

Flu Facts

This PDF is a primer on the flu virus, explaining how it spreads and what you can do to prevent it.

Influenza, or the flu, is a respiratory infection caused by a variety of flu viruses. The U.S. Centers for Disease Control and Prevention (CDC) estimates that 35 to 50 million Americans come down with the flu during each flu season, which typically lasts from November to March. Children are two to three times more likely than adults to get sick with the flu, and children frequently spread the virus to others. Although most people recover from the illness, CDC estimates that in the United States more than 100,000 people are hospitalized and about 36,000 people die from the flu and its complications every year.

When and Where Do People Usually Get the Flu?

Flu outbreaks usually begin suddenly and occur mainly in the late fall and winter. The disease spreads through communities creating an epidemic. During the epidemic, the number of cases peaks in about three weeks and subsides after another three or four weeks. Half of the population of a community may be affected. Because schools are an excellent place for flu viruses to attack and spread, families with school-age children have more infections than other families, with an average of one-third of the family members infected each year.

How is the Flu Transmitted?

You can get the flu if someone around you who has the flu coughs or sneezes. You can get the flu simply by touching a surface like a telephone or doorknob that has been contaminated by a touch from someone who has the flu. The viruses can pass through the air and can enter your body through your nose or mouth. If you've touched a contaminated surface, they can pass from your hand to your nose or mouth. You are at the greatest risk of getting infected in highly populated areas, such as in crowded living conditions and in schools.

What are Symptoms of the Flu?

Influenza, also known as the flu, is a contagious disease that is caused by the influenza virus. It attacks the respiratory tract in humans (nose, throat, and lungs). The flu is different from a cold. Influenza usually comes on suddenly and may include the following symptoms:

- Fever
- Headache
- Tiredness
- Dry Cough
- Sore Throat
- Nasal Congestion
- Body Aches

These symptoms are usually referred to as "flu-like symptoms."

What about "Stomach Flu"?

Many people use the term "stomach flu" to describe illnesses with nausea, vomiting, or diarrhea. These symptoms can be caused by many different viruses, bacteria, or even parasites. While vomiting, diarrhea, and being nauseous or "sick to your stomach" can sometimes be related to the flu – particularly in children – these problems are rarely the main symptoms of influenza. The flu is a respiratory disease and not a stomach or intestinal disease.

When is the Flu Contagious?

A person can spread the flu starting one day before he or she feels sick. Adults can continue to pass the flu virus to others for another three to seven days after symptoms start. Children can pass the virus for longer than seven days. Symptoms start one to four days after the virus enters the body. Some persons can be infected with the flu virus but have no symptoms. During this time, those persons can still spread the virus to others.

What Can I Do to Prevent the Flu?

The single best way to prevent the flu is to get vaccinated each fall -- either with a flu shot or using the flu nasal spray vaccine. The nasal spray is approved for use only among healthy people between the ages of 5 and 49 years. The flu shot is approved for use among people over 6 months of age, including healthy people and those with chronic medical conditions. Be aware that the benefits of the vaccine won't take effect immediately.

Three of the antiviral drugs (amantadine, rimantadine, and oseltamivir) have also 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.

Aside from the vaccine or anti-viral drugs, there are other ways to protect against flu.

- **Avoid close contact**
Avoid close contact with people who are sick. When you are sick, keep your distance from others to protect them from getting sick too.
- **Stay home when you are sick**
If possible, stay home from work, school, and errands when you are sick. You will help prevent others from catching your illness.
- **Cover your mouth and nose**
Cover your mouth and nose with a tissue when coughing or sneezing. It may prevent those around you from getting sick.
- **Clean your hands**
Washing your hands often will help protect you from germs.
- **Avoid touching your eyes, nose or mouth**
- Germs are often spread when a person touches something that is contaminated with germs and then touches his or her eyes, nose, or mouth.

What if I Get the Flu?

If you develop flu-like symptoms, but you do not have an underlying medical condition:

- Get plenty of rest
- Drink a lot of liquids

- Avoid using alcohol and tobacco
- Consider taking over-the-counter medications to relieve the symptoms of flu (but never give aspirin to children or teenagers who have flu-like symptoms)
- Stay home and avoid contact with other people to protect them from catching your illness
- Cover your nose and mouth with a tissue when you cough or sneeze to protect others from your germs.

Most healthy people recover from the flu without complications. However, there are some "emergency warning signs" that require urgent medical attention.

In children, some emergency warning signs that need urgent medical attention include:

- High or prolonged fever
- Fast breathing or trouble breathing
- Bluish skin color
- Not drinking enough fluids
- Changes in mental status, such as not waking up or not interacting; being so irritable that the child does not want to be held; or seizures
- Flu-like symptoms improve but then return with fever and worse cough
- Worsening of underlying chronic medical conditions (for example, heart or lung disease, diabetes)

In adults, some emergency warning signs that need urgent medical attention include:

- High or prolonged fever
- Difficulty breathing or shortness of breath
- Pain or pressure in the chest
- Near-fainting or fainting
- Confusion
- Severe or persistent vomiting

Seek medical care immediately, either by calling your doctor or going to an emergency room, if you or someone you know is experiencing any of the signs described above or other unusually severe symptoms. When you arrive, tell the receptionist or nurse about your symptoms. You may be asked to wear a mask and/or sit in a separate area to protect others from getting sick.

Are There Different Types of Flu Viruses?

The first flu virus was identified in the 1930's. Since then, scientists have classified flu viruses into types A, B, and C.

Type A is the most common and usually causes the most serious epidemics. Type B outbreaks also can cause epidemics, but the disease it produces generally is milder than that caused by type A. Type C viruses, on the other hand, never have been connected with a large epidemic.

What are Possible Complications from the Flu?

You can have flu complications if you get a bacterial infection, which causes pneumonia in your weakened lungs. Pneumonia also can be caused by the flu virus itself.

Symptoms of complications will usually appear after you start feeling better. After a brief period of improvement, you may suddenly get:

- High fever
- Shaking chills
- Chest pain with each breath
- Coughing that produces thick, yellow-greenish-colored mucus

Pneumonia can be a very serious and sometimes life-threatening condition. If you have any of these symptoms, you should contact your doctor immediately so that you can get the appropriate treatment.

Are There Other Flu Complications that Only Affect Children?

Reye's syndrome, a condition that affects the nerves, sometimes develops in children and adolescents who are recovering from the flu. Reye's syndrome begins with nausea and vomiting, but the progressive mental changes (such as confusion or delirium) cause the greatest concern.

The syndrome often begins in young people after they take aspirin to get rid of fever or pain. Although very few children develop Reye's syndrome, you should consult a doctor before giving aspirin or products that contain aspirin to children. Acetaminophen does not seem to be associated with Reye's syndrome.

Other complications of the flu that affect children are:

- Convulsions caused by fever
- Croup
- Ear infections, such as otitis media

Newborn babies recently out of intensive care units are particularly vulnerable to suffering from flu complications.

Sources: Centers for Disease Control and Prevention (CDC); National Institute of Allergy and Infectious Diseases