

# 2017-2018 Seasonal Flu Facts

# 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 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 <u>strongly</u> encouraged to receive the flu vaccine due to their high-risk for flurelated 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 <u>strongly</u> encouraged to receive the flu vaccine due to their high-risk for flurelated 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 adults aged 65 years and older, 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 when 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 2017-2018 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 during this flu season. These are A/Michigan/45/2015 (H1N1)pdm09-like, A/Hong Kong/4801/2014 (H3N2)-like, and B/Brisbane/60/2008-like (Victoria lineage) virus. The quadrivalent vaccine contains B/Phuket/3073/2013-like (Yamgata lineage) virus in addition to the trivalent strains. There are seven types of flu vaccine available\*:

#### Trivalent—Protects against 3 strains of influenza:

- 1. <u>Standard dose, inactivated influenza vaccine,</u> which is the traditional inactivated seasonal flu vaccine. This is given as an injection into the muscle, and is recommended for people aged 6 months and older. This vaccine is approved for pregnant women.
- 2. <u>High-Dose, inactivated influenza vaccine, Trivalent only</u>, which is licensed only for persons of ages 65 years and older. This vaccine is also an injection into the muscle.
- 3. <u>MF59 adjuvanted influenza vaccine, Trivalent only</u>, 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 age 65 years and older. It is given in the same way as traditional inactivated seasonal flu vaccine.
- 4. <u>Recombinant influenza vaccine (RIV3), Trivalent only</u>, which is a recombinant hemagglutinin (HA) vaccine, is indicated for persons 18 years and older. It is given in the same way as traditional inactivated seasonal flu vaccine. This vaccine can be given to someone with a reported allergy to eggs.

# What are the types of flu vaccine available this year? (Continued)

#### Quadrivalent—Protects against 4 strains of influenza:

- 1. <u>Standard dose, inactivated influenza vaccine</u>. There are several different flu shots of this type available, and they are approved for people of different ages. Some are approved for use in people as young as 6 months of age.
- Intradermal, Inactivated influenza vaccine is indicated for persons aged 18—64 years. This vaccine is given by injection into the dermal layer of the skin, compared to the traditional flu shot which is injected into the muscle. This vaccine uses less antigen than the traditional flu shot, but produces a comparable immune response. This vaccine is administered using a 90% smaller needle than is used for traditional flu shots, which may be appealing to needle-averse adults. All intradermal vaccines will be quadrivalent this season.
- 3. <u>Cell-culture based, quadrivalent vaccine</u>. 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.

# NOTE: While there is a quadrivalent nasal spray vaccine, also known as live attenuated influenza vaccine (LAIV4), that is FDA approved for the U.S. market, ACIP and CDC do NOT recommend the use of the nasal spray vaccine during the 2017-2018 season because of concerns regarding low effectiveness against influenza A (H1N1)pdm09 in the United States during the 2013-14 and 2015-16 seasons.

#### 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 time to get the flu vaccine.** The single best way to prevent the flu is get a flu vaccine. Flu vaccination can reduce flu illnesses, doctor's 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 of 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 if your hands are not visibly soiled
  - 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 medications 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 2017-2018 flu vaccine, see these documents:

- Centers for Disease Control and Prevention. Prevention and Control of Seasonal Influenza with Vaccines— Recommendations of the Advisory Committee on Immunization Practices (ACIP), United States, 2017-18 Influenza Season., at <u>https://www.cdc.gov/mmwr/volumes/66/rr/rr6602a1.htm</u>
- Regulatory information pertinent to the two recently licensed products, Fluad & Flucelvax: http://www.fda.gov/BiologicsBloodVaccines/SafetyAvailability/VaccineSafety/ucm473989.htm
- Preliminary data reviewed by ACIP on effectiveness of LAIV4: <u>http://www.cdc.gov/vaccines/acip/meetings/</u> meetings-info.html
- Inactivated & Recombinant Influenza Vaccine (Vaccine Information Statement): <u>http://www.cdc.gov/vaccines/hcp/vis/vis-statements/flu.html</u>