 9. Are some people more at risk?

More data is needed regarding this, but in general, younger people, older people, people who are immunocompromised and pregnant women are more vulnerable.

### 10. Is it safe to travel?

As of now there are no travel restrictions. Limiting travel would have little effect on stopping the virus from spreading, but would be highly disruptive to the global community. The focus now is on minimizing the impact of the virus.





# A Lowdown on the Swine Flu Alert

### Dr Lavanya Nutankalva

he current swine flu alert sweeping across the globe has health organizations doing their best to prevent a full-blown pandemic. The challenge for them is to prevent the virus from crossing borders and infecting other populations.

### So what exactly is swine flu?

Swine flu is a form of influenza that is caused by strains of virus that usually infects pigs. It's a common infection

among pigs in Midwestern US, Mexico, Canada, South America, Europe, Kenya, Mainland China, Taiwan, Japan and other parts of Asia.

Transmission of the swine flu virus from pigs to humans is not common, though there have been some reported cases earlier among people who work in close proximity with pigs. Since the mid-twentieth century, only about fifty such transmissions have been reported, the spread and disappearance being more localized.

But the current strain of the microbe is resilient and fast-moving, and what's even more worrying is that it spreads from human-to-human contact, unlike the earlier reported cases. This means that none of us are immune to the possibility of infection.

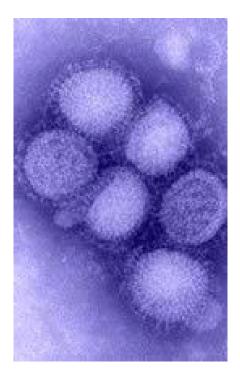
Reports indicate that the current strain is a new one of influenza A virus subtype H1N1. The origin of this strain is unknown. World Organization of animal health reports that this strain is not isolated in pigs, and other initial

Besides antivirals, palliative care focused on controlling fevers and maintaining fluid balance goes a long way to ensure recovery. In fact, the majority of people infected with swine flu make a full recovery without requiring medical intervention or antiviral drugs.

reports describe it as an apparent reassortment of at least four strains from humans, birds and swine.

### **Diagnosis**

Since symptoms mimic those for common flu, for a layperson, it is hard to tell them apart. Medically, the virus is diagnosed by: (1) Throat/nasopharyngeal swab, and (2) blood samples for the antibodies.



### **Treatment**

If diagnosed early, swine flu is easy to treat, so there is no need for panic. The US Center for Disease Control and Prevention and the WHO recommend the use of Tamiflu (oseltamivir) or Relenza (zanamivir) for treating swine flu. Besides antivirals, palliative care focused on controlling fevers and maintaining fluid balance goes a long way to ensure recovery. In fact, the majority of people infected with swine flu make a full recovery without requiring medical intervention or antiviral drugs.

### Prevention

A new virus being developed is slated to be available only mid-2009. Till then, adequate precautions against infection is absolutely essential in order to prevent a global pandemic. Prevention has three components: (1) Prevention in swine, (2) Prevention of transmission to humans, and (3) Prevention of it spreading among humans.

### Prevention in swine

- · Facility management
- Herd management
- Vaccination



### Prevention of transmission to humans

- Farmers working with pigs and veterinarians must use a face mask when dealing with infected animals.
- Wearing gloves when working with sick animals

## Prevention of human to human transmission

- Frequent washing of hands with soap and water or with alcoholbased hand sensitizers, especially after being out in the public.
- Anyone with flu-like symptoms such as sudden fever, cough or muscle aches should stay away from work or public transportation, and contact a doctor to be tested.



Dr Lavanya Nutankalva Consultant – Infectious Diseases, Apollo Health City, Hyderabad