

## Swine Flu/Influenza Type A Alert (VIRUS H1N1)

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Amongst the many types of viruses that we must protect ourselves from, the type A H1N1 is one of greatest concerns at this time to the Center for Disease Control (CDC), and the Department of Health and Human Services (HHS) of the United States. Personnel from these organizations are currently on alert status for the possibility of a pandemic. Cases of this virus have been confirmed in Mexico, California, Texas, Kansas, Ohio, New York City and Canada—among others. The virus infection that causes the swine type A is not unknown to us, as various sporadic cases have been detected before; nevertheless, in recent years increase in the number of cases has been identified.

According to the CDC, (2009) the swine virus was isolated in the US in 1930. Ever since, it has been a public health risk and the cause of respiratory disease in pigs. Pigs can infect people with the virus, whom in turn can infect other pigs—and other people, especially if there is proximity, direct contact or through contaminated objects. Pigs are vulnerable to bird flu and to many other viruses from other animals and humans, and they serve as host where the virus has the opportunity to reconstitute itself genetically interchanging genetic material from the other viruses.

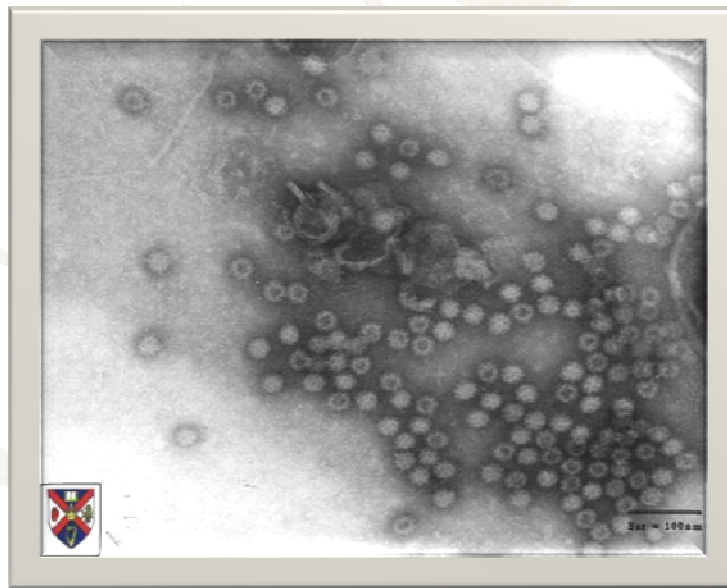
The influenza virus exists in three types, A - B -C—and of all, type- “A” causes respiratory problems in pigs. This type is also classified in sub-types, according to its Hemagglutinin (H) and Neuraminidases (N) – both virus proteins. All the subtypes are different in their genetic sequence. All viruses benefit from having their genes in 8 separated segments with RNA, which permits them to interchange segments with other viruses within the host’s body. This in turn helps the reproduction of new and unknown combinations. From there we find countless known pandemics throughout history responsible for the sickness and death of humans.

The impact of the transmission of the swine virus to people can be devastating, especially in children, old people with debilitating conditions and compromised immune-system. The interim guidelines provided by the CDC indicate that acute respiratory infections with nose bleed, or congestion, sore throat, cough, nausea and vomiting and fever are not necessarily indicative of swine flu; however, if you have traveled to Mexico, the US or places with reported cases, and within the period of three to seven days begin manifesting symptoms, report or inform them immediately to your health provider. Should the infection be confirmed, the person should be confined to strict respiratory isolation, hand wash and use of disposable utensils to eat. In addition, a mask must also be utilized if outside the room or quarters. It is possible for a person to infect others in a period of seven days, or until the symptoms have subsided. The treatment consists of measures to decrease symptoms, and fever (acetaminophen, ibuprofen and liquids), the use of aspirin is not recommended.

In the present the use of antiviral is limited to oseltamivir (Tamiflu) or zanamivir (Relenza) for prevention and treatment. Resistance of this virus to other types of antivirus used in the past has been detected, examples are amantadine(Simadine, Symmetrel) and rimantadine (Flumadine). These should not be used since they provide no protection against the H1N1 virus. The efforts to prevent a pandemic are full steam ahead, however, it is imperative for the population to **remain alert**, and take the necessary precautions and quickly notify health providers should contamination be suspected.

For more information access the CDC webpage at <http://www.cdc.gov/swineflu/> and, <http://www.fda.gov/bbs/topics/NEWS/2009/NEW02002.html>

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