Endocrine disorders (such as diabetes mellitus)
• Kidney disorders
• Liver disorders
• Metabolic disorders (such as inherited metabolic disorders and mitochondrial disorders)
• Weakened immune system due to disease or medication (such as people with HIV or AIDS, or cancer, or those on chronic steroids)
• People younger than 19 years of age who are receiving long-term aspirin therapy
• People who have extreme obesity (Body Mass Index, or BMI, of 40 or greater)

If you (or your child) are in one of the groups above and develop flu-like symptoms, consult a health care provider to get advice about seeking medical care. Also, it's possible for otherwise healthy people to develop severe illness, so any one concerned about their illness should consult their doctor.

There are “emergency warning signs” that should signal anyone to seek medical care urgently.

**Emergency Warning Signs In Children:**
- Fast breathing or trouble breathing
- Bluish skin color
- Not drinking enough fluids
- 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
- Fever with a rash

**Flu Symptoms can include**
- fever *
- cough
- sore throat
- runny or stuffy nose
- body aches
- headache
- chills
- fatigue
- sometimes diarrhea and vomiting

*It’s important to note that not everyone with flu will have a fever.

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

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**Are there medicines to treat infection with flu?**

Yes. Antiviral drugs are prescription medicines (pills, liquid or an inhaled powder) that fight against the flu in your body. While a flu vaccine is the first and most important step in preventing flu, antiviral drugs are a second line of defense to treat the flu if you get sick. Antiviral drugs are not sold over-the-counter; you must have a prescription to get them. Antiviral drugs are not a substitute for vaccination.

**How long should I stay home if I’m sick?**

CDC recommends that you stay home for at least 24 hours after your fever is gone except to get medical care or for other necessities. (Your fever should be gone without the use of a fever-reducing medicine.) Stay away from others as much as possible to keep from making others sick. Continue to cover coughs and sneezes and wash hands even after you return to work. It is important to know that even if you don’t have a fever, you may have flu and be contagious if you get flu symptoms.

Centers for Disease Control and Prevention
National Center for Immunization and Respiratory Diseases
Influenza (Flu)

Flu is a serious contagious disease that can lead to hospitalization and sometimes death.

How does flu spread?
Most experts think that flu viruses are spread mainly by droplets made when people with flu cough, sneeze or talk. These droplets can land in the mouths or noses of people who are nearby or possibly be inhaled into the lungs. A person might also get flu by touching a surface or object that has flu virus on it and then touching their own eyes, mouth or nose.

How long can a sick person spread flu to others?
People infected with flu shed virus and may be able to infect others from 1 day before getting sick to about 5-7 days after getting sick. This can be longer in some people, especially children and people with weakened immune systems. This means that you may be able to pass on the flu to someone else before you know you are sick, as well as while you are sick.

How severe is illness associated with flu?
Each flu season, different flu viruses spread and affect people differently based on their body's ability to fight infection. Even healthy children and adults can get very sick from the flu and spread it to friends, co-workers, and family. In the United States, millions of people have to visit the doctor because of flu and hundreds of thousands are hospitalized from flu complications each year.

While flu can make anyone sick, certain people are at greater risk for severe illness resulting in hospitalization or death. This includes older adults, young children, people with certain long-term health conditions such as asthma, diabetes, and heart disease and women who are pregnant. (See “What should I do if I get sick?” for the full list of high risk factors.)

What can I do to protect myself from getting sick from flu?
CDC recommends a three-step approach to fighting flu: vaccination, everyday preventive actions, and the correct use of antiviral drugs if your doctor recommends them.

Prevention

A flu vaccine is the first and most important step in protecting against flu viruses.
- While there are many different flu viruses, the flu vaccine protects against the viruses that research indicates will be most common.
- Flu vaccines protect against three or four viruses; an H1N1, an H3N2, and one or two influenza B viruses, depending on the vaccine.
- Everyone 6 months of age and older should get vaccinated against the flu each year.
- Vaccination of high-risk persons is especially important to decrease their risk of severe flu illness. Vaccination also is important for health care workers, and those who live with or care for high-risk people to keep from spreading flu to high-risk people.
- Children younger than 6 months are at high risk of serious flu illness, but are too young to be vaccinated. People who care for or live with them should be vaccinated to protect these babies.

Take everyday actions to help prevent the spread of germs that cause respiratory illnesses.
- Try to avoid close contact with sick people.
- If you are sick with flu-like illness, CDC recommends that you stay home for at least 24 hours after your fever is gone except to get medical care or for other necessities. Your fever should be gone without the use of a fever-reducing medicine.
- While sick, limit contact with others as much as possible to keep from infecting them.
- Cover your nose and mouth with a tissue when you cough or sneeze. Throw the tissue in the trash after you use it.
- Wash your 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.
- Clean and disinfect surfaces and objects that may be contaminated with germs like the flu.

Take flu antiviral drugs if your doctor prescribes them.
- If you get the flu, antiviral drugs can treat your illness. These drugs can make illness milder and shorten the time you are sick.
- Antiviral drugs work best when started in the first 2 days of symptoms to treat people who are very sick (such as those who are hospitalized) or people who are sick with flu symptoms and who are at increased risk of severe flu illness.

If You Get Sick

What should I do if I get sick?
If you become ill with influenza symptoms you should stay home and avoid contact with other people except to seek medical care. Most people are able to recover at home from flu without medical care.

However, some people are at greater risk of serious flu-related complications. They are:
- Children younger than 5, but especially children younger than 2 years old
- People 65 and older
- Pregnant women (and women up to two weeks postpartum)
- People who have:
  - Asthma
  - Neurological and neurodevelopmental conditions (including disorders of the brain, spinal cord, peripheral nerve, and muscle such as cerebral palsy, epilepsy [seizure disorders], stroke, intellectual disability [mental retardation], moderate to severe developmental delay, muscular dystrophy, or spinal cord injury).
  - Chronic lung disease (such as chronic obstructive pulmonary disease [COPD] and cystic fibrosis)
  - Heart disease (such as congenital heart disease, congestive heart failure and coronary artery disease)
  - Blood disorders (such as sickle cell disease)

- People who have:
  - Blood disorders (such as sickle cell disease)
  - Pregnancy
  - Immune system disorders
  - Congenital or acquired immunodeficiency syndrome
  - Congenital heart disease
  - Pulmonary disease (such as chronic obstructive pulmonary disease [COPD] or cystic fibrosis)
  - Diabetes (including gestational diabetes)
  - Muscular dystrophy, or spinal cord injury
  - Blood disorders (such as sickle cell disease)
  - Chronic lung disease (such as chronic obstructive pulmonary disease [COPD] and cystic fibrosis)
  - Heart disease (such as congenital heart disease, congestive heart failure and coronary artery disease)
  - Blood disorders (such as sickle cell disease)
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.
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
**1 Why get vaccinated?**

**Influenza vaccine** can prevent **influenza** (flu).

**Flu** is a contagious disease that spreads around the United States every year, usually between October and May. Anyone can get the flu, but it is more dangerous for some people. Infants and young children, people 65 years of age and older, pregnant women, and people with certain health conditions or a weakened immune system are at greatest risk of flu complications.

Pneumonia, bronchitis, sinus infections and ear infections are examples of flu-related complications. If you have a medical condition, such as heart disease, cancer or diabetes, flu can make it worse.

Flu can cause fever and chills, sore throat, muscle aches, fatigue, cough, headache, and runny or stuffy nose. Some people may have vomiting and diarrhea, though this is more common in children than adults.

Each year **thousands of people in the United States die from flu**, and many more are hospitalized. Flu vaccine prevents millions of illnesses and flu-related visits to the doctor each year.

**2 Influenza vaccine**

CDC recommends everyone 6 months of age and older get vaccinated every flu season. **Children 6 months through 8 years of age** may need 2 doses during a single flu season. **Everyone else** needs only 1 dose each flu season.

It takes about 2 weeks for protection to develop after vaccination.

There are many flu viruses, and they are always changing. Each year a new flu vaccine is made to protect against three or four viruses that are likely to cause disease in the upcoming flu season. Even when the vaccine doesn’t exactly match these viruses, it may still provide some protection.

**Influenza vaccine does not cause flu.**

Influenza vaccine may be given at the same time as other vaccines.

**3 Talk with your health care provider**

Tell your vaccine provider if the person getting the vaccine:

- **Has had an allergic reaction after a previous dose of influenza vaccine**, or has any severe, life-threatening allergies.
- **Has ever had Guillain-Barré Syndrome** (also called GBS).

In some cases, your health care provider may decide to postpone influenza vaccination to a future visit.

People with minor illnesses, such as a cold, may be vaccinated. People who are moderately or severely ill should usually wait until they recover before getting influenza vaccine.

Your health care provider can give you more information.
**4 Risks of a vaccine reaction**

- Soreness, redness, and swelling where shot is given, fever, muscle aches, and headache can happen after influenza vaccine.
- There may be a very small increased risk of Guillain-Barré Syndrome (GBS) after inactivated influenza vaccine (the flu shot).

Young children who get the flu shot along with pneumococcal vaccine (PCV13), and/or DTaP vaccine at the same time might be slightly more likely to have a seizure caused by fever. Tell your health care provider if a child who is getting flu vaccine has ever had a seizure.

People sometimes faint after medical procedures, including vaccination. Tell your provider if you feel dizzy or have vision changes or ringing in the ears.

As with any medicine, there is a very remote chance of a vaccine causing a severe allergic reaction, other serious injury, or death.

**5 What if there is a serious problem?**

An allergic reaction could occur after the vaccinated person leaves the clinic. If you see signs of a severe allergic reaction (hives, swelling of the face and throat, difficulty breathing, a fast heartbeat, dizziness, or weakness), call 9-1-1 and get the person to the nearest hospital.

For other signs that concern you, call your health care provider.

Adverse reactions should be reported to the Vaccine Adverse Event Reporting System (VAERS). Your health care provider will usually file this report, or you can do it yourself. Visit the VAERS website at [www.vaers.hhs.gov](http://www.vaers.hhs.gov) or call 1-800-822-7967. VAERS is only for reporting reactions, and VAERS staff do not give medical advice.

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**6 The National Vaccine Injury Compensation Program**

The National Vaccine Injury Compensation Program (VICP) is a federal program that was created to compensate people who may have been injured by certain vaccines. Visit the VICP website at [www.hrsa.gov/vaccinecompensation](http://www.hrsa.gov/vaccinecompensation) or call 1-800-338-2382 to learn about the program and about filing a claim. There is a time limit to file a claim for compensation.

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**7 How can I learn more?**

- Ask your healthcare provider.
- Call your local or state health department.
- Contact the Centers for Disease Control and Prevention (CDC):
  - Call 1-800-232-4636 (1-800-CDC-INFO) or
  - Visit CDC’s [www.cdc.gov/flu](http://www.cdc.gov/flu)