



### Diseases Fact Sheet - Influenza

#### South Dakota Department of Health

**Office of Disease Prevention Services - 605-773-3737 -(1-800-592-1861 in South Dakota only)**

This material is provided for informational purposes only and is not a substitute for medical care. We are not able to answer personal medical questions. Please see your health care provider concerning appropriate care, treatment or other medical advice.

#### What is it?

Influenza, or flu, is a viral infection of the nose, throat, bronchial tubes and lungs. There are 2 main types of virus: A and B. Each type includes many different strains which tend to change each year.

#### When does influenza occur?

Influenza occurs most often in the winter months. Illnesses resembling influenza may occur in the summer months, but they are usually due to other viruses. Influenza surveillance is conducted by the South Dakota Department of Health and the Centers for Disease Control and Prevention each year from October through mid-May.

#### [Learn About the Flu in SD](#)

#### Who gets influenza?

Anyone can get influenza, but it is most serious in the elderly, in people with chronic underlying illnesses (such as cancer, emphysema or diabetes), or those with weak immune systems.

#### How is it spread?

Influenza is highly contagious and is easily transmitted through contact with droplets from the nose and throat of an infected person who is coughing and sneezing.

#### What are the symptoms of influenza?

Typical flu symptoms include headache, fever, chills, cough and body aches. Intestinal symptoms are uncommon. Although most people are ill for only a few days, some people have a much more serious illness, such as pneumonia, and may need to be hospitalized. Thousands of people die each year in the United States from the flu or related complications.

#### How soon after exposure do symptoms appear?

Symptoms can occur within 1 to 3 days after exposure to an infected person.

### How is influenza diagnosed?

Usually, a doctor will diagnose a case of the flu based on typical symptoms of fever, chills, headaches, cough and body aches. There are a variety of tests that can be used to detect influenza. Rapid (antigen detection) tests detect influenza but do not differentiate between types. Fluorescent antibody tests differentiate several different upper respiratory viruses as well as differentiate between the types of influenza (A and B). Viral culture is able to differentiate between strains of a specific virus.

### When and for how long is a person able to spread influenza?

The contagious period varies, but probably begins the day before symptoms appear and extends for a week.

### Does past infection with influenza make a person immune?

Generally, yes. However, the viruses that cause flu frequently change, so people who have been infected or given a flu shot in previous years may become infected with a new strain. Because of this, and because any immunity produced by the flu shot will possibly decrease in the year after vaccination (waning immunity), people in high-risk groups should be vaccinated every year.

### What are the high-risk groups?

The following groups are at increased risk for serious illness with the flu, or in contact with those at high risk and should receive vaccine:

- - Children aged 6–59 months;
  - Women who will be pregnant during the influenza season;
  - Persons aged >50 years;
  - Children and adolescents (aged 6 months–18 years) who are receiving long-term aspirin therapy and, therefore, might be at risk for experiencing Reye's syndrome after influenza infection;
  - Adults and children who have chronic disorders of the pulmonary or cardiovascular systems, including asthma (hypertension is not considered a high-risk condition);
  - Adults and children who have required regular medical follow-up or hospitalization during the preceding year because of chronic metabolic diseases (including diabetes mellitus), renal dysfunction, hemoglobinopathies or immunodeficiency (including immunodeficiency caused by medications or by human immunodeficiency virus);

- Adults and children who have any condition (e.g., cognitive dysfunction, spinal cord injuries, seizure disorders, or other neuromuscular disorders) that can compromise respiratory function or the handling of respiratory secretions, or that can increase the risk for aspiration;
- Residents of nursing homes and other chronic-care facilities that house persons of any age who have chronic medical conditions;
- Persons who live with or care for persons at high risk for influenza-related complications, including healthy household contacts and caregivers of children aged 0–59 months; and
- Health-care workers.

### What is the treatment for influenza?

Rest and liquids are usually adequate. However, prescription antiviral drugs can reduce the severity of influenza if started early (within 48 hours of onset). Oseltamivir or Zanamivir may be prescribed if treatment of chemoprophylaxis of influenza is indicated. Neither amantadine nor rimantadine should be used for treatment or chemoprophylaxis of influenza A because of widespread resistance. Because recommendations for treatment with these antiviral drugs vary with age, their use should be discussed with the patient's physician.

### What can be done to control or prevent influenza?

Coughs and sneezes should be covered or shielded to protect others. Wash your hands before touching your nose, mouth or eyes. Routine immunization against influenza is the most important control measure. Influenza vaccines may be available (flu shot) through your personal physician or local health department throughout the influenza season. When influenza type A occurs, amantadine and rimantadine may be prescribed for certain individuals to prevent influenza infection. A few studies have shown that the neuraminidase inhibitors are effective in preventing influenza, however, they are currently only licensed for the treatment of influenza. Because new influenza viruses often appear, the effectiveness of the vaccine sometimes varies from one year to the next. Nevertheless, studies have shown that even in years when new strains emerge, people in high-risk groups who obtain annual flu shots tend to have milder illness and are less likely to be hospitalized with complications due to influenza.

People who are allergic to egg protein or other vaccine components should not be vaccinated against influenza.

### Related Sites:

- [Centers for Disease Control and Prevention](#)
  - [Influenza Specimen Collection Guide](#)



## SOUTH DAKOTA PUBLIC HEALTH LABORATORY

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Environmental Health Testing | Forensic Chemistry | Medical Microbiology

- [South Dakota Influenza Surveillance Summaries](#) (reported weekly during the influenza season)
- [Mayo Clinic](#)
- [Specimen Collection - New England Journal of Medicine](#) (YouTube)
- [Nasopharyngeal Specimen Collection](#)