

What is Swine – Flu?

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A person is said to have Swine-Flu when he experiences an acute attack of respiratory illness with the presence of swine influenza-A (H1N1) virus in his body fluids". 2009 Swine-Flu strain was first seen in Mexico and it is termed as H1N1 flu because, it is mainly found infecting human beings and exhibits two main surface antigens, viz., H1 (Hemagglutinin type1) and N1 (Neuraminidase type1) . Swine influenza virus was first isolated from pigs in 1930 in U.S.A. In several instances, people have developed Swine-Flu infection, when they were closely associated with pigs (e.g. farmers, pork processors). Likewise, pig population has occasionally been infected with the human fluid infection. Swine-Flu produces almost same symptoms in pigs as in human beings. Swine-Flu (Swine influenza) is a respiratory disease caused by viruses (Influenza viruses) that infect the respiratory tract and result in nasal secretions, a barking like cough, decreased appetite and listless behaviour. Under normal circumstances, the cross species infections (Swine virus to man, human fluid virus to pigs) have remained in local areas and have not spread to other parts of the country. Swine-Flu can last about 15 days, whether in pigs or humans. Unfortunately, this cross species infection with influenza viruses has begun to spread worldwide nowadays.

History:

Swine influenza was first proposed to be a disease related to human influenza during the 1918 flu pandemic, when pigs became sick at the same time as humans. The first identification of an influenza virus as a cause of the disease in pigs occurred about twelve years later in U.S.A i.e. in 1930. Thus, 1918 flu pandemic may reflect a zoonosis either from swine to humans or from humans to swine. It is not certain in which direction the virus was

transferred. 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 as causes of influenza among pigs in North America. In 1997-1998, H3N2 strains emerged. These strains, which include genes derived by reassortment from human, swine and avian viruses, have become a major cause of swine influenza in North America. On August 20, 2007 the officers of the Department of Agriculture investigated the outbreak (epizootic) of Swine-Flu in Nueva Ecija and Central Luzon, Philippines. The mortality rate was less than 10% for Swine-Flu, unless there were complications like hog cholera. This disease then spread to backyard pig farms in Bulacan and Pampanga, due to which the Philippine National Meat Inspection Service (NMIS) raised a hog cholera "red alert" warning for the benefit of the society. There are fears that Swine-Flu will become a major global pandemic in the winter months, with many countries planning major vaccination campaigns. It is estimated that around 100 million people have died worldwide due to Swine-Flu till Dec 31, 2009.

Transmission to humans:

People, who work with poultry and swine, particularly those, who have intense exposure are at high risk of zoonotic infection. Thus, people whose jobs involve handling poultry and swine, veterinarians and meat processing workers are highly susceptible to Swine-Flu.

Symptoms of Swine-Flu:

Swine-Flu is another type of virus flu. The big difference is that the Swine Influenza (H1N1) virus has components of pig and bird influenza viruses in it, due to which humans do not have any immunity to these animal viruses.

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