

Influenza (the flu)

Questions & Answers

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The Disease of Influenza (the flu)

What is influenza (the flu)?

Influenza, commonly called "the flu," is caused by the influenza virus, which infects the respiratory tract (nose, throat, lungs). The flu usually spreads from person to person when an infected person coughs, sneezes, or talks and the virus is sent into the air. Unlike many other viral respiratory infections, such as the common cold, the flu causes severe illness and life-threatening complications in many people.

What are the symptoms of the flu?

Influenza is a respiratory illness. Symptoms of flu include fever, headache, extreme tiredness, dry cough, sore throat, runny or stuffy nose, and muscle aches. Children can have additional gastrointestinal symptoms, such as nausea, vomiting, and diarrhea, but these symptoms are uncommon in adults. Although the term "stomach flu" is sometimes used to describe vomiting, nausea, or diarrhea, these illnesses are caused by certain other viruses, bacteria, or possibly parasites, and are rarely related to influenza.

Does the flu have complications?

Yes. Some of the complications caused by flu include bacterial pneumonia, dehydration, and worsening of chronic medical conditions, such as congestive heart failure, asthma, or diabetes. Children may get sinus problems and ear infections as complications from the flu. Those aged 65 years and older and persons of any age with chronic medical conditions are at highest risk for serious complications of flu.

How do I find out if I have the flu?

It is very difficult to distinguish the flu from other viral or bacterial causes of respiratory illnesses on the basis of symptoms alone. A test can confirm that an illness is influenza if the patient is tested within the first two to three days after symptoms begin. In addition, a doctor's examination may be needed to determine whether a person has another infection that is a complication of influenza.

How soon will I get sick if I am exposed to the flu?

The time from when a person is exposed to flu virus to when symptoms begin is about one to four days, with an average of about two days.

How long is a person with flu virus contagious?

The period when an infected person is contagious depends on the age of the person. Adults may be contagious from one day prior to becoming sick and for three to seven days after they first develop symptoms. Some children may be contagious for longer than a week.

Preventing and Treating the Flu

What can I do to protect myself against the flu?

By far, the single best way to prevent the flu is for individuals, especially persons at high risk for serious complications from the flu, to get a flu shot each fall.

Who should get a flu shot?

The most important groups of persons who should get flu shots are those who are at highest risk for developing serious complications from the flu.

Can antiviral drugs cure the flu?

Not exactly. When started within the first two days of illness, they can reduce the duration of the disease but cannot cure it outright.

Four different antiviral drugs (amantadine, rimantadine, zanamivir, and oseltamivir) have been approved for treating the flu. All four drugs can reduce the duration of flu by about one day if taken within 2 days of when symptoms begin. The four drugs differ in terms of side effects. In some patients, amantadine (Symmetrel®, others) can cause symptoms such as nervousness, difficulty concentrating, or lightheadedness. Rimantadine (Flumadine®) can also cause similar types of side effects, but less often. Caution is advised if zanamivir (Relenza®) is used by people who have asthma or chronic obstructive pulmonary disease, because the airways of these people may suddenly grow smaller after using zanamivir, leading to difficulty breathing. Oseltamivir (Tamiflu®) can cause nausea and vomiting in some people.

All of these drugs must be prescribed by a doctor. These drugs are effective against flu viruses, but they are not effective against other viruses or bacteria that can cause symptoms similar to influenza. These drugs are not effective for treating bacterial infections that can occur as complications of influenza.

Can antiviral medications prevent the flu?

Three of the antiviral drugs (amantadine, rimantadine, and oseltamivir) have been approved for prevention of the flu. These drugs are not, however, a substitute for influenza vaccination. All of these drugs are prescription drugs, and a doctor should be consulted before the drugs are used for preventing the flu.

For More Information About Influenza Antiviral Drugs:

"Prevention and Control of Influenza, Recommendations of the Advisory Committee on Immunization Practices (ACIP)," *Morbidity and Mortality Weekly Report (MMWR)*, April 12, 2002/ Vol. 51 / No. RR-3.

When You Are Most Likely to Get the Flu

When is the flu season in the United States?

In the United States, the peak of flu season can occur anywhere from late December through March. The health impact (infections and deaths) of a flu season varies from year to year. CDC monitors circulating flu viruses and their related disease activity and provides influenza reports each week from October through May.

How many people get sick or die from the flu every year?

Each flu season is unique, but it is estimated that approximately 10% to 20% of U.S. residents get the flu, and an average of 114,000 persons are hospitalized for flu-related complications. About 36,000 Americans die on average per year from the complications of flu.

Do other respiratory viruses circulate during the flu season?

In addition to the flu virus, several other respiratory viruses also can circulate during the flu season and can cause symptoms and illness similar to those seen with flu infection. These non-flu viruses include rhinovirus (one cause of the "common cold") and **respiratory syncytial virus** (RSV), which is the most common cause of severe respiratory illness in young children as well as a leading cause of death from respiratory illness in those aged 65 years and older.

What are some of the myths about flu?

There are several common myths about flu, including:

Myth #1: Influenza is merely a nuisance.	Wrong. Influenza is a major cause of illness and death in the United States and leads to an average of about 36,000 deaths and 114,000 hospitalizations per year.
Myth #2: Flu shots cause the flu.	Wrong. The licensed injectable flu vaccine used in the United States, which is made from inactivated or killed flu viruses, cannot cause the flu and does not cause flu illness.
Myth #3: Flu vaccine doesn't work.	Not exactly. When the viruses in the vaccine and circulating viruses are similar, the flu shot is very effective. There are several reasons why people think influenza vaccine doesn't work. People who have gotten a flu vaccination may then get sick from a different virus that causes respiratory illness but is mistaken for flu; the flu shot only prevents illness caused by the influenza virus. In addition, protection from the vaccine is not 100%. Studies of healthy young adults have shown flu vaccine to be 70% to 90% effective in preventing the flu. In the elderly and those with certain long-term medical conditions, the flu shot is often less effective in preventing illness. However, in the elderly, flu vaccine is very effective in reducing hospitalizations and death from flu-related causes.
Myth #4: There is no need to get a flu vaccine every year.	Wrong. The flu viruses are constantly changing. Generally, new influenza virus strains circulate every flu season, so the vaccine is changed each year.