

A portrait of Dr. Anshu Kulkarni, a woman with dark hair pulled back, wearing a white lab coat, smiling against a plain light background.

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.



# A Lowdown on the Swine Flu Alert

Dr Lavanya Nutankalva

**T**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.

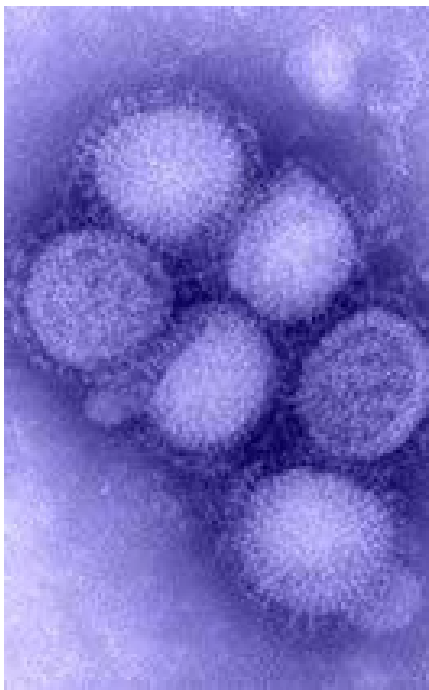
Reports indicate that the current strain is a new one of influenza A virus subtype H1N1. The origin of this strain is unknown. World Organization of animal health reports that this strain is not isolated in pigs, and other initial

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reports describe it as an apparent re-assortment 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 alcohol-based hand sanitizers, 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. 



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