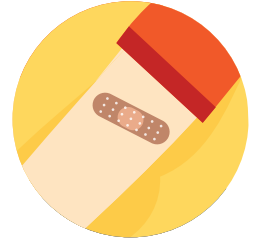




# The Flu:

## A Guide for Parents



Influenza (also known as flu) is a contagious respiratory illness caused by influenza viruses that infect the nose, throat and lungs. Flu is different from a cold, and usually comes on suddenly. Each year flu viruses cause millions of illnesses, hundreds of thousands of hospital stays and thousands or tens of thousands of deaths in the United States.

Flu can be very dangerous for children. CDC estimates that between 6,000 and 26,000 children younger than 5 years have been hospitalized each year in the United States because of influenza. The flu vaccine is safe and helps protect children from flu.

## What parents should know

### How serious is flu?

While flu illness can vary from mild to severe, children often need medical care because of flu. Children younger than 5 years and children of any age with certain long-term health problems are at high risk of flu complications like pneumonia, bronchitis, sinus and ear infections. Some health problems that are known to make children more vulnerable to flu include asthma, diabetes and disorders of the brain or nervous system.

### How does flu spread?

Flu viruses are thought to spread mainly by droplets made when someone with flu coughs, sneezes or talks. These droplets can land in the mouths or noses of people nearby. A person also can get flu by touching something that has flu virus on it and then touching their mouth, eyes, or nose.

### What are flu symptoms?

Flu symptoms can include fever, cough, sore throat, runny or stuffy nose, body aches, headache, chills, feeling tired and sometimes vomiting and diarrhea (more common in children than adults). Some people with the flu will not have a fever.



## Protect your child

### How can I protect my child from flu?

The first and best way to protect against flu is to get a yearly flu vaccine for yourself and your child.

- Flu vaccination is recommended for everyone 6 months and older every year. Flu shots and nasal spray flu vaccines are both options for vaccination.
- It's especially important that young children and children with certain long-term health problems get vaccinated.
- Caregivers of children at high risk of flu complications should get a flu vaccine. (Babies younger than 6 months are at high risk for serious flu complications, but too young to get a flu vaccine.)
- Pregnant women should get a flu vaccine to protect themselves and their baby from flu. Research shows that flu vaccination protects the baby from flu for several months after birth.
- Flu viruses are constantly changing and so flu vaccines are updated often to protect against the flu viruses that research indicates are most likely to cause illness during the upcoming flu season.

### Is flu vaccine safe?

Flu vaccines are made using strict safety and production measures. Millions of people have safely received flu vaccines for decades. Flu shots and nasal spray flu vaccines are both options for vaccination. Different types of flu vaccines are licensed for different ages. Each person should get one that is appropriate for their age. CDC and the American Academy of Pediatrics recommend an annual flu vaccine for all children 6 months and older.

### What are the benefits of getting a flu vaccine?

- **A flu vaccine can keep you and your child from getting sick.** When vaccine viruses and circulating viruses are matched, flu vaccination has been shown to reduce the risk of getting sick with flu by about half.
- **Flu vaccines can keep your child from being hospitalized from flu.** One recent study showed that flu vaccine reduced children's risk of flu-related pediatric intensive care unit admission by 74%.

- **Flu vaccine can prevent your child from dying from flu.**  
A study using data from recent flu seasons found that flu vaccine reduced the risk of flu-associated death by half among children with high risk medical conditions and by nearly two-thirds among children without medical conditions.
- **Flu vaccination also may make your illness milder if you do get sick.**
- **Getting yourself and your child vaccinated also can protect others** who may be more vulnerable to serious flu illness, like babies and young children, older people, and people with certain long-term health problems.

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

In addition to getting a flu vaccine, you and your child should take everyday actions to help prevent the spread of germs.

Stay away from people who are sick as much as possible to keep from getting sick yourself. If you or your child are sick, avoid others as much as possible to keep from infecting them. Also, remember to regularly cover your coughs and sneezes, wash your hands often, avoid touching your eyes, nose and mouth, and clean surfaces that may be contaminated with flu viruses. These everyday actions can help reduce your chances of getting sick and prevent the spread of germs to others if you are sick. However, a yearly flu vaccine is the best way to prevent flu illness.

## 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.**

Make sure your child gets plenty of rest and drinks enough fluids.

If your child is 5 years or older and does not have a long-term health problems and gets flu symptoms, including a fever and/or cough, consult your doctor as needed.

Children younger than 5 years of age – especially those younger than 2 years – and children with certain long-term health problems (including asthma, diabetes and disorders of the brain or nervous system), are at high risk of serious flu complications. Call your doctor or take your child to the doctor right away if they develop flu symptoms.

### What if my child seems very sick?

Even healthy children can get very sick from flu. If your child is experiencing the following emergency warning signs, you should go to the emergency room:

- Fast breathing or trouble breathing
- Bluish lips or face

- Ribs pulling in with each breath
- Chest pain
- Severe muscle pain (child refuses to walk)
- Dehydration (no urine for 8 hours, dry mouth, no tears when crying)
- Not alert or interacting when awake
- Seizures
- Fever above 104°F
- In children less than 12 weeks, any fever
- Fever or cough that improve but then return or worsen
- Worsening of chronic medical conditions



This list is not all inclusive. Please consult your medical provider for any other symptom that is severe or concerning.

### Is there a medicine to treat flu?

Yes. Antiviral drugs are prescription medicines that can be used to treat flu illness. They can shorten your illness and make it milder, and they can prevent serious complications that could result in a hospital stay. Antivirals work best when started during the first 2 days of illness. Antiviral drugs are recommended to treat flu in people who are very sick (for example, people who are in the hospital) or people who are at high risk of serious flu complications who get flu symptoms. Antivirals can be given to children and pregnant women.

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

People with flu may be able to infect others from 1 day before getting sick to up to 5 to 7 days after. Severely ill people or young children may be able to spread the flu longer, especially if they still have symptoms.

### 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 spreading flu to other children or caregivers.

### When can my child go back to school after having flu?

Keep your child home from school, day care, or camp for at least 24 hours after their fever is gone. (The fever should be gone without the use of a fever-reducing medicine.) A fever is defined as 100°F (37.8°C)\* or higher.

\*Many authorities use either 100 (37.8 degrees Celsius) or 100.4 F (38.0 degrees Celsius) as a cut-off for fever, but this number can vary depending on factors such as the method of measurement and the age of the person.



# What You Should Know About Influenza (Flu) Antiviral Drugs

FIGHT FLU



## Can flu illness be treated?

Yes. There are prescription medications called “antiviral drugs” that can be used to treat flu illness.

## What are antiviral drugs?

Influenza antiviral drugs are prescription medicines (pills, liquid, or an inhaled powder) that fight against flu in your body. Antiviral drugs are not sold over-the-counter. You can only get them if you have a prescription from a health care provider. Antiviral drugs are different from antibiotics, which fight against bacterial infections.

## What should I do if I think I have the flu?

If you get sick with flu, antiviral drugs are a treatment option. Check with your health care provider promptly if you are at high risk of serious flu complications (see the next page for full list of high risk factors) and you get flu symptoms. Flu symptoms can include fever, cough, sore throat, runny or stuffy nose, body aches, headache, chills, and fatigue. Your doctor may prescribe antiviral drugs to treat your flu illness.

## Should I still get a flu vaccine?

Yes. Antiviral drugs are not a substitute for getting a flu vaccine. While flu vaccine can vary in how well it works, a flu vaccine is the first and best way to prevent influenza. Antiviral drugs are a second line of defense to treat the flu if you get sick.

## What are the benefits of antiviral drugs?

Antiviral treatment works best when started within two days of getting symptoms. Antiviral drugs can lessen fever and other symptoms, and shorten the time you are sick by about one day. They also can prevent serious flu complications, like pneumonia.

For people at high risk of serious flu complications, treatment with an antiviral drug can mean the difference between having a milder illness versus a very serious illness that could result in a hospital stay. For adults hospitalized with flu illness, some studies have reported that early antiviral treatment can reduce the risk of death.

## What antiviral drugs are recommended this flu season?

There are four FDA-approved antiviral drugs recommended by CDC this season: oseltamivir phosphate (available as a generic version or under the trade name Tamiflu®), zanamivir (trade name Relenza®), peramivir (trade name Rapivab®), and baloxavir marboxil (trade name Xofluza®).

Oseltamivir is available as a pill or liquid and zanamivir is a powder that is inhaled. (Zanamivir is not recommended for people with breathing problems like asthma or COPD). Peramivir is given intravenously by a health care provider, and baloxavir is a pill given as a single dose by mouth.

## What are the possible side effects of antiviral drugs?

Side effects vary for each medication. For example, the most common side effects for oseltamivir are nausea and vomiting, zanamivir can cause bronchospasm, and peramivir can cause diarrhea.

Other less common side effects also have been reported. Your health care provider can give you more information about these drugs or you can check the [Food and Drug Administration \(FDA\) website](https://www.fda.gov) for specific information about antiviral drugs, including the manufacturer’s package insert.

For more information, visit:

[www.cdc.gov/flu](https://www.cdc.gov/flu)

or call 1-800-CDC-INFO



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

## When should antiviral drugs be taken for treatment?

Studies show that flu antiviral drugs work best for treatment when they are started within two days of getting sick. However, starting them later can still be helpful, especially if the sick person is at high risk of serious flu complications or is very sick from the flu. Follow instructions for taking these drugs.

## How long should antiviral drugs be taken?

To treat flu, oseltamivir and zanamivir are usually prescribed for 5 days, although people hospitalized with flu may need the medicine for longer than 5 days. Rapivab<sup>®</sup> is given intravenously for 15 to 30 minutes. Baloxavir is given in a single dose.

## Can children take antiviral drugs?

Yes, though this varies by medication. Oseltamivir is recommended by CDC for treatment of flu in children beginning from birth and the American Academy of Pediatrics (AAP) recommends oseltamivir for treatment of flu in children 2 weeks old or older. Zanamivir is recommended for early treatment of flu in people 7 years and older, though it is not recommended for use in children with underlying respiratory disease, including asthma and other chronic lung diseases. Peramivir is recommended for early treatment of flu in people 6 months and older. Baloxavir is recommended for early treatment of flu in children aged 5 to less than 12 years without chronic medical conditions and in all persons aged 12 years and older.

## Can pregnant and breastfeeding women take antiviral drugs?

Oral oseltamivir is recommended for treatment of pregnant women with flu because compared to other recommended antiviral medications, it has the most studies available to suggest that it is safe and beneficial during pregnancy. Baloxavir is not recommended for pregnant women or breastfeeding mothers.

## Who should take antiviral drugs?

It's very important that antiviral drugs be used early to treat people who are very sick with flu (for example, people who are in the hospital) and people who are sick with flu who are at high risk of serious flu complications, either because of their age or because they have a high risk medical condition. Other people also may be treated with antiviral drugs by their health care provider this season. Most people who are otherwise healthy and get the flu, however, do not need to be treated with antiviral drugs.

## The following is a list of all the health and age factors that are known to increase a person's risk of getting serious complications from the flu:

- Asthma
  - Blood disorders (such as sickle cell disease)
  - Chronic lung disease (such as chronic obstructive pulmonary disease [COPD] and cystic fibrosis)
  - Endocrine disorders (such as diabetes mellitus)
  - People who are obese with a body mass index [BMI] of 40 or higher
  - Heart disease (such as congenital heart disease, congestive heart failure and coronary artery disease)
  - Kidney disorders
  - Liver disorders
  - Metabolic disorders (such as inherited metabolic disorders and mitochondrial disorders)
  - Neurologic and neurodevelopment conditions
  - People younger than 19 years old and on long-term aspirin or salicylate-containing medications
  - People with a weakened immune system due to disease (such as people with HIV or AIDS, or some cancers
- such as leukemia) or medications (such as those receiving chemotherapy or radiation treatment for cancer, or persons with chronic conditions requiring chronic corticosteroids or other drugs that suppress the immune system)
- Other people at higher risk from the flu:
    - » Adults 65 years and older
    - » Children younger than 2 years old<sup>1</sup>
    - » Pregnant people and people up to 2 weeks after the end of pregnancy
    - » American Indian and Alaska Native persons
    - » People who live in nursing homes and other long-term-care facilities
- <sup>1</sup> Although all children younger than 5 years old are considered at high risk for serious flu complications, the highest risk is for those younger than 2 years old, with the highest hospitalization and death rates among infants younger than 6 months old.
- It is especially important that these people get a flu vaccine and seek medical treatment quickly if they get flu symptoms.**

For more information, visit: [www.cdc.gov/flu](http://www.cdc.gov/flu)

or call 1-800-CDC-INFO

# A Strong Defense Against Flu: Get Vaccinated!

FIGHT FLU



The best way to protect yourself and your loved ones against influenza (flu) is to get a flu vaccine every flu season. Flu is a contagious respiratory disease that can lead to serious illness, hospitalization, or even death. CDC recommends everyone six months and older get an annual flu vaccine.

## What are some key reasons to get a flu vaccine?

- Every year, flu vaccination prevents illnesses, medical visits, hospitalizations, and deaths.
- Flu vaccination also is an important preventive tool for people with chronic health conditions. For example flu vaccination has been associated with lower rates of some cardiac events among in people with heart disease.
- Vaccinating pregnant women helps protect them from flu illness and hospitalization, and also has been shown to help protect the baby from flu infection for several months after birth, before the baby can be vaccinated.
- A [2017](#) study showed that flu vaccine can be life-saving in children.
- While some people who get vaccinated still get sick, flu vaccination has been shown in several studies to reduce severity of illness.



## Why is it important to get a flu vaccine EVERY year?

- Flu viruses are constantly changing, so flu vaccines may be updated from one season to the next to protect against the viruses that research suggests will be common during the upcoming flu season.
- Your protection from a flu vaccine declines over time. Yearly vaccination is needed for the best protection.



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

## What kinds of flu vaccines are recommended?

There are several licensed and recommended flu vaccine options this season:

- [Standard dose flu shots made from virus grown in eggs.](#)
- [Shots made with adjuvant and high dose](#) for older adults.
- [Shots made with virus grown in cell culture instead of eggs.](#)
- Shots made using a [recombinant vaccine production technology](#) that does not require the use of a flu virus.
- [Live attenuated influenza vaccine \(LAIV, the nasal spray vaccine\)](#), which is made with live, weakened influenza viruses. It is an option for people 2 through 49 years of age who are not pregnant.



## Is the flu vaccine safe?

Flu vaccines have a good safety record. Hundreds of millions of Americans have safely received flu vaccines over the past 50 years. Extensive research supports the safety of seasonal flu vaccines. Each year, CDC works with the U.S. Food and Drug Administration (FDA) and other partners to ensure the highest safety standards for flu vaccines. More information about the safety of flu vaccines is available at [www.cdc.gov/flu/protect/vaccine/vaccinesafety.htm](http://www.cdc.gov/flu/protect/vaccine/vaccinesafety.htm).

## What are the side effects of flu vaccines?

**Flu shots:** Flu shots are made using killed flu viruses (for inactivated vaccines), or without flu virus at all (for the recombinant vaccine). So, you cannot get flu from a flu shot. Some minor side effects that may occur include soreness, redness and/or swelling where the shot was given, low grade fever, and aches.

**Nasal spray flu vaccines:** The viruses in nasal spray flu vaccines are weakened and do not cause the severe symptoms often associated with influenza illness. For adults, side effects from the nasal spray may include runny nose, headache, sore throat, and cough. For children, side effects may also include wheezing, vomiting, muscle aches, and fever.

If these problems occur, they are usually mild and go away on their own, but serious reactions are also possible. Almost all people who receive flu vaccine have no serious problems from it.

## When and Where to get vaccinated?

You should get a flu vaccine by the end of October. However, as long as flu viruses are circulating, vaccination should continue throughout flu season, even in January or later.

Flu vaccines are offered in many doctors' offices and clinics. Flu vaccine is available in many other locations, including health departments, pharmacies, urgent care clinics, health centers, and travel clinics. Vaccines may also be offered at your school, college health center, or workplace. Visit: [www.vaccinefinder.org](http://www.vaccinefinder.org) at to find a flu vaccination clinic near you.

---

For more information, visit: [www.cdc.gov/flu](http://www.cdc.gov/flu) or call **1-800-CDC-INFO**