

# Influenza

**I**nfluenza (“flu”) is a contagious viral infection mainly affecting the nose, throat, airways, and lungs. It is one of the most changeable viruses; changes in the proteins of the virus can be small and continuous or abrupt. Flu outbreaks occur yearly, usually from November to March in the northern hemisphere. Approximately 5% to 20% of Americans are infected every flu season. Most people improve within a week, but for elderly people, infants and children, and people with some chronic diseases, influenza can be life-threatening. In the United States, more than 36 000 deaths and 200 000 hospitalizations are related to seasonal influenza each year. The October 19, 2011, issue of *JAMA* includes an article about H1N1 influenza. This Patient Page is based on one previously published in the November 4, 2009, issue of *JAMA*.

## TYPES OF INFLUENZA

Influenza viruses are classified as type A, B, or C. Type A is the most common and causes most of the serious epidemics. Influenza can infect many animals, such as ducks, chickens, and pigs, as well as humans. Type B can cause epidemics but these are usually milder than type A influenza. Type C has never been associated with an epidemic. Influenza is not the same as the common cold. Similarly, “stomach flu” is not influenza. In 2009, a new H1N1 influenza A virus started causing widespread disease. Influenza A continues to be the most common type of seasonal influenza.

## TRANSMISSION

Influenza is transmitted from person to person by droplets when infected persons cough or sneeze. It is also possible to become infected after touching a surface that has been contaminated by someone who has flu. Those living in crowded conditions or in schools are at greatest risk of infection. People are infectious from 1 day before symptoms develop until up to 5 days after becoming sick.

### COMMON COLD VS INFLUENZA

SYMPTOM	COLD	INFLUENZA
Respiratory infection caused by viruses	Yes	Yes
Fever	Rare	Usual, lasts 2-3 days
Headache	Rare	Common
General aches and pains	Slight	Usual, often severe
Fatigue, weakness	Sometimes	Usual, up to 2-3 weeks
Exhaustion	Rare	Usual
Stuffy nose	Common	Sometimes
Sneezing	Usual	Sometimes
Sore throat	Common	Sometimes
Cough	Mild to moderate	Common

## TREATMENT AND PREVENTION

The best defense against influenza is the flu vaccine. A new vaccine is created yearly because influenza changes yearly. It is recommended for most people older than 6 months. Flu vaccine for injection is made from killed virus and therefore cannot transmit flu. Side effects of the vaccination may include soreness at the injection site, fever, fatigue, and sore muscles. For vaccine recommendations see the Centers for Disease Control and Prevention Web site. Antiviral medications can be used to treat influenza if given within 48 hours of the first symptoms. Antivirals should not be used in place of flu vaccine. Antibiotics should not be used to treat influenza; they are effective against bacterial infections.

## FOR MORE INFORMATION

- Centers for Disease Control and Prevention  
[www.cdc.gov/flu/flu\\_vaccine\\_updates.htm](http://www.cdc.gov/flu/flu_vaccine_updates.htm)
- National Institutes of Health  
[www.niaid.nih.gov/topics/flu](http://www.niaid.nih.gov/topics/flu)
- World Health Organization  
[www.who.int/en/](http://www.who.int/en/)

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Sources: Centers for Disease Control and Prevention, National Institutes of Health, World Health Organization

Huan J. Chang, MD, MPH, Writer

Robert M. Golub, MD, Editor

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