

Health Brief

Influenza



The more you know about health issues—and your own health in particular—the better you can take care of yourself. This *Health Brief* provides basic health information. To learn more about this topic, please consult your doctor or pharmacist.



Every year, we hear about “cold and flu season,” which lasts from October to May. But the flu, also known as influenza, can be much more serious than any cold. Not only are flu symptoms more severe, but also, flu can lead to other medical problems. As many as 200,000 people are hospitalized with complications from the flu in the United States each year, and 36,000 die as a result.¹ In addition to the risk of complications, flu causes children to miss school, parents to miss work, and everyone to miss out on their normal activities.

Flu is especially serious in people over age 65, young children, and those who have certain health conditions, but anyone can catch the flu. So it’s important to recognize flu symptoms and take steps to protect yourself, including getting a flu vaccination every year if you are eligible for one. The best time to get vaccinated against the flu is October or November.

Not “Just a Cold”: Recognizing Flu Symptoms

The flu is a highly contagious viral illness that spreads from person to person by coughing and sneezing. Symptoms may include fever, body aches, fatigue, and weakness. A feeling of extreme exhaustion is also common with flu, especially at the start of the illness. Both colds and flu can cause coughing, sneezing, stuffy nose, and sore throat. Flu symptoms tend to come on suddenly, in contrast with colds, which develop more gradually. Flu symptoms usually last three to seven days but the tiredness and cough can linger for weeks. A complete list of flu symptoms and how they compare to cold symptoms is shown in Table 1. Keep in mind that flu symptoms may be different or more severe for different people.

Complications of the Flu^{1,2,3,4}

Most people who have the flu make a full recovery and don’t have any lasting effects from it. But some develop complications—their other medical

problems get worse because of the flu or new medical problems develop. These are some of the complications that can result from the flu:

- Dehydration
- Pneumonia
- Reye’s syndrome (a disease that affects all major organs in the body, but primarily affects the brain and liver, causing vomiting, confusion, convulsions, and loss of consciousness)
- Worsening of asthma and other lung conditions
- Worsening of heart failure
- Seizures caused by high fevers
- Myositis, a muscle condition

These complications can become serious and even life threatening if not treated promptly. People who are at high risk for flu-related complications should contact their doctor if they suspect they might have the flu. The following groups are considered to be at high risk:

- Adults 65 years or older
- Children between 6 months and 23 months old
- Anyone over the age of 6 months who has diabetes; kidney, heart, or lung problems; or HIV/AIDS
- Anyone with a medical condition that makes breathing difficult
- Women who are pregnant or plan to become pregnant during the flu season
- Anyone who lives in a nursing home or long-term care facility^{1,2,4}



Table 1: Flu and Cold Symptoms^{1,2,3,4,5}

Symptoms	Flu	Cold
Fever	Usual; high (100°F to 102°F; occasionally higher, especially in young children); lasts 3 to 4 days	Rare
Headache	Common	Rare
General aches, pains	Usual; often severe	Slight
Fatigue, weakness	Usual; can last up to 2 to 3 weeks	Sometimes
Extreme exhaustion	Usual; at the beginning of the illness	Never
Stuffy nose	Sometimes	Common
Sneezing	Sometimes	Usual
Sore throat	Sometimes	Common
Chest discomfort, cough	Common; can become severe	Mild to moderate; hacking cough

Preventing the Flu: The Flu Vaccine^{1,2,4}

Types of Flu Vaccines

For most adults and children over the age of 6 months, the flu vaccine is the best way to prevent the flu. Vaccinations boost the body’s natural immunity, or ability to fight infections. There are two types of flu vaccines available:

- The inactivated vaccine is an injection (shot) given directly into a muscle. It can be used for adults and children 6 months of age and older, those at risk of a serious case of flu or flu-related complications, and healthcare workers.
- The live vaccine is given as a nasal spray (inhaled through the nose). It should only be used by healthy people ages 5 to 49.

Your doctor or pharmacist can advise you about which type of vaccine is right for you. The best time to get either type of flu vaccine is October or November, but getting vaccinated in December or later may still be helpful. Children younger than 9 years who are getting the vaccine for the first time should receive two doses at least one month apart.

The flu vaccine is not 100 percent effective. Some people will still catch the flu even after being vaccinated. This happens because the flu viruses that are “going around” change from one year to the next. Flu vaccines are changed every year as well but there are always a few flu viruses that don’t “match” the vaccine. If a person who received a vaccine does become sick with the flu, the symptoms are usually much milder and the chance of flu-related complications is lower.

The Flu Vaccine Is Not for Everyone

You should not receive either form of the flu vaccine if:

- You are allergic to eggs, as the viral material in flu vaccines is grown in eggs
- You are allergic to any component of the vaccine
- You have had a severe allergic reaction to the flu vaccine in the past, including difficulty breathing, wheezing, hives, weakness, rapid heartbeat, or dizziness
- You have ever had Guillain-Barré syndrome
- You have a cold or a fever

It is possible to have an allergic reaction to the flu vaccine even if you have been vaccinated in the past without any problems. Signs and symptoms of an allergic reaction include itching, flushing (turning red), swelling, or any skin rash; difficulty breathing, chest tightness, or wheezing; difficulty swallowing; and a fast heartbeat. Call a doctor right away if someone has a reaction after getting the flu shot.

Side Effects of the Flu Vaccine

You cannot catch the flu from a flu shot because the viral material in the vaccine is not live. The viruses in the nasal-spray vaccine are live but weakened and do not cause the severe symptoms associated with the flu.

Most people handle the flu vaccine very well. If side effects occur, they usually begin soon after the vaccine is given and last for one to two days. Side effects from the flu vaccine are shown in Table 2.

Table 2: Side Effects of Flu Vaccines^{1,2}

Symptom	Injection	Nasal Spray	
	Adults and children over 6 months	Children age 5 to 17	Adults age 18 to 49
Soreness, redness, or swelling where the shot was given	Yes	No	No
Mild fever	Yes	Yes	No
Aches	Yes	Yes	No
Headache	No	Yes	Yes
Muscle weakness	No	No	Yes
Tiredness	No	No	Yes
Nausea, vomiting, diarrhea	No	Yes	No
Runny nose, congestion, cough	No	Yes	Yes
Sore throat	No	No	Yes

Flu Vaccine Shortages

Shortages of the flu vaccine have been common during the last few years. During a vaccine shortage, the following people will be given first priority for receiving the flu vaccine:

- People who are at high risk for flu-related complications
- Anyone in close contact with people who are at high risk for complications, including family members, healthcare providers, and caregivers
- Adults age 50 and older
- People who live in nursing homes or live with someone who has HIV, cancer, or other chronic conditions^{1,2}

If you have questions about whether you are at risk for complications and could have first priority for receiving the flu vaccine, ask your doctor or pharmacist.

Treatment Options

The flu is always caused by a virus, so antibiotics don’t help. Antibiotics are only effective against bacteria. But there are steps you can take to feel better while you are recovering and help prevent spreading the flu to others.

- *Rest.* Stay home from work or school to rest and avoid spreading the virus to other people.
- *Drink plenty of fluids.* Water is best for preventing dehydration and loosening mucus (phlegm), making it easier to cough up. Avoid alcohol and drinks that contain caffeine, which is dehydrating.
- *Wash your hands frequently.* Wash with soap and water for at least 20 seconds, especially after coughing or sneezing. Cough and sneeze into tissues and dispose of them in a wastebasket after a single use. If tissues are not available, cough into your sleeve rather than covering your mouth with your hand. Then, wash your hands.
- *Consider using over-the-counter (OTC) medications.* These can help relieve headaches, body aches, fevers, and runny or stuffy noses. Always ask a doctor or pharmacist before taking any medications.
 - Medications like acetaminophen, ibuprofen, or naproxen help relieve body aches, sore throat, headache, and fevers.
 - Decongestants can help clear stuffy noses. These medications are available in a tablet or capsule, or as a nasal spray. They include pseudoephedrine, saline nasal spray, and phenylephrine. With the exception of saline nasal spray, decongestants can cause nervousness or sleeplessness. Certain decongestants should not be taken if you have high blood pressure. Check with your doctor or pharmacist before taking them.
 - Antihistamines may help with a runny nose, but they may also cause sleepiness. Examples of antihistamines are diphenhydramine (Benadryl®) or loratadine (Claritin®). Be aware that many OTC products contain a combination of antihistamine and decongestant medications. Choose the product that is appropriate for your symptoms.
 - Cough suppressants may help reduce cough and congestion. Some coughing is desirable because it helps keep your lungs clear. But when coughing interferes with sleep or daily activities, medication can help. Your doctor may recommend prescription cough medications when OTC products do not provide relief.
- Ask your doctor about prescription medications that may help prevent the flu or shorten the number of days you are sick if you do catch it. Examples of these medications are zanamivir (Relenza®), amantadine (Symmetrel®), and oseltamivir (Tamiflu®). These medications can only work if you start taking them within two days of experiencing the first flu symptoms.

Summary

It is important to recognize symptoms of the flu so you can take proper care of yourself and take steps to prevent the spread of the flu to others, including staying at home and washing your hands frequently. You can reduce the risk of catching the flu by getting vaccinated every year. The flu shot is an inactivated vaccine that is appropriate for adults and children 6 months of age and older. The nasal spray is a live vaccine that should only be used in healthy people between 5 and 49 years of age. In times of a vaccine shortage, people who are at high risk for developing serious complications from the flu, or are in close contact with people at high risk, should have first priority for receiving the flu vaccine. Certain people, including those who have had serious allergic reactions to components of the inactivated flu shot (such as egg allergy), or have had serious allergic reactions to the flu shot in the past, should not receive the flu shot. The best time to receive either flu vaccine (the shot or nasal spray) is in October or November. If you have any concerns about the flu vaccine, please ask your doctor or pharmacist.

Resources

Additional information can be obtained from the following organizations:

- **Centers for Disease Control and Prevention (CDC)**
800-232-4636
www.cdc.gov/flu
- **Immunization Action Coalition**
651-647-9009
www.immunize.org/influenza

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