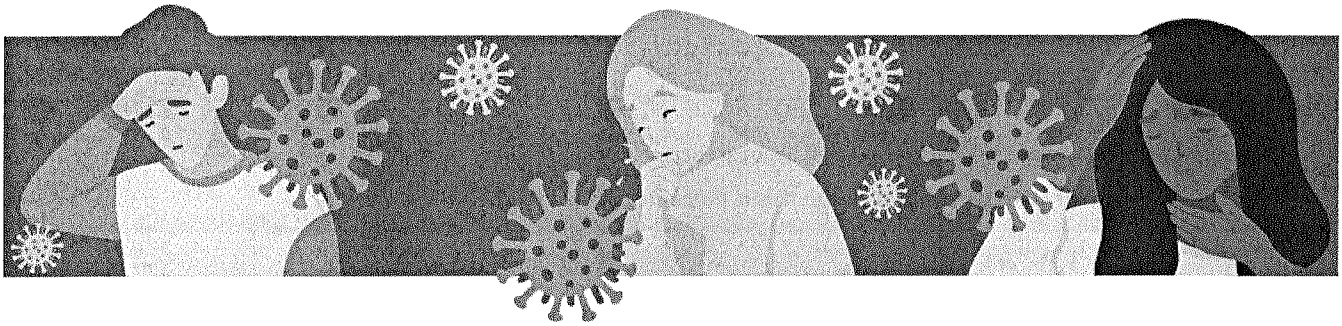
Centers for Disease Control and Prevention

Influenza (Flu)

Influenza (Flu) Home



Similarities and Differences between Flu and COVID-19

More information on COVID-19 symptoms and testing is available.

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 (SARS-CoV-2) first identified in 2019. Flu is caused by infection with a flu virus (influenza viruses).

From what we know, COVID-19 spreads more easily than flu. Efforts to maximize the proportion of people in the United States who are up to date with their COVID-19 vaccines remain critical to reducing the risk of severe COVID-19 illness and death. More information is available about COVID-19 vaccines and how well they work.

Compared with flu, COVID-19 can cause more severe illness in some people. Compared to people with flu, people infected with COVID-19 may take longer to show symptoms and may be contagious for longer periods of time.

You cannot tell the difference between flu and COVID-19 by the symptoms alone because they have some of the same signs and symptoms. Specific testing is needed to tell what the illness is and to confirm a diagnosis. Having a medical professional administer a specific test that detects both flu and COVID-19 allows you to get diagnosed and treated for the specific virus you have more quickly. Getting treated early for COVID-19 and flu can reduce your risk of getting very sick. Testing can also reveal if someone has both flu and COVID-19 at the same time, although this is uncommon. People with flu and COVID-19 at the same time can have more severe disease than people with either flu or COVID-19 alone. Additionally, some people with COVID-19 may also be affected by post-COVID conditions (also known as long COVID).

We are learning more everyday about COVID-19 and the virus that causes it. 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

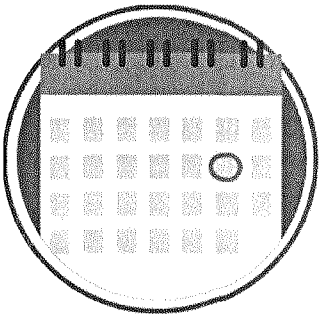
Similarities:

Both COVID-19 and flu can have varying degrees of 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
- Diarrhea (more frequent in children with flu, but can occur in any age with COVID-19)
- 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, one or more days can pass from when a person becomes infected to when they start to experience symptoms of illness. It is possible to be infected with the virus that causes COVID-19 without experiencing any symptoms. It is also possible to be infected with flu viruses without having any symptoms.

Differences:

If a person has COVID-19, it could take them longer from the time of infection to experience symptoms than if they have flu.

Flu

Typically, a person may experience symptoms anywhere from one to four days after infection.

Flu Symptoms

COVID-19

Typically, a person may experience symptoms anywhere from two to five days, and up to 14 days after infection.

COVID-19 Symptoms

How Long Someone Can Spread the Virus

Differences:

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

Flu

- People with flu virus infection are potentially contagious for about one day before they show symptoms. However, it is believed that flu is spread mainly by people who are symptomatic with flu virus infection.
- Older children and adults with flu appear to be most contagious during the first 3-4 days of their illness, but some people might remain contagious for slightly longer periods.
- Infants and people with weakened immune systems can be contagious for even longer.

How Flu Spreads

COVID-19

- On average, people can begin spreading the virus that causes COVID-19 2-3 days before their symptoms begin, but infectiousness peaks one day before their symptoms begin.
- People can also spread the virus that causes COVID-19 without experiencing any symptoms.
- On average, people are considered contagious for about eight days after their symptoms began.

How COVID-19 Spreads

How it Spreads

Similarities:

Both COVID-19 and flu can spread from person to person between people who are near or in close contact with one another. 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 respiratory tract. In some circumstances, such as indoor settings with poor ventilation, small particles containing virus might be spread longer distances and cause infections.

Most spread is by inhalation of large and small droplets; however, it may be possible that a person can get infected by touching another person (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.

Differences:

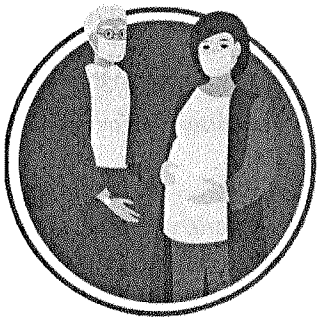
While the virus that causes COVID-19 and flu viruses are thought to spread in similar ways, the virus that causes COVID-19 is generally more contagious than flu viruses. Also, COVID-19 has been observed to have more superspreading events than flu. This means the virus that causes COVID-19 can quickly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

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).

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 increased risk include:

- Older adults
- People with certain underlying medical conditions (including infants and children)
- People who are pregnant

Differences:

Overall, COVID-19 seems to cause more severe illness in some people.

Severe 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

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 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)

Anyone who has had COVID-19, even if their illness was mild, or if they had no symptoms can experience post-COVID conditions. Post-COVID Conditions are 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.

Approved Treatments

Similarities:

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

Differences:

Flu

Prescription influenza antiviral drugs are FDA-approved to treat flu. These antiviral drugs are only for treatment of flu and not COVID-19.

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

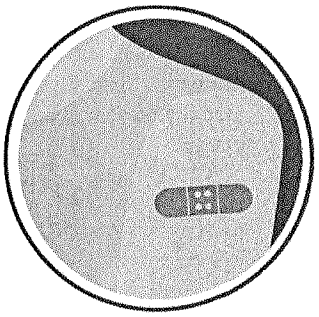
The National Institutes of Health (NIH) has developed guidance on treatment of COVID-19, which is regularly updated as new evidence on treatment options emerge. This includes antiviral treatment for non-hospitalized people at increased risk for severe COVID-19 and antiviral treatment for people hospitalized with severe COVID-19. People who are at increased risk of severe COVID-19 should seek treatment within days of when their first symptoms start.

What to Do If You Are Sick with COVID-19

Vaccine

Similarities:

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



Differences:

Flu

There are multiple FDA-licensed influenza vaccines produced annually to protect against the four flu viruses that scientists expect will circulate each year.

Flu Vaccines

COVID-19

Multiple COVID-19 vaccines are authorized or approved for use in the United States to help prevent COVID-19. More information on COVID-19 vaccine and booster recommendations is available.

COVID-19 Vaccines

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