CDC Centers for Disease Control and Prevention

Seasonal Influenza Q&A

Questions & Answers

On this Page

- What is seasonal influenza (flu)?
- What are the symptoms of the flu?
- When is the flu season in the United States?
- How does CDC monitor the progress of the flu season?
- Why is there a week-long lag between the data and when it's reported?
- How does the flu spread?
- If I got the flu or the flu vaccine last year, will I have immunity against the flu this year?
- Does the flu have complications?
- How do I find out if I have the flu?
- Do other respiratory viruses circulate during flu season?
- How soon will I get sick if I am exposed to the flu?
- How long is a person with flu virus contagious?
- How many people get sick or die from the flu every year?
- Can the flu be treated?
- Is the "stomach flu" really the flu?

What is seasonal influenza (flu)?

Seasonal influenza, commonly called "the flu," is caused by influenza viruses, which infect the respiratory tract (i.e., the nose, throat, lungs). Unlike many other viral respiratory infections, such as the common cold, the flu can cause severe illness and life-threatening complications in many people. It is estimated that in the United States, each year on average 5% to 20% of the population gets the flu and more than 200,000 people are hospitalized from seasonal flu-related complications. Flu seasons are unpredictable and can be severe. Over a period of 30 years, between 1976 and 2006, estimates of flu-associated deaths in the United States range from a low of about 3,000 to a high of

about 49,000 people. Some people, such as older people, young children, pregnant women, and people with certain health conditions, are at high risk for serious flu complications. The best way to prevent seasonal flu is by getting a flu vaccination each year.

Flu vaccines protect against the influenza viruses that research indicates will be most common during the upcoming season. Everyone 6 months and older should get vaccinated against the flu every year. Get vaccinated soon after vaccine becomes available in your community, ideally by October. Immunity sets in about two weeks after vaccination.

What are the symptoms of the flu?

The flu can cause mild to severe illness, and at times can lead to death. The flu is different from a cold. The flu usually comes on suddenly. For information about flu symptoms, see Flu Symptoms & Severity.

When is the flu season in the United States?

In the United States, flu season occurs in the fall and winter. The peak of flu season has occurred anywhere from late November through March. The overall health impact (e.g., infections, hospitalizations, and deaths) of a flu season varies from year to year. CDC monitors circulating flu viruses and their related disease activity and provides influenza reports (called "FluView (http://www.cdc.gov/flu/weekly/)") each week from October through May. See Weekly U.S. Influenza Summary Update (http://www.cdc.gov/flu/weekly/summary.htm).

How does CDC monitor the progress of the flu season?

CDC collects data year-round and reports on influenza (flu) activity in the United States (http://www.cdc.gov/flu/weekly/fluactivitysurv.htm) each week from October through May. The U.S. influenza surveillance system consists of five separate categories.

- Laboratory-based viral surveillance, which tracks the number and percentage of influenza-positive tests from laboratories across the country, and monitors for human infections with influenza A viruses that are different from currently circulating human influenza H1 and H3 viruses;
- Outpatient physician surveillance for influenza-like illness (ILI), which tracks the percentage of doctor visits for flu-like symptoms;
- Mortality surveillance as reported through the 122 Cities Mortality Reporting System, which tracks the percentage of deaths reported to be caused by pneumonia and influenza in 122 cities in the United States; and influenza-associated pediatric mortality as reported through the Nationally Notifiable Disease Surveillance System, which tracks the number of deaths in children with laboratory confirmed influenza infection;

- Hospitalization surveillance, which tracks laboratory confirmed influenza-associated hospitalizations in children and adults through the Influenza Hospitalization Network (FluSurv-NET) and Aggregate Hospitalization and Death Reporting Activity (AHDRA); and
- State and territorial epidemiologist reports of influenza activity, which indicates the number of states affected by flu and the degree to which they are affected.

These surveillance components allow CDC to determine when and where influenza activity is occurring, determine what types of influenza viruses are circulating, detect changes in the influenza viruses collected and analyzed, track patterns of influenza-related illness, and measure the impact of influenza in the United States. All influenza activity reporting by states, laboratories, and health care providers is voluntary. For more information about CDC's influenza surveillance activities, see the Overview of Influenza Surveillance in the United States (http://www.cdc.gov/flu/weekly/overview.htm).

Why is there a week-long lag between the data and when it's reported?

The influenza surveillance system is one of the largest and most timely surveillance systems at CDC. The system consists of 5 complementary surveillance categories. These categories include reports from more than 145 laboratories, about 3,000 outpatient health care providers, vital statistics offices in 122 cities, research and health care personnel at the Emerging Infections Program (EIP) sites, and influenza surveillance coordinators and state epidemiologists from all 50 state health departments and the New York City and District of Columbia health departments. Influenza surveillance data collection is based on a reporting week that starts on Sunday and ends on Saturday of each week. Each surveillance participant is requested to summarize weekly data and submit it to CDC by Tuesday afternoon of the following week. The data are then downloaded, compiled, and analyzed at CDC each Wednesday. The compiled data are interpreted and checked for anomalies which are resolved before the report is written and submitted for clearance at CDC. On Friday the report is approved, distributed, and posted on the Internet.

How does the flu spread?

The main way that influenza viruses are thought to spread is from person to person in respiratory droplets of coughs and sneezes. For more information about flu transmission, visit How Flu Spreads.

If I got the flu or the flu vaccine last year, will I have immunity against the flu this year?

Not necessarily. Several studies conducted over different flu seasons and involving different influenza viruses and types of flu vaccine have shown that a person's protective antibody against influenza viruses declines over the course of a year after vaccination and infection, particularly in the elderly. So, a flu shot given during one season, or an infection acquired during one season, may not provide adequate protection through later seasons.

The decline in protective antibody against the flu that occurs after vaccination or after flu infection may be influenced by several factors, including a person's age, the antigen used in the vaccine, and the person's health situation (for example, chronic health conditions that weaken the immune system may have an impact).

This decline in protective antibody has the potential to leave some people more vulnerable to infection, illness and possibly serious complications from the same influenza viruses a year after being vaccinated or infected.

So, for optimal protection against influenza, annual vaccination is recommended regardless of past vaccination status or flu infection.

Does the flu have complications?

Yes. Some of the complications caused by flu include bacterial pneumonia, dehydration, and worsening of chronic medical conditions, such as congestive heart failure, asthma, or diabetes. Children may get sinus problems and ear infections as complications from the flu. For more information, see Flu Symptoms & Severity.

How do I find out if I have the flu?

It is very difficult to distinguish the flu from other viral or bacterial causes of respiratory illnesses on the basis of symptoms alone. There are tests available to diagnose flu. For more information, see Diagnosing Flu.

Do other respiratory viruses circulate during flu season?

In addition to flu viruses, several other respiratory viruses also can circulate during flu season and can cause symptoms and illness similar to those seen with flu infection. These non-flu viruses include rhinovirus (one cause of the "common cold") and respiratory syncytial virus (RSV).

How soon will I get sick if I am exposed to the flu?

The time from when a person is exposed to flu virus to when symptoms begin is about 1 to 4 days, with an average of about 2 days.

How long is a person with flu virus contagious?

Information about how long a person is contagious is available at How Flu Spreads.

How many people get sick or die from the flu every year?

Flu seasons vary in severity. It is estimated that between 5% to 20% of U.S. residents get the flu, and it is estimated that more than 200,000 people are hospitalized on average for flu-related complications each year. Over a period of 30 years, between 1976 and 2006, estimates of flu-associated deaths in the United States range from a low of about 3,000 to a high of about 49,000 people.

Can the flu be treated?

Yes. There are influenza antiviral drugs that can be used to treat flu illness.

Is the "stomach flu" really the 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 — more commonly in children than adults — these problems are rarely the main symptoms of influenza. The flu is a respiratory disease and not a stomach or intestinal disease.

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