

Influenza

Influenza (“flu”) is a contagious viral infection mainly affecting the nose, throat, airways, and lungs. It is one of the most changeable viruses; changes 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, seasonal influenza kills more than 36 000 people and hospitalizes 200 000 others yearly. The November 4, 2009, issue of *JAMA* includes several articles about influenza.

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. It infects 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. The H1N1 influenza virus, or “swine flu,” is a new type A influenza virus, probably resulting from an abrupt change in virus structure. It is so different that no one knows how severe it will be in the general population; this leads to concern that it may be particularly **virulent** (extremely severe). It is currently causing global (pandemic) disease.

TRANSMISSION

Influenza is transmitted from person to person by droplets when infected people 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 one day before symptoms develop until up to five 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 viruses change yearly. 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. This fall, a separate vaccine against the H1N1 virus will be offered in addition to the normal seasonal flu vaccine. 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.

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FOR MORE INFORMATION

- Centers for Disease Control and Prevention
www.cdc.gov/flu/flu_vaccine_updates.htm
- National Institutes of Health
www3.niaid.nih.gov/topics/Influenza/understandingInfluenza/
- World Health Organization
www.who.int/en/

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

