The Flu:
A Guide For Parents

FLU INFORMATION

What is the flu?

Influenza (the flu) is an infection of the nose, throat, and lungs caused by influenza viruses. There are many different influenza viruses that are constantly changing. They cause illness, hospital stays and deaths in the United States each year.

The flu can be very dangerous for children. Each year about 20,000 children younger than 5 years old are hospitalized from flu complications, like pneumonia.

How serious is the flu?

Flu illness can vary from mild to severe. While the flu can be serious even in people who are otherwise healthy, it can be especially dangerous for young children and children of any age who have certain long term health conditions, including asthma (even mild or controlled), neurological and neurodevelopmental conditions, chronic lung disease, heart disease, blood disorders, endocrine disorders (such as diabetes), kidney, liver, and metabolic disorders, and weakened immune systems due to disease or medication. Children with these conditions and children who are receiving long-term aspirin therapy can have more severe illness from the flu.

How does the flu spread?

Most experts believe that flu viruses spread mainly by droplets made when people with the flu cough, sneeze or talk. These droplets can land in the mouths or noses of people who are nearby. Less often, a person might get the flu by touching something that has flu virus on it and then touching their own mouth, eyes or nose.

What are the symptoms of the flu?

Symptoms of the flu can include fever, cough, sore throat, runny or stuffy nose, body aches, headache, chills, fatigue and sometimes vomiting and diarrhea. Some people with the flu will not have a fever.

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

People with the flu may be able to infect others by shedding virus from 1 day before getting sick to 5 to 7 days after. However, children and people with weakened immune systems can shed virus for longer, and might be still contagious past 5 to 7 days of being sick, especially if they still have symptoms.

PROTECT YOUR CHILD

How can I protect my child against the flu?

To protect against the flu, the first and most important thing you can do is to get a flu vaccine for yourself and your child.

- Vaccination is recommended for everyone 6 months and older.
- It's especially important that young children and children with long term health conditions get vaccinated. (See list of conditions under "How Serious is the Flu?")
- Caregivers of children with health conditions or of children younger than 6 months old should get vaccinated. (Babies younger than 6 months are too young to be vaccinated themselves.)
- Another way to protect babies is to vaccinate pregnant women because research shows that this gives some protection to the baby both while the woman is pregnant and for a few months after the baby is born.

A new flu vaccine is made each year to protect against the three flu viruses that research indicates are most likely to cause illness during the next flu season. Flu vaccines are made using strict safety and production measures. Over the years, millions of flu vaccines have been given in the United States with a very good safety record.

U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

Is there a medicine to treat the flu?

Antiviral drugs can treat flu illness. They can make people feel better and get better sooner and may prevent serious flu complications, like pneumonia, for example, that can lead to hospitalization and even death. These drugs are different from antibiotics, but they also need to be prescribed by a doctor. They work best when started during the first 2 days of illness. It's very important that antiviral drugs be used early to treat the flu in people who are very sick (for example people who are in the hospital) or people who are at greater risk of having serious flu complications. Other people with flu illness may also benefit from taking antiviral drugs. These drugs can be given to children and pregnant women.

What are some of the other ways I can protect my child against the flu?

In addition to getting vaccinated, take – and encourage your child to take – everyday steps that can help prevent the spread of germs.

This includes:

- Cover coughs and sneezes with a tissue. Throw the tissue in the trash after you use it.
- Stay away from people who are sick.
- Wash hands often with soap and water. If soap and water are not available, use an alcohol-based hand rub.
- Avoid touching your eyes, nose and mouth. Germs spread this way.
- If someone in the household is sick, try to keep the sick person in a separate room from others in the household, if possible.
- 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 tissues and other disposable items used by sick persons in your household in the trash.

These everyday steps are a good way to reduce your chances of getting all sorts of illnesses, but a yearly flu vaccine is always the best way to specifically prevent the flu.

What should I use for hand washing?

Washing hands with soap and water (for as long as it takes to sing the "Happy Birthday" song twice) will help protect against many germs. If soap and water are not available, use an alcohol-based hand rub.

IF YOUR CHILD IS SICK

What can I do if my child gets sick?

Talk to your doctor early if you are worried about your child's illness.

If your child is 5 years and older and does not have other health problems 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 years (and especially younger than 2 years) or of any age with a long term health condition (like asthma, a neurological condition, or diabetes, for example) and develops flu-like symptoms, they are at risk for serious complications from the flu. Ask a doctor if your child should be examined.

What if my child seems *very* sick?

Even children who have always been healthy before or had the flu before can get very sick from the flu.

Call for emergency care or take your child to a doctor right away if your child of any age has any of the warning or emergency signs below:

- Fast breathing or trouble breathing
- Bluish or gray skin color
- Not drinking enough fluids (not going to the bathroom or making as much urine as they normally do)
- 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 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 or caregivers.

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. (Fever should be gone without the use of a fever-reducing medicine.) A fever is defined as 100°F (37.8°C) or higher.

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

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Influenza (Flu) Prevention and Control Recommendations for K—12 Settings

What can teachers and other school officials do to reduce the spread of influenza?

1. **Recognize the symptoms of flu.** The symptoms of flu are fever (greater than 100°F or 37.8°C), cough, sore throat, body aches, headache, chills and fatigue. Sometimes diarrhea or vomiting may occur; however, these symptoms are usually not the main problem.
2. **Prevent others from becoming sick.** Children with symptoms of flu (see #1) should be removed from the classroom as soon as possible. Send the child to the school nurse or designated school official. Keep sick children separate from others while waiting for someone to take them home.
3. **Contain ill persons.** Designate an area where ill children can stay while waiting to leave school. This area should be away from common rooms or areas where others could be exposed.
4. **Designate staff to watch ill persons** until they can be sent home. Limit the number of people involved. Designated staff should **not** be at high risk of flu. People at high risk for contracting flu include pregnant women, people who have weakened immune systems, people with chronic health conditions among others.
5. **Follow exclusion guidelines.** Inform parent/guardian that the child is to be excluded from school and extracurricular activities, such as sports activities, academic clubs, school dances, until at least 24 hours after their fever is gone. The sick child's fever must go away without using fever-reducing medications, even if the child is taking an antiviral medication.

What can you do to prevent or reduce the spread of flu in your school?

1. **Get the flu vaccine every year.** The single best way to protect against seasonal flu is for children and staff to get a seasonal influenza vaccine every year. Flu vaccination is recommended for all children aged 6 months and older.
2. **Wash your hands.** Wash your hands several times a day using soap and warm water for 15-20 seconds. Check restrooms regularly to ensure soap dispensers are full and paper towels are always available. Alcohol-based hand sanitizers are also effective.
3. **Use alcohol-based hand sanitizers.** Alcohol-based hand gels may be used in classrooms to minimize lesson disruption. Hand sanitizer with at least 60% alcohol is effective in killing germs on hands when they are not visibly soiled. Important times to practice good hand hygiene are after coughing, sneezing, or contact with infected surfaces (i.e., desks, doorknobs).
4. **Cover your mouth and nose** with a tissue when you cough or sneeze. Make sure tissues are available in all classrooms. Tissues should be thrown away immediately, and then followed by cleaning your hands. If you don't have a tissue, cough or sneeze into your elbow or shoulder, not into your hands.
5. **Avoid touching your eyes, nose, or mouth.** Germs are spread this way.
6. **Stay home when you are sick.** Any student, teacher, or staff member reporting flu-like symptoms should stay at home or be sent home until at least 24 hours after their fever is gone. The sick person's fever must go away without the use of fever-reducing medications, even if the individual is taking an antiviral medication.
7. **Clean surfaces frequently.** In the school, clean commonly used surfaces such as door handles, handrails, eating surfaces, desks, etc., frequently with detergent-based cleaners or EPA registered disinfectants that are normally used in the school setting. Special cleaning products are not needed. Use cleaning products according to the directions on the product label. For bleach solutions, mix 1/4 cup chlorine bleach with 1 gallon of cool water. Bleach solutions should be changed daily. Additionally, extensive cleaning of school settings by wiping down floors and walls is not necessary as this has not been demonstrated to decrease the spread of influenza.
8. **Remember the school bus.** Clean commonly handled interior surfaces (i.e., door handles, hand rails, etc.) between groups of students. Consider making tissues and alcohol-based hand gel available on buses since hand washing facilities are not available.
9. **Report high absentee rates to your local health department.** Your health department will work with you to help stop the spread of illness.

Oklahoma State Department of Health
Acute Disease Service
Public Health Fact Sheet

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 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;

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- 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 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. Standard dose, inactivated influenza vaccine, 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. High-Dose, inactivated influenza vaccine, Trivalent only, which is licensed only for persons of ages 65 years and older. This vaccine is also an injection into the muscle.
3. MF59 adjuvanted influenza vaccine, Trivalent only, 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. Recombinant influenza vaccine (RIV3), Trivalent only, 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.

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

Quadrivalent—Protects against 4 strains of influenza:

1. Standard dose, inactivated influenza vaccine. 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.
2. 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. Cell-culture based, quadrivalent vaccine. 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 https://www.cdc.gov/mmwr/volumes/66/rr/rr6602a1.htm
- 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: http://www.cdc.gov/vaccines/acip/meetings/meetings-info.html
- Inactivated & Recombinant Influenza Vaccine (Vaccine Information Statement): http://www.cdc.gov/vaccines/hcp/vis/vis-statements/flu.html

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Cold vs. Flu: Know the Difference

Influenza, also called “the flu”, and the common cold, are both respiratory illnesses, but they are caused by different viruses with different symptoms. Use this chart to learn the difference between them. The term “stomach flu” is used to describe an illness with symptoms of diarrhea, nausea, and vomiting, but the “stomach flu” is not the same thing as influenza.

Symptoms	**Common Cold**	**Flu**
● Appearance of Symptoms	Symptoms appear gradually	Symptoms appear suddenly—can appear within 3—6 hours
● Fever	Uncommon	Common—100 to 102°F or higher, lasting 3—4 days
● Chills	Uncommon	Common
● Headache	Uncommon	Common—can come on suddenly and be severe
● Muscle Aches and Pains	Uncommon or mild	Common—can be severe
● Feeling Tired and Weak	Sometimes—usually mild	Common—can be moderate to severe; can last for 2—3 weeks; extreme tiredness can occur suddenly
● Cough	Common—mild to moderate hacking	Common—can become severe and last for several weeks
● Stuffy Nose	Common	Sometimes
● Sneezing	Common	Sometimes
● Sore Throat	Common	Sometimes
● Chest Discomfort	Sometimes—can be mild to moderate	Common—can be severe
Treatment	● Antihistamines ● Decongestant ● Pain reliever/fever reducer ● Rest and plenty of water	● Antiviral medicines—see a doctor as soon as possible ● Antihistamines ● Decongestant ● Pain reliever/fever reducer ● Rest and plenty of water
Prevention	● Use good hand hygiene ● Avoid close contact with anyone who has a cold ● Cover your cough and sneezes ● Clean all surfaces touched by you and others often ● Stay home when sick	● Annual vaccination ● Use good hand hygiene ● Avoid close contact with anyone who has the flu ● Cover your cough and sneezes ● Clean all surfaces touched by you and others often ● Stay home when sick ● In certain situations, your doctor may prescribe antiviral medications to prevent you from getting the flu
Complications/ Severity	● Sinus congestion ● Middle ear infection ● Asthma ● Usually does not cause severe health problems	● Bronchitis ● Pneumonia—can be life threatening ● Sinus and ear infections ● Sepsis ● Secondary bacterial infections ● Hospitalization can occur

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