



What is influenza?

Influenza, also called “the flu”, is caused by a virus that mainly affects the nose, throat, air passages, and lungs. There are two main types of flu that affect humans, types A and B. Either or both types can circulate in the United States (U.S.) each year during the fall and winter months, which is why it is called “seasonal flu”. Each type of flu virus has different strains, which change from year to year. On average each year, seasonal flu infects between 5–20% of the U.S. population, and more than 200,000 hospitalizations and 36,000 deaths can be attributed to influenza-related complications each year.

What are the symptoms of flu?

Flu can range from a very mild to serious, sometimes fatal illness. Symptoms of the flu usually come on suddenly. Symptoms may include fever of 100°F to 103°F (possibly higher in children), cough, sore throat, runny or stuffy nose, muscle or body aches, headaches, and extreme tiredness. Less often nausea, vomiting, or diarrhea can also occur, especially in children, however these symptoms are usually not the main problem. The term “stomach flu” is sometimes used to describe a different type of stomach illness (with symptoms of diarrhea, nausea, and vomiting), but this is not the same as seasonal flu.

How is flu spread?

Flu is spread from person to person by respiratory (nose and throat) droplets released into the air by talking, coughing, sneezing, laughing, or singing. Touching an object that has flu virus on it, and then touching one’s own eyes, nose, or mouth can also spread flu. Most healthy adults can infect others from one day before symptoms are present and up to seven days after becoming sick. Some people, especially young children and people with weakened immune systems, might be able to infect others for an even longer time.

How soon after exposure do symptoms start? How long will symptoms last?

The time from being exposed to the flu to the first sign of symptoms can be from one to five days. Most people who have flu recover completely in one to two weeks, but sometimes the illness can cause other infections like pneumonia.

How do you know if you have flu?

The only way to know for sure is to visit your healthcare provider. They may do a rapid lab test for flu, or they may diagnose flu based on your symptoms with evidence that flu virus has been found in your surrounding area. A rapid test for flu may be performed in an outpatient clinic.

Is there any treatment for flu?

Most people who get the flu usually recover by drinking plenty of fluids and getting plenty of rest. Prescriptions (called flu antiviral drugs) are available through your healthcare provider to help prevent or reduce the severity of flu, but some only work against type A flu virus. Antiviral drugs work best when started within 48 hours of getting sick; however, starting them later can still be helpful, especially if the sick person has a high-risk health condition or is very sick from the flu. Antibiotics do not work against the flu virus.

Who should get vaccinated this year in Oklahoma?

- All persons aged 6 months and older are recommended to receive the flu vaccine.
- People in certain categories are strongly encouraged to receive the flu vaccine due to their high-risk for flu-related complications or exposure to others. These categories are persons who:
 - ◆ are ages 6 months — 4 years;
 - ◆ are ages 65 years and older;
 - ◆ have chronic disorders such as asthma, chronic lung disease, heart disease, kidney disorders, liver disorders, neurological and neurodevelopment conditions, blood disorders, endocrine disorders (such as diabetes mellitus), or metabolic disorders;

- People in certain categories are strongly encouraged to receive the flu vaccine due to their high-risk for flu-related complications or exposure to others. These categories are persons who:
 - ◆ have a weakened immune system due to disease or medication (such as people with HIV or AIDS, or cancer, or those on chronic steroids);
 - ◆ are or will be pregnant during the flu season;
 - ◆ are aged 6 months—18 years and receiving long-term aspirin therapy, and may be at risk for Reye Syndrome after flu infection;
 - ◆ are residents of nursing homes and other chronic-care facilities;
 - ◆ are American Indian/Alaskan Native;
 - ◆ are morbidly obese (Body Mass Index or BMI of 40 or greater);
 - ◆ are healthcare personnel;
 - ◆ are household contacts and caregivers to children younger than 5 years of age and/or adults 65 years and older, and especially contacts of children aged younger than 6 months; and
 - ◆ are household contacts and caregivers of persons with any of the above medical conditions that put them at higher risk for severe complications from flu.

How can people get a flu vaccination?

Flu vaccines are offered every flu season through healthcare providers, local county health departments, outpatient clinics, and many pharmacies. Call first to see if the vaccine is available and to find out what times the vaccine is being given.

When should people get the flu vaccination?

It is never “too late” to get the flu vaccine during the flu season. Flu starts spreading as early as the beginning of October, but flu illnesses are usually highest in January or February in Oklahoma and can continue to occur into mid-May. It is recommended to get the flu vaccine as soon as it’s available to you, rather than wait until flu is circulating in your community. Once a you are vaccinated against flu, it takes two weeks before you are fully protected from infection.

What are the types of flu vaccine available this year?

This 2019-2020 flu season, there are 2 formulations of the flu vaccine. The trivalent vaccine contains three strains of flu that are most likely to spread in the United States this flu season. These are A/Brisbane/02/2018 (H1N1)pdm09-like virus, A/Kansas/14/2017 (H3N2)-like, and B/Colorado/06/2017-like (Victoria lineage) virus. The quadrivalent vaccine contains B/Phuket/3073/2013-like (Yamagata lineage) virus in addition to the trivalent strains. There are six types of flu vaccine available*:

Trivalent—Protects against 3 strains of influenza:

1. Standard Dose, inactivated influenza vaccine (egg based with MF59 adjuvant): Adjuvant is an oil-in-water emulsion of squalene oil that helps create a stronger immune response to vaccination. This vaccine is licensed for persons 65 years of age and older.
2. High-Dose, inactivated influenza vaccine, trivalent only: This vaccine is licensed for persons 65 years of age and older.

Quadrivalent—Protects against 4 strains of influenza:

1. Standard dose, inactivated influenza vaccine: There are several different brand of flu shots of this type available. All are approved for persons 6 months of age and older.
2. Live attenuated influenza nasal spray, quadrivalent vaccine (LAIV4): The nasal spray is approved for use in non-pregnant individuals, 2 years through 49 years of age. The following persons are NOT recommended to use the nasal spray vaccine: children younger than 2 years, adults 50 years and older, pregnant women, people with a history of allergic reaction to flu vaccine, immunosuppressed persons, children 2-17 years on aspirin or salicylate-containing medications, children 2-4 years with history of asthma or wheezing in previous 12 months, people who have taken flu antivirals within previous 48 hours, people who care for immunocompromised persons.
3. Cell-culture based: This vaccine contains virus grown in cell culture and is approved for people 4 years of age and older. Cell-based vaccine was first approved in 2012 as a trivalent vaccine. This season it will be quadrivalent.
4. Recombinant influenza vaccine (RIV4): Recombinant hemagglutinin (HA) vaccine is indicated for persons 18 years and older. This vaccine can be given to someone with reported egg allergy.

What can be done to control or prevent flu?

We join the CDC's "Take 3" campaign to fight the flu. These three actions are:

1. **Take the time to get the flu vaccine.** The single best way to prevent the flu is to get a flu vaccine. Flu vaccination can reduce flu illnesses, doctors visits, and missed work and school due to flu, as well as prevent flu-related complications, such as hospitalization and death.
2. **Take everyday preventative actions to stop the spread of germs.** These include:
 - Covering your mouth and nose with a disposable tissue when sneezing or coughing, and disposing those used tissues immediately into trash containers;
 - Washing your hands often with soap and water, especially after coughing, sneezing, or using a tissue;
 - Using alcohol-based hand sanitizers in your hands are not visibly dirty;
 - Staying home if you have a fever and not returning to work or school until you are fever-free for 24 hours.
3. **Take antiviral flu medication if prescribed by your healthcare provider.** These medications can make your flu illness milder and shorten the time you are sick. They can also help prevent serious complications from flu. You are still contagious, so follow the advice above regarding staying home when sick.

***For more information about the 2019-2020 flu vaccine, see this document:**

- Centers for Disease Control and Prevention. Prevention and Control of Seasonal Influenza with Vaccines—Recommendations of the Advisory Committee on Immunization Practices—United States, 2019-20 Influenza Season, available at <https://www.cdc.gov/mmwr/volumes/68/rr/rr6803a1.htm>