What should I use for hand cleaning?

Washing hands with soap and running water (for as long as it takes to sing the "Happy Birthday" song twice) will help protect against many germs. When soap and running water are not available, wipes or gels with alcohol in them can be used (the gels should be rubbed into your hands until they are dry).*

If your child is sick

What can I do if my child gets sick?

If your child is 5 years or older and otherwise healthy and gets flu-like symptoms, including a fever and/or cough, consult your doctor as needed and make sure your child gets plenty of rest and drinks enough fluids.

If your child is younger than 5, or of any age and has a medical condition like asthma, diabetes, or a neurologic problem and develops flu-like symptoms, including a fever and/or cough, call your doctor or get medical attention. This is because younger children and children who have chronic medical conditions (like asthma or diabetes) may be at higher risk of serious complications from influenza infection, including the new H1N1. Talk to your doctor early if you are worried about your child's illness.

What if my child seems very sick?

Even children who have always been healthy before or had the flu before can get a severe case of flu.

Call or take your child to a doctor right away if your child of any age has:

- 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
- Has other conditions (like heart or lung disease, diabetes, or asthma) and develops flu-like symptoms, including a fever and/or cough.

Can my child go to school, day care or camp if he or she is sick?

No. Your child should stay home to rest and to avoid giving the flu to other children.

When can my child go back to school after having the flu?

Keep your child home from school, day care or camp for at least 24 hours after their fever is gone. (Their fever should be gone without them having taken a fever-reducing medicine.) A fever is defined as 100°F or 37.8°C.

*Though the scientific evidence is not as extensive as that on hand washing and alcohol-based sanitizers, other hand sanitizers that do not contain alcohol may be useful for killing flu germs on hands in settings where alcohol-based products are prohibited.

For more information, visit
www.cdc.gov or www.flu.gov
or call
1-800-CDC-INFO

Seasonal and Novel H1N1 Flu:

A Guide for Parents

CDC

Flu information

What is the flu?

The flu (influenza) is an infection of the nose, throat, and lungs caused by influenza viruses. Flu viruses cause illness, hospital stays and deaths in the United States each year. There are many different flu viruses and sometimes a new flu virus emerges to make people sick.

What is novel H1N1 flu?

Novel H1N1 flu is a new and very different influenza virus that is spreading worldwide among people. This new virus was called "swine flu" at first because it has pieces of flu viruses found in pigs in the past. However, novel H1N1 virus has not been detected in U.S. pigs.

Influenza is unpredictable, but scientists believe that the new H1N1 virus will cause illness, hospital stays and deaths in the United States over the coming months. This flu season, the new virus may cause a lot more people to get sick than during a regular flu season. It also may cause more hospital stays and deaths than seasonal flu.

How serious is the flu?

The flu can be very serious, especially for younger children and children of any age who have one or more chronic medical conditions. These conditions include asthma or other lung problems, diabetes, weakened immune systems, kidney disease, heart problems and neurological and neuromuscular disorders. These conditions can result in more severe illness from influenza, including the new H1N1 virus.

How does flu spread?

Both novel H1N1 flu and seasonal flu are thought to spread mostly from person to person through the coughs and sneezes of people who are sick with influenza. People also may get sick by touching something with flu viruses on it and then touching their mouth or nose.

What are the symptoms of the flu?

Symptoms of seasonal flu and novel H1N1 flu include fever, cough, sore throat, runny or stuffy nose, body aches, headache, chills and fatigue. Some people also may have vomiting and diarrhea.

How long can a sick person spread the flu to others?

People infected with seasonal and novel H1N1 flu shed virus and may be able to infect others from 1 day before getting sick to 5 to 7 days after. This can be longer in some people, especially children and people with weakened immune systems and in people infected with novel H1N1 flu.

Protect your child

How can I protect my child against flu?

Get a seasonal flu vaccine for yourself and your child to protect against seasonal flu viruses.

Take everyday steps to prevent the spread of all flu viruses. This includes:

- Cover your nose and mouth with a tissue when you cough or sneeze. Throw the tissue in the trash after you use it.
- Wash your hands often with soap and water, especially after you cough or sneeze. If soap and water are not available, alcohol-based hand cleaners are also effective. *

- Avoid touching your eyes, nose and mouth. Germs spread this way.
- Teach your child to take these actions too.
- Try to keep your child from having close contact (about 6 feet) with sick people, including anyone in the household who is sick.
- Keep surfaces like bedside tables, surfaces in the bathroom, kitchen counters and toys for children clean by wiping them down with a household disinfectant according to directions on the product label.
- Throw away tissues and other disposable items used by sick persons in your household in the trash.

Is there a vaccine to protect my child from H1N1 flu?

A vaccine against novel H1N1 flu is being produced and will be available in the coming months as an option for the prevention of the new H1N1 flu. A vaccine against seasonal flu is available each fall and winter. More information about the new H1N1 flu vaccine and the seasonal flu vaccine is available on the CDC Web site.

Is there medicine to treat the flu?

Antiviral drugs can treat both seasonal flu and the new H1N1 flu. These drugs can make people feel better and get better sooner. But they need to be prescribed by a doctor and they work best when started during the first 2 days of illness. These drugs can be given to children. The priority use for these drugs is to treat people who are seriously ill or who have a medical condition that puts them at high risk of serious flu complications.

Update on School (K-12) Programs: Interim Guidance in Response to Human Infections with the Novel Influenza A (H_1N_1) Virus

Horace McCorvey, MHSc.
Epidemiologist
Health Service Region 4/5

Objective

To Describe the 2009 H1N1 Influenza Pandemic, its Impact, and the Implications for Public School Programs (K-12)

Response Goals

Public Health's Response Goals:

- reduce transmission and illness severity
- provide information to help health care providers, public health officials, and the public address the challenges posed by this emergency.

Agenda

- Background on H1N1
  - The virus formerly known as "swine flu"
- The 2009 Pandemic Chronology
- By The Numbers!
- Prevention
- Specific Recommendations for Schools
  - Response scenarios
- Questions & Answers

Background on Novel H1N1

Novel H1N1 Influenza Background

Novel H1N1 (referred to as swine flu early on) is a new influenza virus that is spreading from person-to-person.

- Early testing showed similarities between the new virus and other swine viruses
- Later testing revealed it to have 2 European and Asian swine genes, 1 avian gene, and 1 human gene
  - A "Quadruple" threat

Signs and Symptoms

Symptoms of novel H1N1 flu in people are similar to those associated with seasonal flu.

- Fever
- Cough
- Sore throat
- Runny or stuffy nose
- Body aches
- Headache
- Chills
- Fatigue

- Vomiting (25%) and diarrhea (25%) have been reported. (Higher rate than for seasonal flu.)

How Does Novel H1N1 Influenza Spread?

- This virus is thought to spread the same way seasonal flu spreads*
- Symptoms occur at 1-4 days after exposure
- Viral shedding can begin 1 day BEFORE symptoms appear
- Peak shedding occurs during first 3 days of illness and his associated with fever
- Subsides by 5-7 days
- Can be 10+ days in children

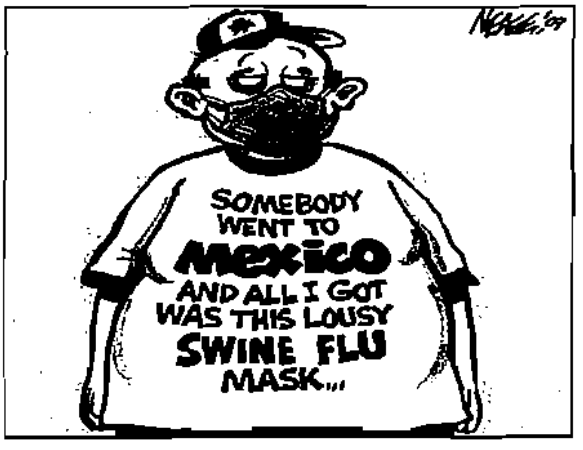
Chronology of the 2009 H1N1 Pandemic

Novel H1N1 Influenza Timeline

- Cases reported in Mexico in early March
- Outbreak in Veracruz province prompted Mexico to alert international health organizations on 12 April
- April 15, first U.S. case confirmed in San Diego and Imperial Counties, California and in Guadalupe County, Texas.
- 17 April, Mexico launches enhanced statewide surveillance

Novel H1N1 Influenza Timeline

- 27 April, CDC issued a travel advisory against non-essential travel to Mexico
  - WHO Raised Pandemic Alert to LEVEL 4
- 29 April WHO Raised Pandemic Alert Level to LEVEL 5
- 11 June, WHO declared an H1N1 Pandemic LEVEL 6
- By June 19 all 50 states and territories had reported cases of H1N1



How We Fared

- By the end of the first month, the healthcare system was overwhelmed
  - Laboratory capacity inadequate
  - Vaccine unavailable
  - Clinical picture incomplete
  - Communications mixed

By The Numbers!

Epidemiological Characteristics of the Pandemic (so far)

Descriptive Statistics of Novel Influenza A (H1N1) Cases Reported to CDC (U.S. Cases)

As of August 14, 2009

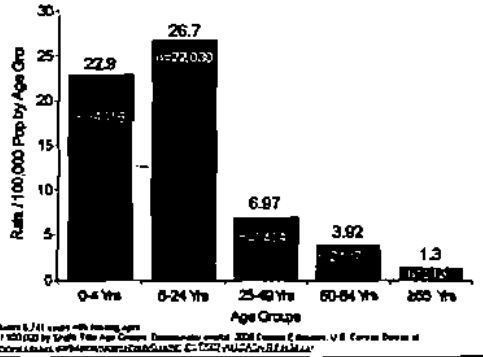
Hospitalizations	Deaths
7,511	477

- CDC models postulate that > 1,000,000 people infected between April and June
- July 24, 2009 CDC discontinued probable and confirmed case counts
- Case fatality ratio approximately 0.4%
  - *By comparison, the 1918 virus had 2.5% and 33% in some settings*

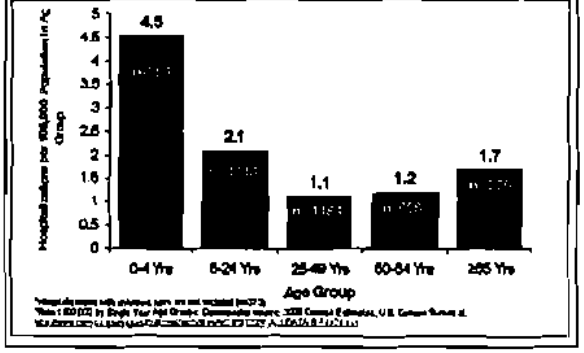
Who Was Impacted

- Most infections and hospitalizations occur in the 0-24 Age Group
- Most severe cases occur in people with underlying medical conditions
- Most deaths (65%) occur in people age 25-64*

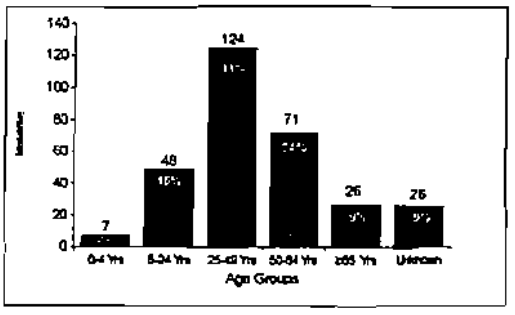
Pandemic H1N1 Cases Rate per 100,000 Population by Age Group
As of 09 JULY 2009



Pandemic H1N1 Hospitalizations per 100,000 Population by Age Group
As of 09 JULY 2009

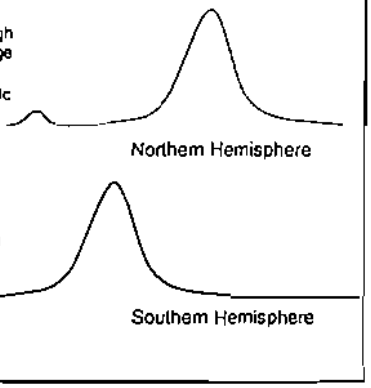


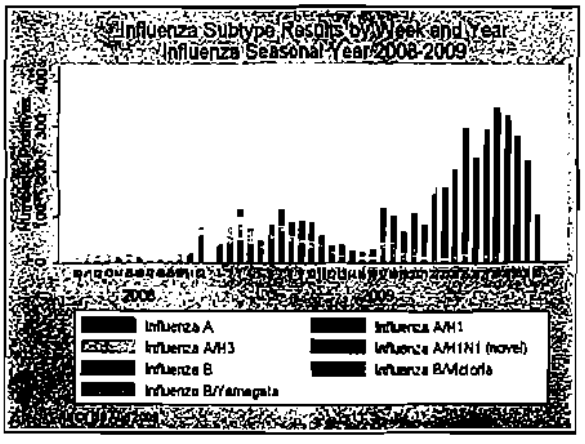
Pandemic H1N1 Deaths by Age Group



What's Next

- Disease persists through summer; expected surge in fall
- Severity of Fall epidemic difficult to predict
- Southern Hemisphere being monitored for subtypes, spread, and severity
- Vaccine being readied
- Surveillance continuing





What is the At Risk Population?

- Children younger than 5 years old
- People 0-25 years old
- Persons aged 65 years or older
- Pregnant women
- People who have asthma, chronic pulmonary, cardiovascular, hepatic, hematological, neu… neuromuscular, or metabolic disorders such…
- Adults and children who are immunosuppr…
- Residents of nursing homes and other ch… facilities.

TEXAS
Department of State Health Services

Prevention

Specific Response Guidance for Schools

CDC

CDC Guidance for State and Local Public Health Officials and School Administrators for School (K-12) Responses to Influenza during the 2009-2010 School Year

- CDC outlines two pandemic H1N1 response scenarios for the coming school year
  - Under conditions with similar severity as in spring 2009
  - Under conditions of increased severity compared with spring 2009

Closure vs. Dismisssl

School Closure: All students, staff and other personnel sent home.

School Dismissal: Only students sent home

Types of School Closures

*All decisions on closure should be made locally

- ***Selective School Dismissal***
  - Based on the population of an individual school
  - Designed to protect high-risk students and staff
- ***Reactive School Closure***
  - Excessive absenteeism threatens school functioning
- ***Preemptive School Dismissal***
  - Used to protect the community from a severe virus

Scenario 1
Under Conditions With Similar Severity As In Spring 2009

Response Measures

- Encourage sick students and staff to stay home
- Separation of ill students and staff
- Hand hygiene and respiratory etiquette
- Routine Cleaning
- Early treatment of high-risk students and staff
- Consideration of selective school dismissal

Encourage Sick Students and Staff To Stay Home

- Exclusion criteria should be set locally
- Ill people with ILI should stay home until 24 hours after fever has subsided
  - Communicability diminishes quickly after fever subsides
  - Does not include fever reducing medications
  - Virus shedding is highest during fever period but can last as long as 10 days after fever subsides
  - Regardless of use of antiviral medication
- Ill people should avoid contact with groups of people and people at high risk for serious infection

Separation of Ill Students and Staff

- Students and staff who appear to have flu-like illness should be sent to a room separate from others until they can be sent home. CDC recommends that they wear a surgical mask, if possible, and that those who care for ill students and staff wear protective gear such as a mask.

Hand Hygiene, Respiratory Etiquette and Routine Cleaning

We've Heard It Before: Cover, Clean, PROTECT!

Early Treatment of High-risk Students and Staff

- People at high risk for complications should speak with a medical provider as soon as possible
- Antiviral therapy most effective if administered within 48 hours of onset of symptoms
- Individuals taking antiviral drugs can still shed virus

School Closure Under Conditions with Similar Severity as in Spring 2009

- Selective school closure may be considered
- Schools should work closely with local and state public health officials when considering closing schools
- Schools should balance the risk of keeping students in school with the social disruption that closure may cause
- Selective school dismissal is not likely to have a significant effect on community-wide transmission

Scenario 2
Under Conditions Of Increased Severity Compared With Spring 2009

Response Measures

- Active Screening
- Encourage high-risk students and staff to stay home
- Encourage students with ill household members to stay home
- Increase the distance between people at school
- Extend the period that ill people should stay home
- Consider school dismissal

Active Screening

- Entry screen for flu symptoms in the last 24 hours
- Staff maintain "vigilant watch" during the day.
- During high severity scenarios, dismiss students who complain any two:
  - sore throat, cough, runny nose (new and unexplained by allergies)
- If tolerable, the sick student should wear a mask until sent home.

High Risk Students and Staff Remain Home

- If influenza severity increases, students and staff at high risk for influenza complications may consider staying home from school while influenza transmission is high in their community if they, or their families, are concerned about their ability to avoid influenza at school
- Schools should consult with school boards and legal counsel about policy accommodations that might be necessary to allow students and staff at high risk for influenza complications to stay home

Students with Ill Household Members Stay Home

- School-aged children who live with people with influenza-like illness should remain home for 5 days from the day the first household member got sick
  - Greatest risk of transmission to other household members is within the first 5 days
  - Greatest risk of household transmission is day one.

Increase Distance Between People at School

- Cancel classes that bring students together from multiple classrooms (in elementary school);
- Postpone class trips that bring students together from multiple classrooms or schools in large, densely-packed groups
- Hold classes outdoors
- Discourage use of school buses and public transit;
- Divide classes into smaller groups; move desks farther apart
- Move classes to larger spaces, when available, to allow more space between students

Consider Extending the Exclusion Period

- If influenza severity increases, individuals with influenza-like illness should remain at home for at least 7 days, even if symptoms resolve sooner. Individuals who are still sick 7 days after they become ill should continue to stay home until at least 24 hours after symptoms have resolved.

School Closure

- Selective, Reactive or Preemptive
- CDC Recommends closure for 5-7 days
  - Reactive dismissal may be of shorter duration than selective or preemptive
- Always consider the community impact of school closure

School Influenza Surveillance 2009-2010

- Online reporting tool available; see ESC VIII
- Report weekly by COB Tuesday
- Reporting takes approximately 7 minutes
- Surveillance is vital to early response

Questions?

References

Technical Report for State and Local Public Health Officials and School Administrators on CDC Guidance for School (K-12) Responses to Influenza during the 2009-2010 School Year
http://www.cdc.gov/h1n1flu/schools/technicalreport.htm#hand

H1N1 Flu (Swine Flu): Resources for Child Care Programs, Schools, Colleges, and Universities
http://www.cdc.gov/h1n1flu/schools/