



What you need to know about influenza!

AND HOW NOT TO BECOME
INFECTED

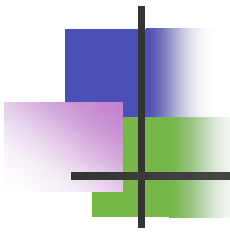


What is Influenza?

Influenza (also known as the flu) is a contagious respiratory illness that is caused by the Influenza virus.

It can cause mild to severe illness and at times can lead to death.

The influenza virus changes frequently and that is why we need to receive a “flu shot” every year.

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- Every year in the United States, on average:
 - 5% to 20% of the population gets the flu.
 - More than 200,000 people are hospitalized from influenza complications.
 - About 36,000 people die from the flu.



People at Risk

- People older than 50
- Young children
- Adults and children with asthma, diabetes, heart disease and other immune compromising diseases.



SYMPTOMS OF FLU

- Fever (usually high fever)
- Headache
- Extreme tiredness
- Dry cough
- Sore throat
- Runny and/or stuffy nose
- Muscle aches



Symptoms of a Cold

- Runny/stuffy nose
- Headache
- Muscle aches
- Cough and/ or Sneezing
- Fever (usually low grade)
- Sore Throat



Complications of Flu

Bacterial Pneumonia

Ear Infections

Sinus Infections

Dehydration

Worsening of chronic medical conditions,
such as CHF, asthma or diabetes.

How Flu Spreads



- From person to person through coughing or sneezing.
 - OR
- By touching something with the flu virus on it and then touching your mouth or nose.



How Flu Spreads

- Most people can infect others one to four days **before** symptoms develop and up to 5 days **after** becoming sick.
- **That means you can pass on the flu to someone else before you know you are sick, as well as while you are sick.**



How to Prevent the Flu

- **Number one best way to prevent the flu is to get vaccinated each year.**

With either:

- The flu shot – an inactivated or killed viruses.
- or
- Nasal spray flu vaccine – a vaccine made with live weakened viruses.



Flu Vaccine

- Each vaccine contains three influenza viruses- one A (H3N2), one A (H1N1) and one B virus.
- The viruses in the vaccine change each year based on international surveillance and scientists' estimations about which types and strains of viruses will circulate in the next year.



Flu Vaccine

- About 2 weeks after vaccination, antibodies that provide protection against influenza virus infection develop in the body.
- This protection generally lasts approximately 3-4 months.



Vaccine Effectiveness

- The ability of flu vaccine to protect a person depends on the age and health status of the person receiving the vaccine.
 - And
- The similarity or “match” between the virus strains in the vaccine and those in circulation.



Vaccine Side Effects

- The viruses in the flu shot are inactivated or (killed), so you can not get the flu from the flu shot.
- Soreness, redness or swelling at the site where the shot was given.
- Low grade fever
- Aches



Vaccine Side Effects

- If symptoms do occur they usually last 1-2 days. Serious side effects are rare but occasionally people do have allergic reaction to some component of the vaccine.



When to get Vaccinated

- Flu season can start as early as September and last here in ND through April and into May.
- If you have not received your flu shot the best time is **NOW!**



Who should get vaccinated?

- Children aged 6 months to their 19th birthday.
- Pregnant women
- People 50 years of age and older
- People of any age with chronic medical conditions.
- People who live in long term care facilities.



Who should get vaccinated?

- People who live with or care for those at high risk for complications from flu including:
 - Health Care Workers
 - Household contacts of persons at high risk for complications.
 - Household contacts or caregivers of children less than 6 months of age.



What else can we do to Reduce the chance of getting the Flu?

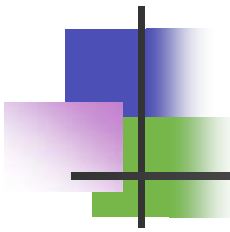
- **Wash your hands frequently.**
- Eat a balanced diet, get proper amount of sleep and exercise regularly.
- “First line of defense against the flu is a healthy body and a rested mind.”



What else can we do?

- 1. Avoid close contact.
- 2. Stay home when you are sick.
- 3. Cover your mouth and nose when coughing or sneezing.
- 4. **WASH YOUR HANDS OFTEN!**
- 5. Avoid touching your eyes, nose or mouth.

Who should not get vaccinated?



- People with an allergy to chicken eggs or the preservative in the vaccine.
- People who developed Guillain-Barre' syndrome within 6 weeks of getting an influenza vaccine.
- Children less than 6 months of age.
- People who are ill and/or have a fever should wait until symptoms are gone.



What else can we do?

- 6. Practice other good Health Habits
 - Drink plenty of fluids
 - Eat a nutritious diet that includes fruit and vegetables.
 - **WASH YOUR HANDS FREQUENTLY!**
 - Avoid Stress



Antiviral Drugs

- Antiviral drugs are an important second line of defense in the prevention and treatment of flu.
- Treatment with antiviral should begin within 48 hours of becoming ill.
- An antiviral drug can reduce the symptoms and shorten the length of time you are ill.



Antiviral Drugs

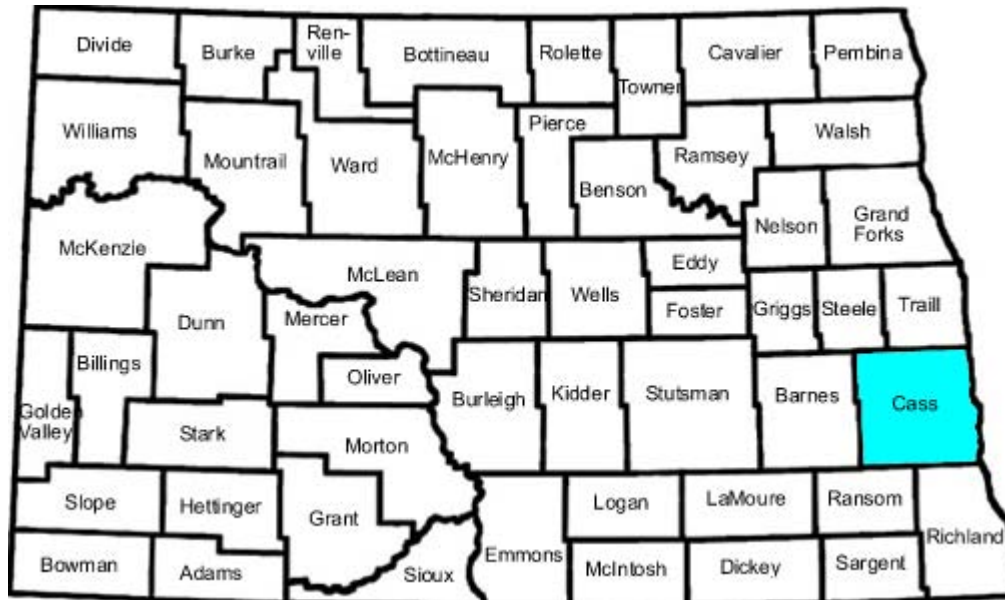
- When used for prevention they are 70% to 90% effective in preventing influenza infection.



- **2008-2009 Reported Influenza Activity in North Dakota**

2008-2009 Reported Influenza Activity in North Dakota

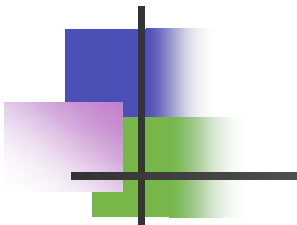
Last Updated



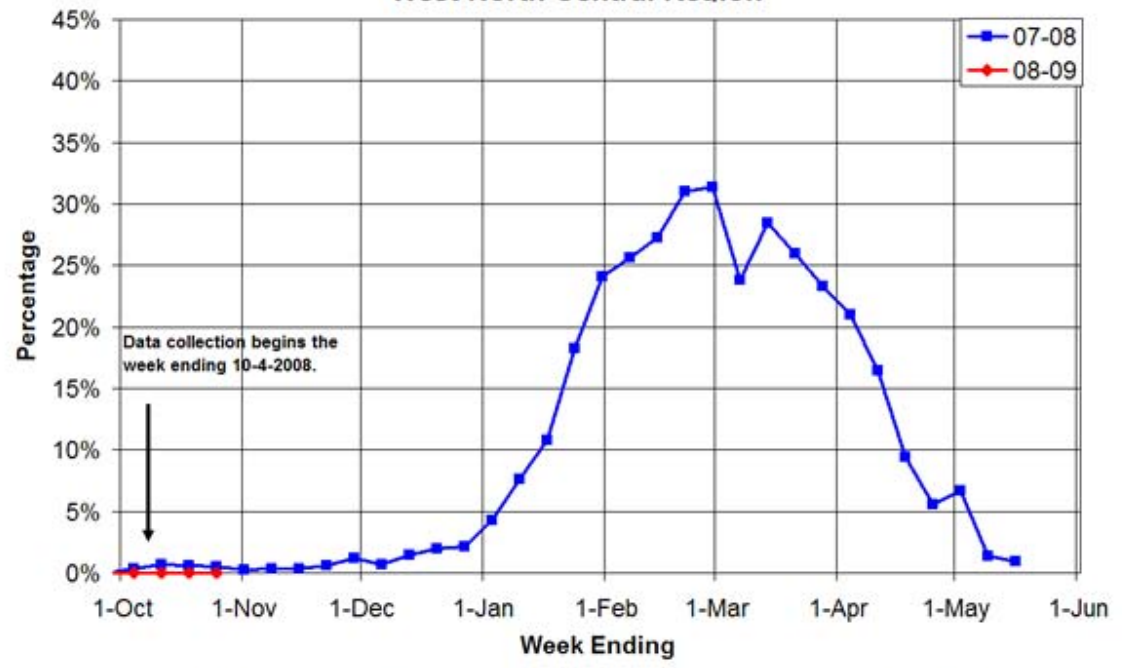
Legend

0 1 - 10 11 - 20 21 - 30 31 - 40 41 - 50 50+

Click on County to view data



Percent of Laboratory-Confirmed Positive Influenza Isolates* 2007-2008 and 2008-2009 Influenza Season West North Central Region



*Percent of laboratory confirmed influenza isolates sent to WHO laboratories received from participating physicians



PANDEMIC FLU



PANDEMIC FLU

In order for influenza "outbreaks" or epidemics to reach a pandemic status, the outbreak must be occurring worldwide.

The timing or the severity of the next Pandemic flu can not be predicted but history indicates that we may be due for an outbreak.



How do Seasonal Flu and Pandemic Flu Differ?

SEASONAL FLU

Occurs annually, in the winter.

Usually some immunity from previous exposure.

Healthy people usually not at risk for complications

- **PANDEMIC FLU**
- Occurs occasionally & may last year around.
- Little or no immunity

- Everyone may be at risk

How do Seasonal and Pandemic Flu Differ?



- SEASONAL FLU
 - Occurs annually.
 - Usually some immunity from previous exposure.
 - Healthy people usually not at risk.
 - Health system can meet public and patients needs.
- PANDEMIC FLU
 - Occurs occasionally
 - Little or no immunity
 - Everyone may be at risk
 - Public and patient needs may exceed the capacity of health systems to provide care.



How do Seasonal and Pandemic Flu Differ?

- Vaccine developed based on known virus strains.
- Adequate supplies of antivirals are available
- Average U.S. deaths approx. 36,000/yr.
- Vaccine probably not available in the early stages.
- Effective antivirals may be in limited supply.
- Number of deaths may be high.

How do SEASONAL and Pandemic Flu differ?

- Symptoms: fever, cough malaise, etc.
- Generally causes modest impact on society
- Manageable impact on domestic and world economy.
- Symptoms more severe and complications more frequent.
- Major impact on society, restrictions on travel and all gatherings.
- Potential for severe impact on domestic and world economy.



PANDEMIC FLU

- A pandemic can start when three conditions have been met:
- A new influenza virus emerges for which there is little or no immunity in the human population.
- It infects people and begins to cause serious illness.
- It spreads easily from person to person.



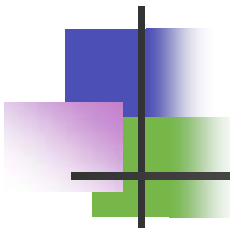
PANDEMIC FLU HISTORY

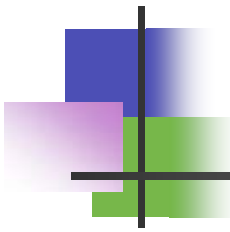
- The 20th century saw three pandemics of influenza:
- 1918 caused at least 5,100 deaths in ND, 500,000 deaths in US and up to 40 million deaths world wide.
- 1957 caused at least 70,000 US deaths and 1-2 million world wide.
- 1968-1969 caused about 34,000 US deaths and 700,000 deaths worldwide.



Pandemic Flu Challenges

- The virus will spread quickly around the globe without much warning.
- Most people will have little or no immunity to a pandemic virus.
- There will be an inadequate supply of vaccine because it takes approximately 6 months to develop and manufacture a vaccine for a specific flu virus.

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- Death rates are determined by four factors:
 1. Number of people who become infected.
 2. The virulence of the virus.
 3. The vulnerability of the affected population.
 4. The effectiveness of the preventive measures.



What you should do NOW and during a Pandemic.

1. Be informed
2. Practice healthy hygiene
3. Plan ahead



Pandemic Plan

- BE INFORMED
- Listen to local radio and TV stations for information and updates.
- ND Department of Health may enforce disease containment methods such as
 - Social Distancing
 - Community Containment
 - Isolation
 - Quarantine



Practice Healthy Hygiene

- Stay home from work, school and errands when you are sick.
- Wash your hands frequently for at least 20 seconds. You may also use a waterless hand sanitizer.
- Cover your mouth and nose when coughing or sneezing with tissues or the inside of your elbow.



Practice Healthy Hygiene

- Avoid close contact with people who are sick. If you are the caretaker, clean and sanitize common-use items, such as telephones, door knobs, table and counter surfaces.
- Avoid being near others when you are sick. If this is not possible, remain at least 3 feet from others if your are sick.



Plan Ahead – Build a Kit

- Water – Enough for one gallon per person per day for 2 weeks to a month.
- Food – Ready –to- eat foods: canned meat, fruits and vegetables, canned juices, soups, protein bars and comfort foods.
- Hygiene and Sanitation – Moist towelettes, toothpaste & toothbrush etc.



Plan Ahead

- If you have children or pets be sure you have ample supply of food for them.
- Have activities planned if you are house bound for a extended period of time.
- If electrical supply is interrupted you may need candles and flashlights, a portable radio with batteries and a manual can opener.



Build a Kit - Medication

- Aspirin, ibuprofen and/or Tylenol. (Do not give aspirin to children or teenagers.)
- Anti-diarrhea medicine, antacid and laxative.
- At least a 2 week supply or more of your prescription medications.



WHACK THE FLU

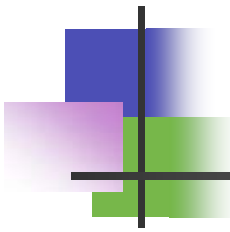
W: Wash your hands often.

H: Home is where you stay when you are sick.

A: Avoid touching your eyes, nose and mouth.

C: Cover your coughs and sneezes.

K: Keep your distance from people who are coughing or sneezing.

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- Additional information can be found at:
 - www.pandemicflu.gov
 - 1-800-232-4636
 - www.apic.org
 - www.ndpandemicflu.gov