# WHO surveillance case definitions for ILI and SARI

### Case definitions for influenza surveillance

As of January 2014

The WHO global influenza surveillance standards define the surveillance case definitions for influenza-like illness (ILI) and severe acute respiratory infections (SARI).

Key messages when using the case definitions:

* Influenza infection causes a clinical syndrome not easily distinguished from other respiratory infections.
* The case definitions for ILI and SARI are not necessarily intended to capture all cases but to describe trends over time.
* Using one common case definition globally will allow national health authorities to interpret their data in an international context.

### ILI case definition

An acute respiratory infection with:

* measured fever of ≥ 38 C°
* and cough;
* with onset within the last 10 days.

<https://www.who.int/influenza/surveillance_monitoring/ili_sari_surveillance_case_definition/en/>

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

Influenza surveillance data collection is based on a reporting week that starts on Sunday and ends on the following Saturday of each week. Each surveillance participant is requested to summarize the weekly data and submit it to CDC by the following Tuesday afternoon. The data are then downloaded, compiled, and analyzed at CDC. The data are used to update [FluView](https://www.cdc.gov/flu/weekly/index.htm) and [FluView Interactive](https://www.cdc.gov/flu/weekly/fluviewinteractive.htm) on the following Friday

# <https://www.cdc.gov/flu/about/season/flu-season.htm>

# About Flu

Influenza (flu) is a contagious respiratory illness caused by [influenza viruses](https://www.cdc.gov/flu/about/viruses/index.htm). It can cause mild to severe illness. Serious outcomes of flu infection can result in hospitalization or death. Some people, such as older people, young children, and people with [certain health conditions](https://www.cdc.gov/flu/about/disease/high_risk.htm), are at high risk of serious flu complications.  There are two main types of influenza (flu) virus: Types A and B. The influenza A and B viruses that routinely spread in people (human influenza viruses) are responsible for seasonal flu epidemics each year.

The best way to prevent flu is by getting [**vaccinated**](https://www.cdc.gov/flu/protect/keyfacts.htm) each year.

**Do other respiratory viruses circulate during the flu season?**

<https://www.cdc.gov/flu/about/season/flu-season.htm>

In addition to flu viruses, several other respiratory viruses also circulate during the flu season and can cause symptoms and illness similar to those seen with flu infection. These respiratory viruses include rhinovirus (one cause of the “common cold”) and [respiratory syncytial virus (RSV)](https://www.cdc.gov/surveillance/nrevss/index.html), which is the most common cause of severe respiratory illness in young children as well as a leading cause of death from respiratory illness in those aged 65 years and older.

# The Flu Season

While seasonal influenza (flu) viruses are detected year-round in the United States, flu viruses are most common during the fall and winter. The exact timing and duration of flu seasons can vary, but influenza activity often begins to increase in October. Most of the time flu activity peaks between December and February, although activity can last as late as May.

**When is the flu season in the United States?**

In the United States, flu season occurs in the fall and winter. While influenza viruses circulate year-round, most of the time flu activity [peaks](https://www.cdc.gov/flu/about/season/flu-season.htm) between December and February, but activity can last as late as May. The overall health impact (e.g., infections, hospitalizations, and deaths) of a flu season varies from season to season. CDC collects, compiles, and analyzes information on influenza activity year-round in the United States and produces [FluView](https://www.cdc.gov/flu/weekly/index.htm), a weekly surveillance report, and [FluView Interactive](https://www.cdc.gov/flu/weekly/fluviewinteractive.htm), which allows for more in-depth exploration of influenza surveillance data.  The [Weekly U.S. Influenza Summary Update](https://www.cdc.gov/flu/weekly/summary.htm) is updated each week from October through May.

<https://www.cdc.gov/flu/about/season/flu-season.htm>

# Key Facts About Influenza (Flu)

[Español](https://espanol.cdc.gov/enes/flu/about/keyfacts.htm)

What is Influenza (Flu)?

Flu is a contagious respiratory illness caused by influenza viruses that infect the nose, throat, and sometimes the lungs. It can cause mild to severe illness, and at times can lead to death. The best way to prevent flu is by getting a flu [vaccine](https://www.cdc.gov/flu/protect/keyfacts.htm) each year.

### **Flu Symptoms**

Flu is different from a cold. As it usually comes on suddenly. People who are sick with flu often feel some or all of these symptoms:

* Fever\* or feeling feverish/chills
* Cough
* Sore throat
* Runny or stuffy nose
* Muscle or body aches
* Headaches
* Fatigue (tiredness)
* Some people may have vomiting and diarrhea, though this is more common in children than adults.

\*It’s important to note that not everyone with flu will have a fever.

How Flu Spreads

Most experts believe that flu viruses spread mainly by tiny droplets made when people with flu cough, sneeze or talk. These droplets can land in the mouths or noses of people who are nearby. Less often, a person might get flu by touching a surface or object that has flu virus on it and then touching their own mouth, nose or possibly their eyes.

Period of Contagiousness

You may be able to pass on flu to someone else before you know you are sick, as well as while you are sick.

* People with flu are most contagious in the first 3-4 days after their illness begins.
* Some otherwise healthy adults may be able to infect others beginning 1 day **before**symptoms develop and up to 5 to 7 days **after**becoming sick.
* Some people, especially young children and people with weakened immune systems, might be able to infect others with flu viruses for an even longer time.

Onset of Symptoms

The time from when a person is exposed and infected with flu to when symptoms begin is about 2 days, but can range from about 1 to 4 days.

Complications of Flu

[Complications of flu](https://www.cdc.gov/flu/about/disease/complications.htm#complications) can include bacterial pneumonia, ear infections, sinus infections and worsening of chronic medical conditions, such as congestive heart failure, asthma, or diabetes.

People at High Risk from Flu

Anyone can get flu (even healthy people), and serious problems related to flu can happen at any age, but some people are at [high risk of developing serious flu-related complications](https://www.cdc.gov/flu/about/disease/high_risk.htm) if they get sick. This includes people 65 years and older, people of any age with certain chronic medical conditions (such as asthma, diabetes, or heart disease), pregnant women, and children younger than 5 years.

Preventing Seasonal Flu

The first and most important step in [preventing flu](https://www.cdc.gov/flu/consumer/prevention.htm) is to get a flu vaccine each year. Flu vaccine has been shown to reduce flu related illnesses and the risk of serious flu complications that can result in hospitalization or even death. CDC also recommends everyday preventive actions (like staying away from people who are sick, covering coughs and sneezes and frequent handwashing) to help slow the spread of germs that cause respiratory (nose, throat, and lungs) illnesses, like flu.

Diagnosing Flu

It is very difficult to distinguish flu from other viral or bacterial respiratory illnesses based on symptoms alone. There are tests available to diagnose flu. More information is available: [Diagnosing Flu](https://www.cdc.gov/flu/about/qa/testing.htm).

Treating Flu

There are [influenza antiviral drugs](https://www.cdc.gov/flu/antivirals/whatyoushould.htm) that can be used to treat flu illness.

# People at High Risk For Flu Complications

# Most people who get sick with flu will have mild illness, will not need medical care or antiviral drugs and will recover in less than two weeks. Some people, however, are more likely to get [flu complications](https://www.cdc.gov/flu/about/disease/complications.htm#complications) that can result in hospitalization and sometimes death. Pneumonia, bronchitis, sinus infections and ear infections are examples of flu-related complications. Flu also can make chronic health problems worse. For example, people with asthma may experience asthma attacks while they have flu and people with chronic congestive heart failure may experience a worsening of this condition triggered by flu. Below are the groups of people who are more likely to get serious flu-related complications if they get sick with flu.

Information for Specific High Risk Groups

* People\_01

[Adults 65 Years and Older](https://www.cdc.gov/flu/highrisk/65over.htm)

* People\_09

[Pregnant Women](https://www.cdc.gov/flu/highrisk/pregnant.htm)

* People\_03

[Young Children](https://www.cdc.gov/flu/highrisk/children.htm)

* Medical\_05

[Asthma](https://www.cdc.gov/flu/highrisk/asthma.htm)

* Heart\_01

[Heart Disease & Stroke](https://www.cdc.gov/flu/highrisk/heartdisease.htm)

* Device\_05

[Diabetes](https://www.cdc.gov/flu/highrisk/diabetes.htm)

* Lab\_07

[HIV/AIDS](https://www.cdc.gov/flu/highrisk/hiv-flu.htm)

* Badge\_04

[Cancer](https://www.cdc.gov/flu/highrisk/cancer.htm)

* People\_06

[Children with Neurologic Conditions](https://www.cdc.gov/flu/highrisk/neurologic-pediatric.htm)

##### **Following is a list of all the health and age factors that are known to increase a person’s risk of getting serious complications from the flu:**

* Asthma
* Neurologic and neurodevelopment conditions
* Blood disorders (such as sickle cell disease)
* Chronic lung disease (such as chronic obstructive pulmonary disease [COPD] and cystic fibrosis)
* Endocrine disorders (such as diabetes mellitus)
* Heart disease (such as congenital heart disease, congestive heart failure and coronary artery disease)
* Kidney disorders
* Liver disorders
* Metabolic disorders (such as inherited metabolic disorders and mitochondrial disorders)
* People who are obese with a body mass index [BMI] of 40 or higher
* People younger than 19 years of age on long-term aspirin- or salicylate-containing medications.
* People with a weakened immune system due to disease (such as people with HIV or AIDS, or some cancers such as leukemia) or medications (such as those receiving chemotherapy or radiation treatment for cancer, or persons with chronic conditions requiring chronic corticosteroids or other drugs that suppress the immune system)

**Other people at high risk from the flu:**

* Adults 65 years and older
* Children younger than 2 years old1
* Pregnant women and women up to 2 weeks after the end of pregnancy
* American Indians and Alaska Natives
* People who live in nursing homes and other long-term care facilities
* 1 Although all children younger than 5 years old are considered at high risk for serious flu complications, the highest risk is for those younger than 2 years old, with the highest hospitalization and death rates among infants younger than 6 months old.

<https://www.cdc.gov/flu/season/flu-season-2018-2019.htm>

#### **What is flu forecasting?**

Influenza (flu) places a [significant disease burden](https://www.cdc.gov/flu/about/burden/index.html) on the U.S. population each year, but the magnitude and timing varies from season to season, making the annual impact difficult to predict at the beginning of each season. [Flu forecasting](https://www.cdc.gov/flu/weekly/flusight/index.html) can change that by predicting in advance when the start, peak, and increases in flu activity will occur. Unlike CDC’s traditional [influenza surveillance systems](https://www.cdc.gov/flu/weekly/overview.htm), which measure influenza activity after it has occurred, flu forecasting offers the possibility to look into the future and better plan ahead, potentially reducing the impact of flu.