

## **“H1N1 – The Virus Formerly Known As Swine”**

### ***Frequently Asked Questions***

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#### **What is H1N1?**

H1N1 is one of many variants of the influenza A virus, which is the most common cause of the flu. H1N1 appeared in late March of 2009 in Mexico, but spread quickly throughout the world. As with seasonal influenza, H1N1 is transmitted from human to human via aerosol, meaning that small particles from an infected person's cough or sneeze are inhaled by an unexposed person, and the virus in the sneeze droplet infects its new host. It can also be spread when people touch an infected surface and then touch their mouth, nose or eyes.

#### **Why has it been referred to as "swine flu"?**

It received the name swine flu because it is believed that the new variant developed as a result of a specialized genetic change called re-assortment after it was able to live in a pig's lung. The virus cannot be contracted from exposure to pigs or from consuming pork or other pig-derived food products. Additionally, the virus has not been found in any pigs in the United States. In fact, the current virus is a mixture of parts of viruses from several different sources.

#### **How do I know if I have H1N1?**

We commonly call the constellation of symptoms such as a cough, runny nose, fever, sore throat, body aches, chills, fatigue, and headache "the flu." Seasonal influenza A and its H1N1 variant have thus far caused a similar set of symptoms. Special testing of secretions in your nose will determine if you have influenza and if so which kind. During epidemic periods, diagnosis is often made based on symptoms alone, because testing of everyone is too costly and time consuming, leading to delays in treatment.

#### **Is H1N1 worse than the seasonal flu?**

Many people in the United States die from the seasonal flu every year, so all infections with the influenza A virus should be considered potentially serious. Those who are at higher risk of serious complications include children under 5 years of age, those over 65, pregnant women, those with other chronic medical conditions (especially lung disease), and the immunocompromised. Hospitalizations and deaths attributed to H1N1 have for the most part been in those higher-risk groups. To date, H1N1 has been less severe than seasonal flu, but the second wave may be more severe.

#### **Does H1N1 cause a different disease?**

H1N1 is different from seasonal flu in many ways, which is cause for concern. First, no vaccine has been developed yet and, if developed, will not be available until late 2009, when the annual flu season will have already begun. Additionally, new, more virulent strains of influenza A can seriously affect young adults of working age. For instance, during the influenza pandemic of 1918, the majority of patients were healthy young adults. The reasons for this are not fully understood, but may be due to the fact that younger populations have never been previously exposed to this particular variation of H1N1 influenza A. In fact, the Centers for Disease Control and Prevention (CDC) notes that people over 65 may be less susceptible to H1N1, because they may have been exposed to a similar variant at some point in their lives and have acquired immunity. The CDC notes that it is impossible to predict the exact effect of H1N1 worldwide. However, an overlap with the seasonal influenza A strains may result in a shortage of healthcare resources (including staff, vaccines, and antiviral medications). The CDC errs on the side of safety, encouraging all Americans to take precautions to help minimize the spread of the disease, thereby minimizing the impact of an H1N1 outbreak in the United States.

#### **Will a seasonal flu vaccine protect me against H1N1?**

Because the H1N1 influenza virus is significantly different from the strains that cause the seasonal flu, experts do not believe that the seasonal vaccine will provide full protection against H1N1. However, do  
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not let this discourage you from getting a seasonal flu vaccine. Both types of flu may circulate this fall and winter. Even if your seasonal flu symptoms are mild, you risk infecting other people around you.

**Okay, so I need to take precautions. What can I do?**

Because no vaccine is yet available, hygiene is especially important. If you are in a public space, use alcohol sanitizing gels or wash your hands frequently. Keep in mind that influenza A can, in some cases, be transmitted via infected surfaces, including doorknobs, water faucets, and other areas frequently touched by others. The best thing to do is to stay home from work if you develop signs and symptoms of the seasonal flu, and to keep children home from school. CDC recommends that you stay home from the day you begin experiencing symptoms until 24 hours after your fever goes away.

**What do I do if I start to experience flu-like symptoms?**

To minimize the risk of spreading the virus, cough or sneeze into a clean tissue, discard it carefully, and wash your hands afterwards. The fever caused by the virus should resolve on its own, as do most respiratory viral infections in healthy individuals. The Illinois Department of Public Health has developed its "Three C's" for H1N1 prevention: (1) CLEAN - Clean your hands frequently, clean commonly used surfaces like doorknobs; (2) COVER - Cover your mouth and nose when coughing or sneezing, and dispose of tissues immediately; (3) CONTAIN - If you are experiencing flu-like symptoms, do not go to work. If your children are sick, do not send them to school. If you must go out in public, cover your mouth and nose with a mask to prevent getting others sick. Some patients benefit from treatment, especially in the early stages. Call your doctor. Even if you do not require treatment, the knowledge that the virus is spreading can be reported to the public health authorities to help them take steps to contain the virus.

**What should I avoid doing?**

If possible, avoid crowded environments. Do not give aspirin to children suffering from flu-like symptoms, as it may cause a severe life-threatening illness called Reye's Syndrome. CDC also warns against "flu parties," where a group of people gather with someone who has H1N1 in the hopes of acquiring the infection early, having the typical flu-like symptoms for a short period, and thereafter being immune. This is dangerous because it is not possible to predict how an individual's body will handle the H1N1 strain of influenza A, and it may have potentially serious and unanticipated outcomes. Taking antiviral medications to prevent becoming infected may help some people in selected cases of exposure, such as in families with sick young children. However, overuse of these medications may lead to drug-resistant strains that are even more dangerous than the original H1N1 virus. It may also result in a shortage of antiviral medications for those hospitalized patients who need them most. If you are healthy, you do not need to wear a face mask to protect yourself. The World Health Organization (WHO) warns that improper use of face masks could, in fact, increase your risk of exposure to the virus.

**Can flu be treated?**

Yes, seasonal flu can be treated with oseltamivir (Tamiflu®) by mouth and zanamivir (Relenza®) by inhaler. H1N1 can be treated with the same medications. Experimental studies of intravenous peramivir and intravenous zanamivir are in progress and are now being employed for certain hospitalized patients.

**Where can I go for more information?**

The CDC's H1N1 Flu web page has a number of resources. Go to <http://www.cdc.gov/h1n1flu/> for more information. Also, your state [http://www.idph.state.il.us/h1n1\\_flu/index.htm](http://www.idph.state.il.us/h1n1_flu/index.htm) and county <http://www.scdph.org> public health departments have more information about H1N1.

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