



# Similarities and Differences between Flu and COVID-19

## What is the difference between Influenza (Flu) and COVID-19?

Influenza (flu) and COVID-19 are both contagious respiratory illnesses, but they are caused by different viruses. COVID-19 is caused by infection with a coronavirus first identified in 2019, and flu is caused by infection with [influenza viruses](#).

COVID-19 seems to spread more easily than flu. However, as more people become [fully vaccinated](#) against COVID-19, the spread of the virus that causes COVID-19 should slow down. More information is available about [COVID-19 vaccines](#) and [how well they work](#).

Compared to flu, COVID-19 can cause more serious illnesses in some people. COVID-19 can also take longer before people show symptoms and people can be contagious for longer. More information about differences between flu and COVID-19 is available in the different sections below.

Because some of the symptoms of flu, COVID-19, and other respiratory illnesses are similar, the difference between them cannot be made based on symptoms alone. [Testing](#) is needed to tell what the illness is and to confirm a diagnosis. People can be infected with both flu and the virus that causes COVID-19 at the same time and have symptoms of both influenza and COVID-19.

While more is learned every day about COVID-19 and the virus that causes it, there are still things, such as [post-COVID conditions](#), that are unknown. This page compares COVID-19 and flu, given the best available information to date.

Learn more about how to protect yourself and others from COVID-19.



Learn more about how to protect yourself and others from flu this season.



## Signs and Symptoms

### Similarities:

Both **COVID-19** and **flu** can have varying degrees of signs and symptoms, ranging from no symptoms (asymptomatic) to severe symptoms. Common symptoms that COVID-19 and flu share include:

- Fever or feeling feverish/having chills
- Cough
- Shortness of breath or difficulty breathing
- Fatigue (tiredness)
- Sore throat



- Runny or stuffy nose
- Muscle pain or body aches
- Headache
- Vomiting and diarrhea
- Change in or loss of taste or smell, although this is more frequent with COVID-19.

[Flu Symptoms](#)

[COVID-19 Symptoms](#)

## How Long Symptoms Appear After Exposure and Infection

### Similarities:

For both COVID-19 and flu, 1 or more days can pass between when a person becomes infected and when he or she starts to experience illness symptoms.

### Differences:

If a person has COVID-19, it could take them longer to experience symptoms than if they had flu.

#### Flu

Typically, a person experiences symptoms anywhere from **1 to 4 days after infection**.

[Flu Symptoms](#)

#### COVID-19

Typically, a person experiences symptoms about **5 days after being infected**, but symptoms can appear **2 to 14 days after infection**.

[COVID-19 Symptoms](#)



## How Long Someone Can Spread the Virus

### Similarities:

For both COVID-19 and flu, it's possible to spread the virus for at least 1 day before experiencing any symptoms.

### Differences:

If a person has COVID-19, they could be contagious for a longer time than if they had flu.

#### Flu

Most people with flu are contagious for about 1 day before they show symptoms.

Older children and adults with flu appear to be most contagious during the initial 3-4 days of their illness but many people remain contagious for about 7 days.

Infants and people with weakened immune systems can be contagious for even longer.

[How Flu Spreads](#)

#### COVID-19



*How long someone can spread the virus that causes COVID-19 is still under investigation.*

It's possible for people to spread the virus for about 2 days before experiencing signs or symptoms (or possibly earlier) and remain contagious for at least 10 days after signs or symptoms first appeared. If someone is asymptomatic or their symptoms go away, it's possible to remain contagious for at least 10 days after testing positive for COVID-19. People who are hospitalized with severe disease and people with weakened immune systems can be contagious for 20 days or longer.

[How COVID-19 Spreads](#)

## How it Spreads

### Similarities:

Both **COVID-19** and **flu** can spread from person-to-person between people who are in close contact with one another (within about 6 feet). Both are spread mainly by large and small particles containing virus that are expelled when people with the illness (COVID-19 or flu) cough, sneeze, or talk. These particles can land in the mouths or noses of people who are nearby and possibly be inhaled into the lungs. In some circumstances, such as indoor settings with poor ventilation, small particles might be spread further than 6 feet and cause infections.

Although most spread is by inhalation, it may be possible that a person can get infected by touching (for example, shaking hands with someone who has the virus on their hands) or by touching a surface or object that has virus on it, and then touching their own mouth, nose, or eyes.

Both flu viruses and the virus that causes COVID-19 can be spread to others by people before they begin showing symptoms; by people with very mild symptoms; and by people who never experience symptoms (asymptomatic people).

### Differences:

While the virus that causes COVID-19 and flu viruses are thought to spread in similar ways, the virus that causes COVID-19 is generally more contagious than flu viruses. Also, COVID-19 has been observed to have more superspreading events than flu. This means the virus that causes COVID-19 can quickly and easily spread to a lot of people and result in continual spreading among people as time progresses.

[How Flu Spreads](#)

[How COVID-19 Spreads](#)



## People at Higher-Risk for Severe Illness

### Similarities:

Both **COVID-19** and **flu** illness can result in severe illness and complications. Those at highest risk include:

- Older adults
- People with certain underlying medical conditions (including infants and children)
- Pregnant people

### Differences:

Overall, COVID-19 seems to cause more serious illnesses in some people.

Serious COVID-19 illness resulting in hospitalization and death can occur even in healthy



people.

Some people that had COVID-19 can go on to develop [post-COVID conditions](#) or [multisystem inflammatory syndrome \(MIS\)](#)

[People at Increased Risk of COVID-19 Severe Illness](#)

[More information on flu and COVID-19 severity in children.](#)

## Complications

### Similarities:

Both **COVID-19** and **flu** can result in complications, including:

- Pneumonia
- Respiratory failure
- Acute respiratory distress syndrome (fluid in the lungs)
- [Sepsis](#) (a life-threatening illness caused by the body's extreme response to an infection)
- Cardiac injury (for example, heart attacks and stroke)
- Multiple-organ failure (respiratory failure, kidney failure, shock)
- Worsening of chronic medical conditions (involving the lungs, heart, or nervous system or diabetes)
- Inflammation of the heart, brain, or muscle tissues
- Secondary infections (bacterial or fungal infections that can occur in people who have already been infected with flu or COVID-19)



### Differences:

#### Flu

Most people who get flu will recover on their own in a few days to two weeks, but some people will experience severe [complications](#), requiring hospitalization. Some of these complications are listed above. Secondary bacterial infections are more common with influenza than with COVID-19.

Diarrhea is more common in young children with flu than in adults with flu.

#### [Flu complications](#)

#### COVID-19

Additional complications associated with COVID-19 can include:

- Blood clots in the veins and arteries of the lungs, heart, legs or brain
- [Multisystem Inflammatory Syndrome in Children \(MIS-C\)](#) and in Adults (MIS-A)

**Long COVID** is a range of symptoms that can last weeks or months after first being infected with the virus that causes COVID-19 or can appear weeks after infection. Long COVID can happen to anyone who has had COVID-19, even if their illness was mild, or if they had no symptoms.

## Approved Treatments

## Similarities:

People at higher risk of complications or who have been hospitalized for **COVID-19** or **flu** should receive supportive medical care to help relieve symptoms and complications.

## Differences:

### Flu

Prescription [influenza antiviral drugs](#) are FDA-approved to treat flu.

People who are hospitalized with flu or who are at increased risk of complications and have flu symptoms are recommended to be treated with antiviral drugs as soon as possible after illness onset.

### Flu Treatment

### COVID-19

The National Institutes of Health (NIH) has developed [guidance on treatment of COVID-19](#) [↗](#), which is regularly updated as new evidence on treatment options emerges.

The Food and Drug Administration (FDA) has approved one drug, remdesivir (Veklury®), to treat COVID-19. FDA has issued [emergency use authorizations](#) [↗](#) (EUAs) to allow healthcare providers to use investigational products that are not yet approved, or that are approved for other uses, to treat patients with COVID-19 if certain legal requirements are [met](#) [↗](#).

### [What to Do If You Are Sick with COVID-19](#)



## Vaccine

### Similarities:

Vaccines for **COVID-19** and **flu** are approved and/or authorized for emergency use (EUA) by FDA.

### Differences:

### Flu

There are multiple FDA-licensed [influenza vaccines](#) produced annually to protect against the 4 flu viruses that scientists expect will circulate each year.

### Flu Vaccines

### COVID-19

Three [COVID-19 vaccines](#) have been authorized for use by FDA under an EUA. Other vaccines to prevent COVID-19 are under development.

### [COVID-19 Vaccines](#)

