I heard that the novel H1N1 influenza is now a pandemic—what does that mean?

Pandemic flu occurs when a new influenza virus appears for which most people do not have immunity, when it spreads easily between people worldwide and when it may cause serious illness. On June 11, 2009, the World Health Organization (WHO) made a declaration that novel H1N1 influenza has spread around the world to the point where it is now a pandemic. However, the most important point to remember is that at this time, even though the virus has spread quickly, most people who have gotten novel H1N1 influenza have had mild illness. Unfortunately, some people in New York State, in the United States and in other countries have developed more severe illness and some have died. It's uncertain at this time how serious or severe novel H1N1 influenza pandemic will be in terms of how many people infected will develop serious complications from novel H1N1 influenza.

The New York State Department of Health has been closely monitoring influenza-like illness (ILI) and novel H1N1 influenza in the state and working closely with local health departments to detect illness, reduce the spread and severity of illness, and provide information and guidance to health care providers and the public about the situation.

What is novel H1N1 influenza?

Novel H1N1 influenza is a new type A influenza (flu) virus that was first seen in the United States in April 2009. Health officials initially called it "swine flu" because it looked similar to some flu viruses that pigs get. However, further study showed that novel H1N1 influenza contains a combination of flu virus genes that circulate in some pigs, birds and humans. Novel H1N1 influenza is not the same as swine flu.

As health officials learn more about this flu virus, they continue to identify it more accurately. As a result, you may hear or see it called by different names, including "novel H1N1 influenza," "novel H1N1 influenza (flu) virus," "H1N1 influenza (flu) virus" or "novel influenza A (H1N1) virus infection." These are all describing this same, newly seen influenza virus in people. The word "novel" indicates that this is a new influenza virus with a gene combination that has not been seen before.

Is novel H1N1 influenza the same as seasonal flu?

No. Seasonal flu is a contagious respiratory illness caused by different flu viruses than novel H1N1 influenza. Seasonal flu occurs every year, most often during the winter and early spring. Seasonal flu most severely affects people 65 years and older, while novel H1N1 influenza is currently being seen in children and young adults between the ages of 5 and 24 years old. In addition, a new vaccine is available every year to help prevent seasonal flu. Currently there is no vaccine against novel H1N1 influenza, although work is being done to create one. More information on seasonal flu and the seasonal flu vaccine.

Novel H1N1 Influenza – Specifics about the Illness and Treatment

How does the virus that causes novel H1N1 influenza spread?
The federal Centers for Disease Control and Prevention (CDC) has determined that novel H1N1 influenza spreads from person to person, in the same way that seasonal flu spreads. Influenza viruses are thought to spread is from person to person in respiratory droplets of coughs and sneezes. This can happen when droplets from a cough or sneeze of an infected person are propelled through the air and deposited on the mouth or nose of people nearby. Influenza viruses may also be spread when a person touches respiratory droplets on another person or an object and then touches their own mouth or nose (or someone else's mouth or nose) before washing their hands. Health officials are currently studying how easily novel H1N1 influenza spreads between people.

**How long after exposure do symptoms appear?**

Because this virus is new, it is not known how long it takes symptoms to appear after exposure. It could range from 1-7 days, and is more likely 1-4 days.

**What are the signs and symptoms of novel H1N1 influenza?**

The symptoms of novel H1N1 influenza in people are similar to the symptoms of regular human flu and include:

- Fever 100°F or greater
- Cough
- Sore throat
- Body aches
- Headache
- Chills
- Fatigue (weariness, tiredness, or lack of energy)
- Some people have also reported diarrhea and vomiting, which are not usual symptoms of seasonal flu

Like seasonal flu, novel H1N1 influenza can vary in severity from mild to severe, and may cause a worsening of underlying chronic medical conditions. The severity of illness from the current novel H1N1 influenza is not yet clear and is being studied by the federal Centers for Disease Control and Prevention (CDC).

**Can novel H1N1 influenza be treated?**

Yes. There are anti-flu drugs that your health care provider can prescribe to treat novel H1N1 influenza. They work best if started within 2 days of the beginning of symptoms. Your health care provider can determine if you need treatment. The federal Centers for Disease Control and Prevention (CDC) recommends that influenza antiviral treatment be given to all hospitalized patients with confirmed, probable or suspected novel H1N1 influenza and people who are at higher risk for seasonal flu complications who have confirmed, probable or suspected novel H1N1 influenza.

**Do I need a prescription for one of the anti-flu drugs?**

Yes. Antiviral drugs are prescription medicines (pills, liquid or an inhaler) that fight against the flu by keeping flu viruses from reproducing in the body. The two prescription antiviral medications that health care providers can prescribe to treat novel H1N1 influenza are oseltamivir (oss-el-TAM-eh-veer), brand name "Tamiflu," and zanamivir (zan-AM-i-veer), brand name "Relenza."

**Do most insurers cover prescription antiviral medications?**

Health insurance may cover the cost of these drugs. Talk to your health insurance company to find out if you are covered for these medications.
What are the signs of more severe illness with novel H1N1 influenza?

While most of the novel H1N1 influenza cases have been mild, severe illnesses and death have occurred from this new flu virus. If you, or someone you know, becomes ill and experiences any of the following warning signs, seek emergency medical care immediately.

**In children, symptoms that require emergency medical attention include:**

- Fast breathing or trouble breathing
- Bluish or gray skin color
- Not drinking enough fluids
- Severe or persistent vomiting
- Not waking up or not interacting
- Being so irritable that the child does not want to be held
- Flu-like symptoms improve but then return with fever and worse cough

**In adults, symptoms that require emergency medical attention include:**

- Difficulty breathing or shortness of breath
- Pain or pressure in the chest or abdomen
- Sudden dizziness
- Confusion
- Severe or persistent vomiting
- Flu-like symptoms improve but then return with fever and worse cough

How long can people infected with the virus that causes novel H1N1 influenza spread it to others?

People with novel H1N1 influenza may be contagious from one day before they develop symptoms up to 7 days following illness onset. Children, especially younger children, might potentially be contagious for longer periods.

Can I be tested for novel H1N1 influenza?

Contact your health care provider if you are ill. Your doctor may decide to test you for this new flu, and request special testing if indicated. The New York State Department of Health has provided guidance to health care providers throughout the state regarding who should be tested for novel H1N1 influenza and what specimens to collect.

I know of students, faculty or staff from a school who are sick—should the school close?

School closings because of a flu outbreak are decided by the school district and state officials. Their decisions are based on school absenteeism and how staffing shortages may affect school operations. School closure is not advised unless a large number of faculty or students are absent and their absence interferes with the school's ability to function.

Does closing schools help prevent the spread of novel H1N1 influenza?

Because of the large number of reported novel H1N1 influenza cases and disease clusters in the U.S., the spread of novel H1N1 influenza within communities makes individual school and child care program closure less effective as a control measure. Some schools have and may temporarily close due to high rates of absenteeism and influenza-like illness (ILI) that interfere with the school's ability to function.
What is the best way to prevent the spread of novel H1N1 influenza at schools that have confirmed cases?

The best way to reduce the spread of influenza in schools continues to be the early identification of ill students; faculty or staff, having ill persons stay home from school for 7 days or until 24 hours after symptoms resolve (whichever is longer) and having all students, faculty and staff practice good respiratory hygiene/cough etiquette. See the next question and answer for information on respiratory hygiene/cough etiquette.

What is "good respiratory hygiene/cough etiquette"?

Good respiratory hygiene/cough etiquette means that people:

- Carefully cover their nose and mouth with a disposable tissue every time they cough or sneeze. If they do not have a tissue, they should cough or sneeze into their sleeves or upper arm.
- Dispose of used tissues immediately into a covered trash receptacle
- Perform hand hygiene (wash their hands with non-antimicrobial soap and water or use an alcohol-based hand sanitizer or antiseptic hand wash if hand washing is not possible) after contact with secretions from the nose and mouth and potentially contaminated objects or materials.

What is the best way to be sure people who have flu-like symptoms or novel H1N1 influenza do not go to school?

Parents and guardians should monitor their children every morning for flu-like symptoms (fever of 100°F or greater, cough, sore throat, body aches, headache, chills, fatigue or possible diarrhea or vomiting). Faculty and staff should check themselves for flu-like symptoms. Ill persons should stay home.

How long should students, faculty or staff with flu-like symptoms or confirmed novel H1N1 influenza stay out of school?

Students, faculty or staff with influenza-like illness (ILI) should stay home and not attend school or go into the community, except to seek medical care, for at least 7 days, even if they feel better sooner. Note: Some children and adults who have had the flu may experience a lasting cough after all other symptoms end. If 7 days have passed, they no longer have a fever, and otherwise feel well for at least 24 hours, they may return to school, even if they have this residual (leftover) cough.

What should students, faculty or staff do if they are still sick with flu-like symptoms or confirmed novel H1N1 influenza after 7 days? How much longer should they stay home from school?

Students, faculty or staff who are still sick 7 days after they become ill should continue to stay home from school until at least 24 hours after symptoms have ended. Note: Some children and adults who have had the flu may experience a lasting cough after all other symptoms end. If 7 days have passed, they no longer have a fever, and otherwise feel well for at least 24 hours, they may return to school, even if they have this residual (leftover) cough.

Prevention

Is there a vaccine against novel H1N1 influenza?

At this time, there is no vaccine for novel H1N1 influenza. The seasonal influenza vaccine does not provide protection against novel H1N1 influenza. This makes ordinary precautions, such as covering coughs and washing hands, all the more important.
What can I do to protect myself from getting sick?

There are everyday actions that can help prevent the spread of germs that cause respiratory illnesses like influenza. Take these steps to protect your health:

- Avoid close contact (within 6 feet) with sick people as much as possible.
- Wash your hands often with soap and water, especially after you cough or sneeze. Alcohol-based hand sanitizers are also effective.
- Avoid touching your eyes, nose or mouth. Germs spread this way.
- Cover your nose and mouth with a tissue if you cough or sneeze. Throw the tissue in the trash after you use it and wash your hands or use an alcohol-based hand sanitizer.

Should I avoid large social events and other public gatherings?

If you are at high risk of developing complications if you develop novel H1N1 influenza, consider staying away from public gatherings in communities where there are reported cases of novel H1N1 influenza. People at high risk of complications include those with certain chronic medical conditions, children less than 5 years old, persons 65 years or older, people with weakened immune systems and pregnant women. Contact your health care provider if you have questions.

If you have any symptoms of an influenza-like illness (ILI), for example, fever with either cough or sore throat, stay home. See “What should I do if I get sick and have flu-like symptoms or am diagnosed with novel H1N1 influenza?” below for more information on what to do if you or someone in your household develops an ILI.

At this time, CDC is not recommending that people wear masks or respirators at public gatherings. Wash your hands frequently with soap and water or use an alcohol-based hand sanitizer often and avoid touching your eyes, nose and mouth.

Should I ask my health care provider for a prescription anti-flu drug to prevent novel H1N1 influenza if I am healthy, not pregnant or do not have a chronic medical condition?

No. Antiviral drugs are usually used to treat people who are at risk for developing life-threatening complications from the flu. There is no reason to routinely ask for one of these drugs to keep at home, or to take them just as a precaution. Over-use could result in limited supplies for those who need it most. In addition, over-use of antiviral drugs has been known to lead to flu viruses becoming resistant to the drugs. All drugs, including antivirals, can cause side effects and should only be used when necessary under the direction of a health care provider.

Consult your health care provider if you are pregnant or have a chronic medical condition. In some cases, taking a prescription antiviral medication may be recommended to prevent you from developing novel H1N1 influenza.

Illness in the Household

What should I do if I have flu-like symptoms or am diagnosed with novel H1N1 influenza?

- Stay home and limit contact with others in your household as much as possible.
- To help prevent others in your household from becoming ill, wear a disposable facemask when close contact with other people in the home is unavoidable (including when breastfeeding, if applicable). Disposable facemasks can be purchased at pharmacies and medical supply, hardware or home improvement stores and may be labeled as surgical, dental, medical procedure, isolation or laser masks. Facemasks cover the nose and mouth and reduce the number of infectious droplets you may cough or sneeze into the air. Wash your hands or use an alcohol-
based hand sanitizer immediately after removing the facemask and disposing of it in the trash.

- Unless necessary for medical care, stay home. If you must be in a public place, protect others by wearing a disposable facemask and make the time you spend in crowded settings as short as possible.

- Rest, drink plenty of fluids and take medications that you typically use to treat flu-like symptoms, such as acetaminophen or ibuprofen.

- Use good respiratory hygiene/cough etiquette, which means that you:
  - Carefully cover your nose and mouth with a disposable tissue every time you cough or sneeze. If you do not have a tissue, cough or sneeze into your sleeves or upper arm.
  - Dispose of used tissues immediately into a covered trash receptacle.
  - Perform hand hygiene (wash your hands with non-antimicrobial soap and water, or use an alcohol-based hand sanitizer or antiseptic handwash if hand washing is not possible) after contact with secretions from the nose and mouth and potentially contaminated objects or materials.

- Avoid having visitors. If visitors must enter your home, they should avoid close contact with you.

- Stay home for 7 days after your symptoms begin or until you have been symptom-free for 24 hours, whichever is longer.

What precautions and steps should I take if I live with someone with confirmed novel H1N1 influenza?

Follow the same steps and precautions you would to avoid ordinary seasonal flu:

- If you are taking care of someone with novel H1N1 influenza, speak with your health care provider to see if you should take prescription antiviral medication to prevent catching novel H1N1 influenza.

- If possible, place the person with novel H1N1 influenza in a separate room, away from the common areas of the house or apartment. Respiratory treatments, such as inhalers and nebulizers, should be used by the ill person in a separate room away from common areas of the house when possible.

- Limit your contact with the sick person. Avoid close contact such as kissing and do not share towels, drinking glasses, eating utensils or toothbrushes with the ill person.

- When holding small children who are sick, place their chin on your shoulder so that they will not cough in your face.

- If you must have close contact (within 6 feet) with or are providing care to a member of your household with an influenza-like illness (ILI) or confirmed novel H1N1 influenza AND you are at increased risk of severe illness or complications from influenza, consider wearing a disposable facemask. After removing the facemask, throw it in the trash and immediately wash your hands or use an alcohol-based hand sanitizer. Contact your health care provider if you have further questions.

- All household members, ill and well, should regularly wash their hands with soap and water or use an alcohol-based hand sanitizer.

- Provide disposable tissues to ill persons to use to cover their mouth and nose whenever they sneeze, cough or blow their nose. Make sure they immediately throw their used tissues in a nearby wastebasket or trash receptacle. Both ill and well persons should wash their hands or use an alcohol-based hand sanitizer after touching used tissues, similar waste and after emptying wastebaskets or trash receptacles.

- Do not give infants, children and young people under 18 years old aspirin or aspirin-containing products, for example, regular Pepto-Bismol®, which can increase the risk of a rare and serious illness called Reye's syndrome. "Children's Pepto®" does not contain salicylates (sa-LIS-a-lates), of which aspirin is a type of, but does not treat diarrhea.

- Avoid having visitors. If visitors must enter the home, they should avoid close contact with the sick person.
• The dirty dishes, eating utensils, and laundry of the ill person do not need to be washed separately from other members of the household. Use detergent and wash as usual.
• Monitor well household members closely for the development of illness. If they develop influenza-like illness (ILI), for example fever and cough, they should stay home for 7 days after their symptoms begin or until they have been symptom-free for 24 hours, whichever is longer.

Can household cleaning help prevent transmission?

Yes. To help prevent transmission, clean frequently touched surfaces, such as doorknobs, refrigerator handle, toilet seat and handle. Clean all hard surfaces, for example, bedside tables, bathroom surfaces and children’s toys, with a standard household disinfectant. If surfaces are visibly dirty, use a household cleaner first, then a disinfectant. Wash your hands with soap and water after cleaning surfaces and items. For more information, visit Information about Cleaning and Disinfectants.

Further novel H1N1 influenza information can be found on the following websites:

• New York State H1N1 Influenza Update
• H1N1 (Swine) Flu Information - New York City Department of Health and Mental Hygiene
• H1N1 Flu (Swine Flu) - Centers for Disease Control and Prevention (CDC)
• 2009 H1N1 Flu (Swine Flu) - National Library of Medicine
• Influenza A (H1N1) - World Health Organization (WHO)
• General influenza information from the New York State Department of Health
• CDC Information about H1N1 flu - cdc.gov

WWW.NYSDOH/NOVEL H1N1