

Influenza—“The Flu”

2018–2019 Season Update

Prevention and Treatment of Influenza Infection

What is “the flu”?

The flu is a type of germ (called a virus) that you breathe in. It can get into the nose, throat, and lungs. Flu is also called influenza (in-floo- EN-zuh). The flu illness is caused by influenza viruses. There are many different strains (types) of this virus. All strains are named starting with an A or B type (such as Influenza A H1N1 or Influenza A H3N2). This season there are vaccines available that include four strains of flu virus (quadrivalent) as well as vaccines that include only three strains (trivalent). The strains that are included are the ones likely to appear this season and will give you protection. Flu viruses are constantly changing, so it is not unusual for new flu strains to appear and result in the flu even though you may have gotten the vaccine. Despite this, it is important to get a new flu vaccine every year.

How do I know if I have the flu?

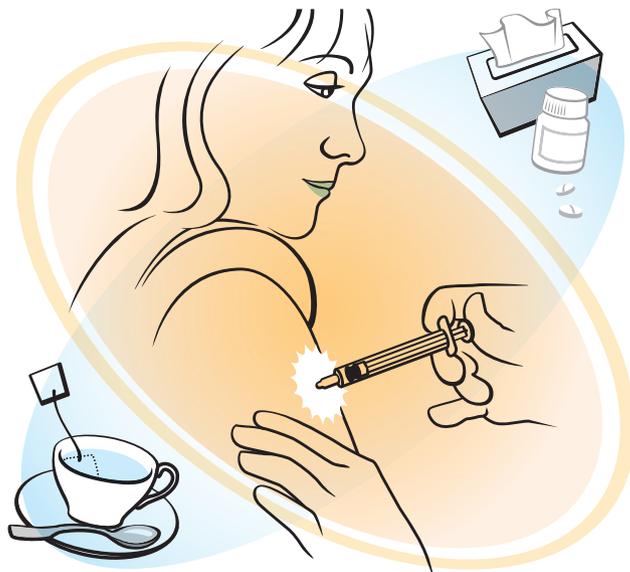
The flu usually starts suddenly and may include the following symptoms:

- fever (usually high)
- chills
- muscle aches
- weakness
- sore throat
- runny or stuffy nose
- headache
- red or itchy eyes
- dry cough
- tiredness (can be extreme)
- diarrhea (especially children)

What is the flu vaccine?

The flu vaccine can protect you against some types of flu virus. These vaccines are usually available by September and are usually given until at least March or April, when the typical flu season ends. It takes about 2 weeks after vaccination for antibodies to form that can help protect you. There are four ways you can get the flu vaccine this season:

- The flu “shot” is usually given in the **muscle** of the arm. It is given to children 6 months and older and adults. It cannot make you sick with the flu.



- The flu “micro-shot” is given under the **skin** of the arm (intra-dermal). It can be given to adults between the ages of 18 and 64 years. It cannot make you sick with the flu.
- One brand of trivalent flu vaccine can be given with a jet injector which uses a high pressure jet of fluid to penetrate the skin rather than a needle. It is approved only for people 18 to 64 years of age.
- An updated flu nasal spray vaccine (brand FLUMIST®) is being offered this season for people ages 2-49 years of age. The nasal-spray vaccine uses live attenuated virus rather than killed virus but should not cause active infection. However, it is not advised for people with lung disease, pregnant or nursing, or have other chronic health or immune problems. Ask your healthcare provider if you are able to take the nasal spray vaccine. The flu shot is still advised as the first choice for your yearly vaccine.

Children between the ages of 6 months and 8 years who are getting a flu vaccine for the first time need to get 2 doses, at least 4 weeks apart for full protection. The first dose should be given as soon as possible after the vaccine becomes available. Children in this age group who have only gotten 1 dose in the past, will also need 2 doses this season. Check with your primary care provider to see how many doses your child needs.

If you are allergic to eggs, speak to your healthcare provider before getting a flu vaccine. You may be able to safely take the standard vaccine or an egg-free vaccine. You should get your vaccine in a healthcare facility that can treat you if you have an allergic reaction.

Who should receive a flu vaccine?

- All adults and children 6 months of age and older

- People who are at risk of getting a severe flu illness include:
 - ◆ People over 50 years of age (**a higher strength version of the vaccine is recommended for people 65 years and older**)
 - ◆ Pregnant women and those planning pregnancy during the flu season
 - ◆ Young children
- Caregivers of infants less than 6 months
- Adults and children with the following:
 - ◆ Chronic lung disease (including emphysema, COPD and asthma)
 - ◆ Chronic heart disease (except high blood pressure)
 - ◆ Chronic metabolic diseases (including diabetes)
 - ◆ Kidney disease
 - ◆ Hepatic (liver) disease
 - ◆ Blood disorders (including sickle cell anemia)
 - ◆ Those with weakened immune systems such as those with HIV/AIDS or those who have low immunity from chronic steroids, chemotherapy or radiation therapy
 - ◆ Children and teenagers who take daily aspirin therapy
 - ◆ Caregivers who live with or care for those at high risk for serious complications from the flu
 - ◆ People who are very obese with body mass index of 40 or higher
- Most healthcare providers are required to get the flu vaccine

Note: this list only provides examples of conditions for which the flu vaccine is recommended. Your healthcare provider may want you to have a flu shot for other conditions.

What can I do to prevent the flu?

- Getting a yearly influenza (“flu”) vaccine is still the best way to protect you and your family from influenza.
- Wash your hands often and well. Use soap and water or an alcohol-based hand cleaner.
- Avoid being near people who are sick.
- Eat a healthy diet.
- Keep good control of medical problems, such as asthma.
- Don’t smoke and avoid being around any tobacco smoke.
- Cover your nose and mouth with a tissue when you sneeze or cough, and throw away the tissue afterward.

What if I have the flu?

- The flu can be very serious and even deadly, particularly if you have a high risk condition. Do not wait to call your healthcare provider if you think you may have the flu. Ask your healthcare provider about prescription medicines that can help your flu symptoms. These medicines have to be started soon after the flu starts in order to help.
- Treat signs of flu with medicines that relieve pain and fever such as acetaminophen (like Tylenol®) or ibuprofen (like Motrin® and Advil®). Never give a child aspirin without first speaking to your healthcare provider.
- Rest as much as possible.
- Drink plenty of liquids.

- Avoid touching your eyes, nose or mouth to prevent spreading germs.
- Stay home from work or school to keep from giving others the flu.
- Seek medical care immediately if you experience any of the following signs:
 - ◆ difficulty breathing or shortness of breath
 - ◆ pain/pressure in the chest or abdomen
 - ◆ sudden dizziness
 - ◆ confusion
 - ◆ severe vomiting that does not go away

Authors: Marianna Sockrider, MD, DrPH; Suzanne Lareau, RN, MS; Lynn Reinke, ARNP, PhD.

Reviewer: Hrishikesh S. Kulkarni, MD; Kevin Wilson, MD

Source: *Prevention and Control of Seasonal Influenza with Vaccines Recommendations of the Advisory Committee on Immunization Practices — United States, 2018-2019 Influenza Season* <https://www.cdc.gov/vaccines/hcp/acip-recs/vacc-specific/flu.html>

Resources:

American Thoracic Society

Disposable Respirator:

<http://www.thoracic.org/patients/patient-resources/resources/disposable-respirators.pdf>

National Foundation for Infectious Diseases

<http://www.nfid.org/>

U.S. Centers for Disease Control and Prevention

www.cdc.gov/flu

American Academy of Pediatrics

<http://www.healthychildren.org>

Rx What to do...

- ✓ If you need a flu vaccine, get it as soon as possible. It is best to get by October. If you are delayed, there is still value to get it anytime during the active flu season.
- ✓ Wash your hands often and well with soap and water or an alcohol-based hand cleaner.
- ✓ Keep chronic diseases like asthma under control.
- ✓ Keep your body healthy with diet, exercise and don't smoke!
- ✓ Avoid contact with anyone known to have a fever or symptoms of the flu.
- ✓ Cover your nose and mouth when you cough or sneeze.
- ✓ If you are having a fever and symptoms of the flu, ask your healthcare provider right away if you need to be treated with an antiviral medicine. Get immediate medical attention if you are having severe symptoms.

Healthcare Provider's Contact Number:

This information is a public service of the American Thoracic Society. The content is for educational purposes only. It should not be used as a substitute for the medical advice of one's healthcare provider.

