

Influenza (flu)

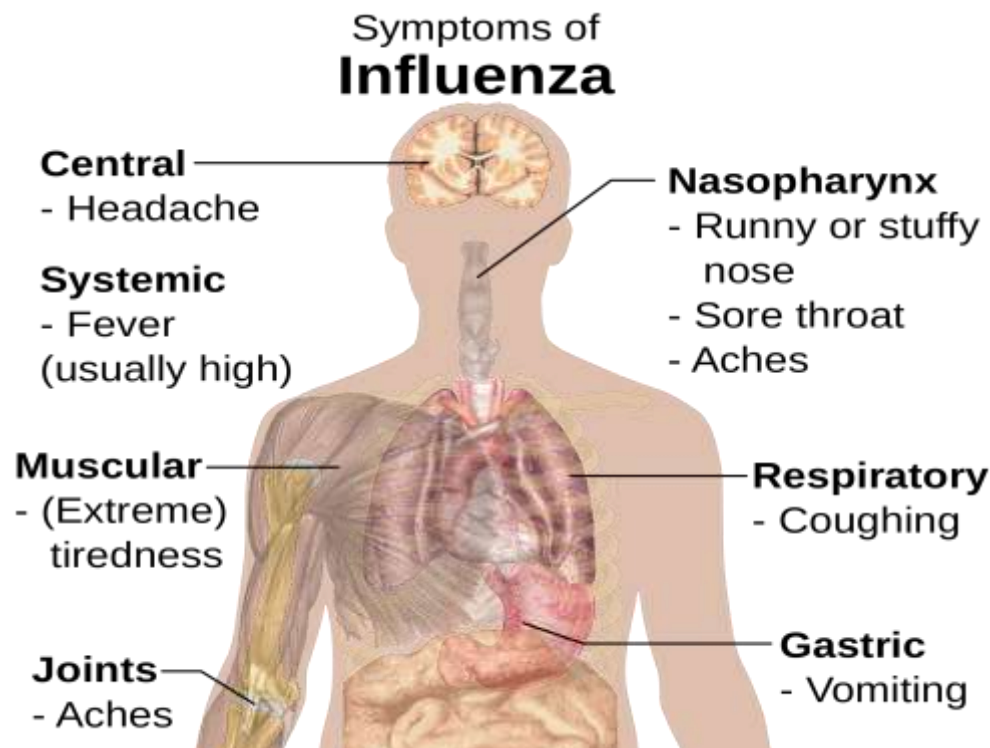
Definition

Influenza is a viral infection that attacks your respiratory system — your nose, throat and lungs. Influenza, commonly called the flu, is not the same as stomach "flu" viruses that cause diarrhea and vomiting.

For most people, influenza resolves on its own, but sometimes, influenza and its complications can be deadly. People at higher risk of developing flu complications include:

- Young children under 5, and especially those under 2 years
- Adults older than 65
- Residents of nursing homes and other long-term care facilities
- Pregnant women
- People with weakened immune systems
- People who have chronic illnesses, such as asthma, heart disease, kidney disease and diabetes
- People who are very obese, with a body mass index (BMI) of 40 or higher

Your best defense against influenza is to receive an annual vaccination.



Symptoms

Initially, the flu may seem like a common cold with a runny nose, sneezing and sore throat. But colds usually develop slowly, whereas the flu tends to come on suddenly. And although a cold can be a nuisance, you usually feel much worse with the flu.

Common signs and symptoms of the flu include:

- Fever over 100 F (38 C)
- Aching muscles, especially in your back, arms and legs
- Chills and sweats
- Headache
- Dry, persistent cough
- Fatigue and weakness
- Nasal congestion
- Sore throat

Causes

- Flu viruses travel through the air in droplets when someone with the infection coughs, sneezes or talks. You can inhale the droplets directly, or you can pick up the germs from an object — such as a telephone or computer keyboard — and then transfer them to your eyes, nose or mouth.
- People with the virus are likely contagious from the day or so before symptoms first appear until about five days after symptoms begin, though sometimes people are contagious for as long as 10 days after symptoms appear. Children and people with weakened immune systems may be contagious for a slightly longer time.
- Influenza viruses are constantly changing, with new strains appearing regularly. If you've had influenza in the past, your body has already made antibodies to fight that particular strain of the virus. If future influenza viruses are similar to those you've encountered before, either by having the disease or by vaccination, those antibodies may prevent infection or lessen its severity.
- But antibodies against flu viruses you've encountered in the past can't protect you from new influenza subtypes that can be very different immunologically from what you had before.

Treatments and drugs

- Usually, you'll need nothing more than bed rest and plenty of fluids to treat the flu. But in some cases, your doctor may prescribe an antiviral medication, such as oseltamivir (Tamiflu) or zanamivir (Relenza). If taken soon after you notice symptoms, these drugs may shorten your illness by a day or so and help prevent serious complications.
- Oseltamivir is an oral medication. Zanamivir is inhaled through a device similar to an asthma inhaler and shouldn't be used by anyone with respiratory problems, such as asthma and lung disease.
- Antiviral medication side effects may include nausea and vomiting. These side effects may be lessened if the drug is taken with food. Oseltamivir has also been associated with delirium and self-harm behaviors in teenagers.
- Some researchers recommend further study on both of these drugs because of uncertainty about their effects beyond a slight reduction in the time of illness. Some studies have suggested that these medications can also help reduce the severity of complications. The Centers for Disease Control and Prevention still recommends their use for some people, however.
- An additional concern is that some strains of influenza have become resistant to oseltamivir, amantadine and rimantadine (Flumadine), which are older antiviral drugs.

Prevention

The Centers for Disease Control and Prevention recommends annual flu vaccination for everyone over the age of 6 months.

Each year's seasonal flu vaccine contains protection from the three or four influenza viruses that are expected to be the most common during that year's flu season. The vaccine is typically available as an injection or as a nasal spray.

Controlling the spread of infection

The influenza vaccine isn't 100 percent effective, so it's also important to take measures such as these to reduce the spread of infection:

- **Wash your hands.** Thorough and frequent hand-washing is an effective way to prevent many common infections. Or use alcohol-based hand sanitizers if soap and water aren't readily available.

- **Contain your coughs and sneezes.** Cover your mouth and nose when you sneeze or cough. To avoid contaminating your hands, cough or sneeze into a tissue or into the inner crook of your elbow.
- **Avoid crowds.** Flu spreads easily wherever people congregate — in child care centers, schools, office buildings, auditoriums and public transportation. By avoiding crowds during peak flu season, you reduce your chances of infection. And, if you're sick, stay home for at least 24 hours after your fever subsides so that you lessen your chance of infecting others.