

H1N1 FLU

Understanding and Dealing with Novel H1N1 Influenza (“swine flu”)

The Basics – What Is It?

First detected in people in the United States in April 2009, Novel H1N1 influenza is a new flu virus causing illness in people. “Novel” means it is a viral strain not circulated previously in humans. This influenza is contagious, spreading easily from person to person, and from country to country.

When first detected, the virus was referred to as “swine flu” because many of the laboratory tested genes in this new virus were very similar to flu viruses normally occurring in North American pigs. Additional testing has determined that this new virus is very different from the form presenting in pigs from North America. Novel H1N1 influenza has two genes from flu viruses seen in pigs in Asia and Europe, as well as avian (bird) genes and human genes. Scientists call this a “quadruple reassortant” virus. (Definition of reassortant virus: a virion containing deoxyribonucleic acid from one virus species and a protein coat from another.)

Transmission

This virus is contagious and is spread from person to person. This spread is thought to be happening the same way that seasonal flu spreads, that is, through coughing or sneezing by people with influenza. If an object has been contaminated with the flu virus (droplets expelled when an infected person coughs or sneezes), a person may become infected by touching the contaminated surface and then touching their mouth or nose (access to mucus membranes). The eyes, nose and mouth are referred to as the “T” Zone.

Duration of Contagious Stage

Currently, the CDC (Centers for Disease Control and Prevention) feel this virus has the same properties in terms of spread as seasonal flu viruses: people may be contagious from one day before symptoms develop to up to seven days after they get sick. Children, especially younger children, could possibly be contagious for longer periods.

Signs and Symptoms

Similar to the symptoms of seasonal flu, the symptoms of Novel H1N1 include fever, cough, sore throat, runny or stuffy nose, body aches, headache, chills and fatigue. Many people who have been infected with this virus also have reported diarrhea and vomiting. Also, like seasonal flu, severe illnesses and death has occurred as a result of illness associated with this virus.

Vulnerability

Novel H1N1 virus preferentially infects younger people. According to WHO (World Health Organization):

- The majority of cases have occurred in people under the age of twenty-five years.
- Most severe cases and fatalities from Novel H1N1 have been in adults between thirty and fifty years old.
- In many reported cases, underlying chronic health concerns have been noted. Those conditions include respiratory diseases (notably asthma), cardiovascular disease, diabetes, autoimmune disorders, and obesity.
- However, it should be noted that approximately one third to one half of the severe and fatal infections have occurred in previously healthy young and middle-aged people.
- Pregnant women are at an increased risk.

Treatment and Prevention

There are four influenza antiviral drugs the U.S. has approved for use: oseltamivir, zanamivir, amantadine and rimantadine. Novel H1N1 is resistant to amantadine and rimantadine. Oseltamivir (brand name Tamiflu®) and zanamivir (brand name Relenza®) are being used to treat H1N1. Your health care provider will choose the antiviral drug appropriate for the age of the infected person. These two drugs may also be used to prevent influenza in a person exposed to, but is not ill with, H1N1 influenza.

CDC isolated the Novel H1N1 virus and is working with industry to produce a vaccine. Swiss pharmaceuticals company, Novartis AG, announced June 12, 2009 (Associated Press) that it has successfully produced a batch of H1N1 vaccine. However, manufacturing a vaccine can be a long, multi-month process. Until the vaccine can be made in sufficient supply for mass distribution, there are some everyday actions that can help prevent the spread of germs.

- Cover your mouth and nose with a tissue when you cough or sneeze. Throw the tissue in the trash immediately.
- Wash your hands frequently with hand cleanser and tepid (warm) water. Wash especially after coughing or sneezing.
- If hand washing facilities are not readily available, alcohol based hand sanitizers may be used. (more)

- Avoid touching the “T” Zone of your face (eyes, nose, mouth).
- Avoid close contact with sick persons.
- Stay home if you are sick for 7 days after your symptoms begin or until you have been symptom-free for 24 hours, whichever is longer. This is to keep from infecting others and spreading the virus further.
- Stay current and abide by public health recommendations regarding school closings, avoiding crowds, or other distancing measures.

Be Prepared

Be prepared in case you get sick. Have a supply of over the counter medicines, alcohol-based hand sanitizers, tissues, and other related items that are not only useful but help you avoid the need of making trips out in public once you sick and contagious.

If You Do Get Sick

If you become ill with flu-like symptoms (fever, body aches, runny or stuffy nose, sore throat, nausea, vomiting or diarrhea) you should **STAY HOME** and **AVOID CONTACT WITH OTHER PEOPLE**. If you are severely ill or in one of the high risk categories, see your doctor. Your health care provider will determine whether flu testing and treatment are required.

Cleaning Contaminated Surfaces

Influenza virus and survive on environmental surfaces – and can infect a person – up to two to eight hours after being deposited onto the surface.

Clean surfaces by heat (167-212°F or 71-100°C), or use chemical germicides like chlorine, hydrogen peroxide, detergents (soap), and iodine-based antiseptics. Use household disinfectants according to their label directions to keep bathroom surfaces, bedside tables, toys (for children) and kitchen countertops cleaned.

If someone in the household is contagious, it is important not to share utensils, dishes or linens with the rest of the family. Linens should be tumbled dry on the “hot” setting. Avoid ‘hugging’ soiled laundry prior to washing it. Wash your hands or use alcohol-based sanitizer after handling dirty laundry. Utensils and dishes should be washed either in a dishwasher or by hand with soap and water.

Questions & Answers

Q. Do you have any products to protect against /or / prevent someone from catching Swine Flu?

A. *The best precaution to help prevent the spread of the flu is frequent and thorough HAND WASHING with any of our liquid, foam, or spray hand cleansers. Antibacterial products are not required, but may be used as a matter of personal preference. In the absence of hand washing facilities, alcohol based hand sanitizers containing at least 60% alcohol may be used.*

Q. What is “thorough” Hand Washing?

- A.** *Follow these steps to assure proper cleansing:*
- *Apply hand cleaner to hands.*
 - *Wet hands with warm water and work soap into lather.*
 - *Vigorously rub together all surfaces of lathered hands, including fingers, nails and around cuticles for at least 15 seconds. This is the most important step: the friction will help remove dirt and microorganisms.*
 - *Rinse hands thoroughly under running water to remove all lather.*
 - *Dry hands thoroughly with paper towel.*

Q. Can I get Novel H1N1 influenza from eating or preparing pork?

A. *No. The CDC states that the virus is not spread by eating pork products. Consuming properly prepared and cooked pork products is safe.*

Q. In the U.S., do any swine have the H1N1 virus that has infected humans?

A. *According to the USDA (U.S. Department of Agriculture), there is currently no evidence that swine are infected with this viral strain.*

Q. Is it OK to drink from my city’s water supply?

A. *Yes. Tap water treated by conventional disinfection processes does not likely pose a risk, according to the CDC.*

Q. Is it OK to go swimming at water parks, swimming pools, spas, and similar venues?

A. *Yes. Again, the CDC states that recreational water treated at their recommended disinfectant levels does not likely pose a concern.*

Q. What are “swine flu parties?”

A. *These are gatherings where people intentionally expose themselves to someone infected with the Novel H1N1 virus, thinking they can acquire a mild case of the flu and create a natural immunity. The CDC does not recommend these “parties” as a way to protect oneself from the virus. The CDC’s recommendation is that persons with the virus avoid contact with others.*

Sources:

www.cdc.gov/h1n1flu

www.who.int

www.bulletin.aarp.org

www.usda.gov

FDA 21 CFR Parts 333 and 369 Tentative Final Monograph for Health-Care Antiseptic Drug Products: Proposed Rule