

The Flu Update

When Sharing is not Encouraged

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10/08/2009

Outline

- Seasonal Influenza
- Novel H1N1 Influenza
- Prevention

Influenza

- Respiratory infection
- Spread through coughing, sneezing



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It's thought that novel influenza A (H1N1) flu spreads in the same way that regular seasonal influenza viruses spread, mainly through the coughs and sneezes of people who are sick with the virus, but it may also be spread by touching infected objects and then touching your nose or mouth. Since it is large droplets, standing or sitting more than three feet away from a sneeze or cough would be a good idea.

Seasonal Influenza

- 1 to 5 days from exposure to onset of symptoms
- Contagious 1 day **before illness** and up to 7 days after
- Seasonal influenza traditionally occurs October through April

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The incubation period is between 1 and 5 days and the influenza season in the U.S. usually occurs between October and April.

One of the tricky things about flu is that a person can spread illness before they are even showing symptoms.

Influenza Symptoms

- Rapid onset of:
 - Fever
 - Chills
 - Body aches
 - Sore throat
 - Non productive cough
 - Runny nose
 - Headache



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The symptoms of influenza include the rapid onset of fever, chills, body aches, sore throat, non-productive cough, runny nose, and headache. These initial symptoms are similar for all types of influenza.

Seasonal Influenza

- 36,000 deaths each year nationally-
800-1000 in Minnesota
- Vaccine is available
- High risk for complications include:
 - Very young
 - Very old
 - Fragile immune systems
 - Pregnant women

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The flu we see every year is the result of illness from the same strains coming back year after year. Vaccines are available every year to help combat flu and is recommended for groups that are at high risk for complications of influenza. Vaccine is based on different strains currently circulating in the population.

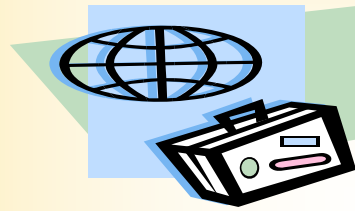
Stress normal target groups for seasonal influenza.

Everyone should get a flu shot! (or nasal mist for ages 5-49)

Make sure that you get your flu shot!

Pandemic Influenza

- A “new” virus transmitted to humans
- Virus must be able to cause illness in humans
- Limited or no natural immunity
- Virus must be able to pass easily from human to human
- Worldwide or global



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Now lets look at pandemic influenza and what the word pandemic means. The word **epidemic** means an infection is occurring within a population, where you see many people becoming sick.

A **pandemic** is a widespread epidemic – one that spans the globe rather than affecting only one population.

A pandemic is not only caused by a flu virus – it can be any human infection that spans the globe. Target groups may change, depending on the particular virus.

So, when would a pandemic occur? Triggers listed on slide.



Influenza Comparison

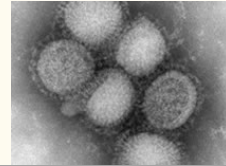
Seasonal Influenza	Pandemic Influenza
Respiratory Infection (Viral)	Respiratory Infection (Viral)
Seasonal (Oct.-April)	Not Seasonal
Not an 'unknown' virus	A new or 'novel' virus
Highly contagious	Highly contagious
Affects the very old and very young	Affects all age groups
Vaccine is available	Vaccine not available yet

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This chart shows a quick comparison of seasonal influenza and pandemic influenza. Now, we'll take a closer look at each.

What is novel H1N1?

- Novel H1N1 (referred to as “swine flu” early on)
- Believed to have started in Mexico in March, 2009
- Confirmed case by CDC in US April 15, 2009
- WHO – Pandemic Phase 6 July 11, 2009



Novel influenza A (H1N1) is a new flu virus of swine origin that first caused illness in Mexico and the United States in March and April, 2009. The first novel H1N1 patient in the United States was confirmed by laboratory testing at CDC on April 15, 2009. The second patient was confirmed on April 17, 2009. It was quickly determined that the virus was spreading from person-to-person. On April 26, 2009, the United States Government declared a public health emergency. By June 19, 2009, all 50 states in the United States, the District of Columbia, Puerto Rico, and the U.S. Virgin Islands have reported novel H1N1 infection. While nationwide U.S. influenza surveillance systems indicate that overall influenza activity is decreasing in the country at this time, novel H1N1 outbreaks are ongoing in parts of the U.S., in some cases with intense activity.

The Center for Disease Control (CDC) estimates that over 1 million people in the United States have had swine flu so far with 593 deaths. The death rate is low when compared with the seasonal flu.

While very few persons with influenza-like illness are actually tested for swine flu, public health authorities are quite confident the outbreaks are attributed to H1N1 novel influenza as other strains of influenza have not been circulating at this point.

Pandemic Phase 6

Interpandemic Period	
Novel subtypes in animals but not humans	Phase 1
Circulating subtypes in animals posing threat to humans	Phase 2
Pandemic Alert Period	
Novel subtypes in humans, but no human-to-human transmission	Phase 3
Limited human-to-human transmission	Phase 4
Localized clusters of human cases	Phase 5
Pandemic Period	
Increased and sustained transmission in the general population on a large scale	Phase 6

How the Novel H1N1 Flu spreads

- Cough
- Sneeze – large droplets traveling up to 3 feet
- Touching infected objects and then touching your nose or mouth

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It's thought that novel influenza A (H1N1) flu spreads in the same way that regular seasonal influenza viruses spread, mainly through the coughs and sneezes of people who are sick with the virus, but it may also be spread by touching infected objects and then touching your nose or mouth. Since it is large droplets, standing or sitting more than three feet away from a sneeze or cough would be a good idea.

Virus Survival

- Seasonal Influenza
 - Non-porous (hard) surfaces: 24-28 hours
 - Porous (soft) surfaces: less than 12 hours
- Novel H1N1 Influenza
 - 2-8 hours

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Studies have shown that H1N1 influenza virus can survive on environmental surfaces and can infect a person for 2 to 8 hours after being deposited on the surface.

Symptoms of the H1N1

- Fever
- Cough
- Sore throat
- Body aches
- Headache
- Chills
- Fatigue
- Diarrhea
- Vomiting

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The symptoms of novel H1N1 flu virus in people are similar to the symptoms of seasonal flu and include fever, cough, sore throat, runny or stuffy nose, body aches, headache, chills and fatigue. A significant number of 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.

Most people who have become ill with this new virus have recovered without requiring medical treatment.

Novel H1N1 Cases Risk Factors

- Between 5 and 24 years old
 - MN: Median age of hospitalization is 12
- No deaths in people older than 64
- Underlying medical conditions
 - Pregnancy
 - Chronic Lung Conditions (including asthma)

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So far, with novel H1N1 flu, the largest number of novel H1N1 flu confirmed and probable cases have occurred in people between the ages of 5 and 24-years-old. At this time, there are few cases and no deaths reported in people older than 64 years old, which is unusual when compared with seasonal flu. However, pregnancy and other high risk medical conditions from seasonal influenza appear to be associated with increased risk of complications from this 2009 H1N1. These underlying conditions include asthma, diabetes, suppressed immune systems, heart disease, kidney disease, neurocognitive and neuromuscular disorders and pregnancy.

About 70 percent of people who have been hospitalized with this 2009 H1N1 virus have had one or more medical conditions previously recognized as placing people at “high risk” of serious seasonal flu-related complications. This includes pregnancy, diabetes, heart disease, asthma and kidney disease.

How long can an infected person spread this virus to others?

- 1-3 days before they have symptoms
- Up to 7 days after they get sick
- Children may potentially be contagious for a longer time.
- CDC is now saying for H1N1 that it is 24 hours after free of fever (100 degrees) without the use of fever reducing medications

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CDC believes that this virus has the same properties in terms of spread as seasonal flu viruses. People may be contagious from one to three days before they develop symptoms to up to 7 days after they get sick. Children, especially younger children, might potentially be contagious for longer periods. CDC is studying the virus and its capabilities to try to learn more and will provide more information as it becomes available.

What you can do in prevention

- Wash your hands frequently, particularly before touching your eyes mouth or nose.
- Cover your cough or sneeze.
- Clean surfaces touched by others.
- Stay home if you are ill with Influenza Like Illness (ILI)
- Vaccination (when available)

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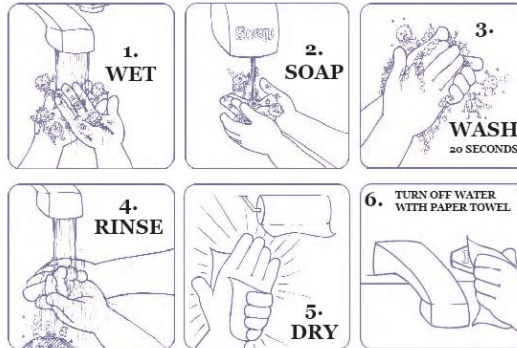
Alcohol is also effective against human influenza viruses if used in proper concentration for a sufficient length of time. Wipes or gels with alcohol in them can be used to clean hands. The gels should be rubbed into hands until they are dry.

Influenza virus is destroyed by heat (167-212°F [75-100°C]). In addition, several chemical germicides, including chlorine, hydrogen peroxide, detergents (soap), iodophors (iodine-based antiseptics).

Hand Hygiene How-To

Does it matter how I wash my hands?

You have to rub your hands for at least 20 seconds to get rid of the bacteria. Follow these instructions:



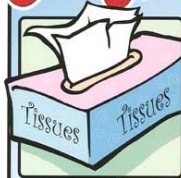
How do I clean my hands with alcohol-based hand sanitizer?

Use enough to cover all the surfaces of your hands.



Minnesota Department of Health
Food Safety Center
625 N Robert St., P.O. Box 64719, St. Paul, MN 55164
651-201-9414, TTY 651-201-6797
www.health.state.mn.us
Images adapted with permission from the
Washington State Department of Health.

Cover Your Cough and Sneeze!



Use a tissue to cover your mouth and nose.



If you don't have a tissue, sneeze or cough into your arm.



H1N1 Vaccination

- **Vaccine – goal of mid-October for vaccine to be available**
- Vaccine may arrive in small amounts over a period of time
- County/health care provider decision as to methods of distribution
 - Clinic (Medical) Based
 - School Based
 - Community Clinics

H1N1 Vaccination

- Priority Groups – Advisory Committee on Immunization Practices
 - pregnant women,
 - people who live with or care for children younger than 6 months of age,
 - healthcare and emergency medical services personnel,
 - persons between the ages of 6 months and 24 years old, and
 - people ages of 25 through 64 years of age who are at higher risk for because of chronic health disorders or compromised immune systems.

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We do not expect that there will be a shortage of 2009 H1N1 vaccine, but availability and demand can be unpredictable. There is some possibility that initially the vaccine will be available in limited quantities. In this setting, the committee recommended that the following groups receive the vaccine before others: pregnant women, people who live with or care for children younger than 6 months of age, health care and emergency medical services personnel with direct patient contact, children 6 months through 4 years of age, and children 5 through 18 years of age who have chronic medical conditions.

Once the priority group demand has been met, vaccination of those age 25-64 will occur.

What should I do if I get sick?

- **Stay home!**

- Exception: you need medical care, call provider first and tell them about your illness.
 - Anti-Virals (i.e. Tamiflu)

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If you live in areas where people have been identified with novel H1N1 flu and become ill with influenza-like symptoms, including fever, body aches, runny or stuffy nose, sore throat, nausea, or vomiting or diarrhea, you should stay home and avoid contact with other people. Staying at home means that you should not leave your home except to seek medical care.

This means avoiding normal activities, including work, school, travel, shopping, social events, and public gatherings

If you have severe illness or you are at high risk for flu complications, contact your health care provider or seek medical care. Your health care provider will determine whether flu testing or treatment is needed. CDC recommends the use of oseltamivir or zanamivir for the treatment of novel H1N1 flu virus. Antiviral drugs are prescription medicines (pills, liquid or an inhaled powder) that fight against the flu by keeping flu viruses from reproducing in your body. If you get sick, antiviral drugs can make you feel better faster.

If I have a family member at home who is sick with H1N1 flu, should I go to work?

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Company Policies

These employees should monitor their health every day, and take everyday precautions including washing their hands often with soap and water, especially after they cough or sneeze. Alcohol-based hand cleaners are also effective.* If they become ill, they should notify their supervisor and stay home. Employees who have an underlying medical condition or who are pregnant should call their health care provider for advice, because they might need to receive influenza antiviral drugs to prevent illness.

CDC H1N1 Flu | H1N1 Flu and You - Mozilla Firefox

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http://www.cdc.gov/h1n1flu/qa.htm

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H1N1 Flu

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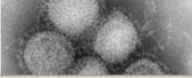
QUESTIONS & ANSWERS

2009 H1N1 Flu (Swine Flu) and You

August 5, 2009 5:00 PM ET

2009 H1N1 Flu

What is 2009 H1N1 (swine flu)?
 2009 H1N1 (referred to as "swine flu" early on) is a new influenza virus causing illness in people. This new virus was first detected in people in the United States in April 2009. This virus is spreading from person-to-person worldwide, probably in much the same way that regular seasonal influenza viruses spread. On June 11, 2009, the [World Health Organization](#) (WHO) signaled that a pandemic of 2009 H1N1 flu was underway.



Why is 2009 H1N1 virus sometimes called "swine flu"?
 This virus was originally referred to as "swine flu" because laboratory testing showed that many of the genes in this new virus were very similar to influenza viruses that normally occur in pigs (swine) in North America. But further study has

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 - Businesses & Employers
 - Deaf & Hard of Hearing

[H1N1 Flu > Info for Specific Groups](#)

H1N1 Flu (Swine Flu): Resources for Child Care and Early Childhood Programs

- Updated Guidance for the Fall Flu Season [Sep 4](#)



Get info on H1N1 flu & more
Text: Health
To: 87000
flu.gov

- Guidance on Helping Child Care & Early Childhood Programs Respond to Flu during 2009–2010 Flu Season [Sep 4](#)
- Technical Report for State & Local Health Officials & Child Care & Early Childhood Providers on CDC Guidance on Helping Child Care & Early Childhood Programs Respond to Flu during 2009–2010 Flu Season [Sep 4](#)

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