



# “Swine Flu”

## What’s the skinny on my cat getting this virus?

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Many reports in March and April 2009 of a new “swine flu” virus in humans have been confirmed by various public health organizations, including the Centers for Disease Control and Prevention (CDC) and the World Health Organization (WHO). Although first identified in central Mexico and the border states, Texas and California, it has been identified in numerous countries and will undoubtedly go worldwide.

### **What’s in a name?**

“Swine flu” is actually a misnomer. This new virus is readily transmitted from person to person, but there is no evidence that it is readily transmitted from pigs to people. CDC has named the virus “2009 H1N1” while WHO recommends the virus be called “North American influenza A (H1N1).” It has also been referred to as Mexican flu.

### **What is “swine flu”?**

The causative virus is a recombinant or mixture of several flu viruses. The 2009 H1N1 virus contains genetic material from four different viruses: North American swine influenza, North American avian influenza, and human influenza and swine influenza found in Europe and Asia. Influenza viruses have a unique structure to their nucleic acid core which enables new viruses to appear under special circumstances. If two or more distinct flu viruses infect a single cell, a mixing of the genetic material can occur resulting in a new virus. If the change results in only minor changes in the surface proteins that stimulate immunity in an infected person or animal, it is called “antigenic drift.” If it is a more significant change such that entirely new immunity is required to prevent disease, it is referred to as “antigenic shift.” A pandemic occurs when a new naturally recombinant virus is produced, and when this new virus is readily transmitted from person to person in a population where there is no immunity to that new virus.

### **Can my cat get “swine flu”?**

At the time of this writing, there is no report or evidence that swine flu 2009 H1N1 can infect cats, or produce disease in cats. The situation is being carefully monitored, and veterinary diagnostic laboratories are prepared to identify a new respiratory virus of cats, should the virus

make the jump from humans to cats. Undoubtedly studies will be conducted to ascertain whether or not cats can be infected with this new virus.

### **Are cats susceptible to other flu viruses?**

Yes, cats can be infected with other flu viruses. Several reports have documented that cats can be infected with the highly pathogenic avian influenza virus. When this virus was first reported in Asia, there were several incidents where domestic, and exotic cats in zoos, were infected, and several deaths occurred. When this virus caused an outbreak in wild aquatic birds in Europe, several cats were naturally infected and some died from the disease. The most common way these cats were infected is believed to be from eating the carcasses of infected birds. At present, this virus has not been identified in the United States.

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