

# DISPATCH



## Influenza

### What Is It?

Influenza, commonly known as "the flu," is a respiratory infection caused by an influenza virus.

Most often present in the fall and winter months, the flu can reach epidemic proportions in many geographic areas and communities. According to the CDC, each year between 3,000 and 49,000 Americans die from influenza-related complications, depending on the severity and length of each flu season.

There are three types of influenza viruses that infect humans: Influenza A, B and C. Influenza A is further divided into subtypes such as the H1N1 and H3N2 viruses. Each year, the seasonal influenza vaccine is designed to cover the three most common viruses expected to infect humans in the coming year. There are three kinds of flu that are important to understand:

- **Seasonal flu** occurs each year, usually during late fall through early spring in the US. Typically, between 5 to 20 percent of the US population get seasonal influenza. Because seasonal flu is so common, most people have developed some natural immunity to these strains.
- **Pandemic flu** is a specific kind of seasonal flu which occurs when a new influenza A virus emerges for which most humans have little or no immunity. An influenza virus is called **pandemic flu** when it rapidly spreads from person-to-person to create a worldwide epidemic (**pandemic**).
- **Avian (H5N1) Flu** is subtype of influenza A virus that is highly contagious among **birds** but rarely infects humans. Scientists follow H5N1 flu closely because it has the potential to cause a deadly pandemic. So far, the majority of human H5N1 cases have occurred outside of the United States.

Influenza is a yearly concern of health professionals as it is a constantly changing, highly infectious, and potentially deadly virus.

### How can you get it?

The major way that influenza viruses are transmitted is through **droplet spread**. When people infected with flu virus cough, sneeze or talk they produce droplets that can land in the mouth, eyes or noses of people nearby. Less commonly, a person might also get the flu through **indirect contact**, by touching a contaminated surface or object and then touching their own mucous membranes (mouth, eyes or nose).

Most healthy adults can infect others beginning one day before symptoms develop and up to five to seven days after becoming sick.

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Several groups are noted to have a high risk of transmitting influenza viruses, particularly school age children (ages 5 to 19) and their parents. Healthcare workers, including first responders, also have significant potential to transmit the virus through multiple patient contacts.

## What are the symptoms?

Symptoms of influenza usually start suddenly and may include:

- Fever (not everyone with flu will have a fever)
- Feeling feverish or having chills
- Cough, sore throat and runny or stuffy nose
- Muscle or body aches
- Headaches
- Fatigue
- Vomiting or diarrhea

Although most healthy people recover from the flu within 1 week, certain groups are at high risk for serious complications. Elderly people, young children, pregnant women and people with certain chronic illnesses (asthma, heart disease, diabetes) are more likely to become seriously ill and possibly die from influenza.

## How do you prevent it?

Influenza is a vaccine preventable disease. About 2 weeks after vaccination, antibodies that provide protection against influenza virus infection develop in the body. **Annual influenza vaccine is recommended for all firefighters in NFPA 1581**, Fire Department Infection Control Programs. Emergency responders need to be vaccinated with the seasonal flu vaccine every year. Currently, there are two kinds of flu vaccine available in the US:

- **The "flu shot"** — an inactivated vaccine (containing killed virus) is approved for use in people older than 6 months, including healthy people and people with high risk chronic medical conditions
- **The nasal-spray flu vaccine** — a live vaccine (containing weakened viruses) that does not cause the flu (sometimes called LAIV for "live attenuated influenza vaccine"; or FluMist®). Nasal vaccines are approved for use in healthy, non-pregnant people 2-49 years of age

In addition to vaccination, you can help prevent the spread of influenza by:

- Staying home from work and school if you are experiencing flu-like symptoms

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- Creating or promoting good ventilation
- Decontamination
  - Practicing decontamination procedures will protect you, your crew and your family from indirect contact. Viruses and bacteria can live for up to two hours or longer on surfaces such as radios, doorknobs and equipment.
- Using Universal Precautions
  - Assume patients with respiratory symptoms have the flu
  - Strictly limit the number of crew members having direct patient contact
  - Hand hygiene (wash with soap and water or using an alcohol based hand rub)
  - Personal protective equipment (PPE) (gloves, gowns, NIOSH-certified respirators that are N95 or higher, and goggles that offer mouth, nose and eye protection)
  - Provide masks for symptomatic patients

## What should you do if you believe you have Influenza?

- Stay home from work or school when you are sick
- Contact your healthcare provider to discuss possible testing and treatment.
  - Because many respiratory illnesses, such as the common cold, have symptoms similar to the flu, it can be difficult to diagnose influenza. If you develop flu-like symptoms and are concerned about your illness, especially if you are at high risk for complications of the flu, it is important to contact your healthcare provider.
  - Tests to diagnose influenza are most effective if performed within the first 2 or 3 days of illness.
  - Antiviral treatments for influenza work best when started within 2 days of symptom onset. While most people do not require medication, antiviral therapy can be very important in certain situations (hospitalized patients, high risk groups, severe complications).

## For More Information and Frequently Asked Questions (FAQs), Check Out :

- ✓ IAFF Influenza Information <http://www.iaff.org/hs/Resi/PanFlu.asp>
- ✓ Occupational Safety & Health Administration (OSHA): <http://www.osha.gov/dts/guidance/flu/index.html>
- ✓ National Institute for Occupational Safety and Health (NIOSH): <http://www.cdc.gov/niosh/topics/flu/>
- ✓ Centers for Disease Control and Prevention (CDC): <http://www.cdc.gov/flu/keyfacts.htm>
- ✓ Public Health Agency of Canada (PHAC), Infection Prevention and Control Measures for Healthcare Workers in Acute Care and Long-term Care Settings: <http://www.phac-aspc.gc.ca/nois-sinp/guide/ac-sa-eng.php>