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 each year.

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 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, a weekly surveillance report, and FluView Interactive, which allows for more in-depth exploration of influenza surveillance data. The Weekly U.S. Influenza Summary Update is updated each week from October through May.

Flu Symptoms

Influenza (flu) can cause mild to severe illness, and at times can lead to death. Flu is different from a cold. Flu usually comes on suddenly. People who have 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 is important to note that not everyone with flu will have a fever.
Treatments for the Flu

Antiviral Drugs

Most people with flu have mild illness and do not need medical care or antiviral drugs. If you get sick with flu symptoms, in most cases, you should stay home and avoid contact with other people except to get medical care.

If, however, you have symptoms of flu and are in a high risk group, or are very sick or worried about your illness, contact your health care provider (doctor, physician assistant, etc.). CDC recommends prompt treatment for people who have flu infection or suspected flu infection and who are at high risk of serious flu complications, such as people with asthma, diabetes or heart disease.

- Antiviral drugs can treat flu illness.
- Antiviral drugs are different from antibiotics. Flu antivirals are prescription medicines (pills, liquid, intravenous solution, or an inhaled powder) and are not available over-the-counter.
- Antiviral drugs can make illness milder and shorten the time you are sick. They also can prevent serious flu complications, like pneumonia.
- It’s very important that antiviral drugs be used early to treat people who are very sick with flu (for example, people who are in the hospital) and people who are sick with flu and have a greater chance of getting serious flu complications, either because of their age or because they have a high risk medical condition. Other people also may be treated with antiviral drugs by their doctor this season. Most otherwise-healthy people who get flu, however, do not need to be treated with antiviral drugs.

Studies show that flu antiviral drugs work best for treatments when they are started within 2 days of getting sick. However, starting them later can still be helpful, especially if the sick person has a high-risk health condition or is very sick from flu (for example, hospitalized patients). Follow your doctor’s instructions for taking these drugs.
If You Get Sick:

1. Take Antiviral Drugs, if prescribed by a doctor.

2. Take **everyday precautions** to protect others while sick.
   - While sick, limit contact with others as much as possible to keep from infecting them.
   - Cover your nose and mouth with a tissue when you cough or sneeze. Throw the tissue in the trash after you use it.
   - Wash your hands often with soap and water. If soap and water are not available, use an alcohol-based hand rub.
   - Clean and disinfect surfaces and objects that may be contaminated with germs like flu.

3. Stay home until you are better.
   - If you are sick with flu-like illness, CDC recommends that you stay home for at least 24 hours after your fever is gone except to get medical care or for other necessities. Your fever should be gone without the use of fever-reducing medicine.
   - See Other Important Information for **People Who are Sick**.

**Flu Complications**

Most people who get flu will recover in a few days to less than two weeks, but some people will develop complications (such as pneumonia) as a result of flu, some of which can be life-threatening and result in death.

Sinus and ear infections are examples of moderate complications from flu, while pneumonia is a serious flu complication that can result from either influenza virus infection alone or from coinfection of flu virus and bacteria. Other possible serious complications triggered by flu can include inflammation of the heart (myocarditis), brain (encephalitis) or muscle (myositis, rhabdomyolysis) tissues, and multi-organ failure (for example, respiratory and kidney failure). Flu virus infection of the respiratory tract can trigger an extreme inflammatory response in the body and can lead to **sepsis**, the body’s life-threatening response to infection. Flu also can make chronic medical problems worse. For example, people with **asthma** may experience asthma attacks while they have flu, and people with **chronic heart disease** may experience a worsening of this condition triggered by flu.

**People at High Risk for Serious Flu-Related Complications**

Anyone can get sick with 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** 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, but especially those younger than 2 years old.
Life-Threatening Complications of the Flu

Caregivers Observing The Symptoms Listed Below Should Call 911.

In children:

- Fast breathing or trouble breathing.
- Bluish lips or face.
- Ribs pulling in with each breath.
- Chest pain.
- Severe muscle pain (child refuses to walk).
- Dehydration (no urine for 8 hours, dry mouth, no tears when crying).
- Not alert or interacting when awake.
- Seizures.
- Fever above 104°F.
- In children less than 12 weeks, any fever.
- Fever or cough that improve but then return or worsen.
- Worsening of chronic medical conditions.

In adults:

- Difficulty breathing or shortness of breath.
- Persistent pain or pressure in the chest or abdomen.
- Persistent dizziness, confusion, inability to arouse.
- Seizures.
- Not urinating.
- Severe muscle pain.
- Severe weakness or unsteadiness.
- Fever or cough that improve but then return or worsen.
- Worsening of chronic medical conditions.
Symptoms: Cold vs. Flu

These lists are not all inclusive. Please consult the individual’s PCP for any other symptom that is severe or concerning.

<table>
<thead>
<tr>
<th>Signs &amp; Symptoms</th>
<th>Cold</th>
<th>Influenza (Flu)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fever</td>
<td>Rare</td>
<td>Usual; lasts 3-4 days</td>
</tr>
<tr>
<td>Aches</td>
<td>Slight</td>
<td>Usual; often severe</td>
</tr>
<tr>
<td>Chills</td>
<td>Uncommon</td>
<td>Fairly common</td>
</tr>
<tr>
<td>Fatigue, weakness</td>
<td>Sometimes</td>
<td>Usual</td>
</tr>
<tr>
<td>Sneezing</td>
<td>Common</td>
<td>Sometimes</td>
</tr>
<tr>
<td>Chest discomfort, cough</td>
<td>Mild to moderate; hacking cough</td>
<td>Common; can be severe</td>
</tr>
<tr>
<td>Stuffy nose</td>
<td>Common</td>
<td>Sometimes</td>
</tr>
<tr>
<td>Sore throat</td>
<td>Common</td>
<td>Sometimes</td>
</tr>
<tr>
<td>Headache</td>
<td>Rare</td>
<td>Common</td>
</tr>
</tbody>
</table>

Length of Time to Develop Symptoms: COVID vs. Flu

COVID-19

If a person has COVID-19, it could take them longer to develop symptoms than if they had flu. Typically, a person develops symptoms 5 days after being infected, but symptoms can appear as early as 2 days after infection or as late as 14 days after infection, and the time range can vary.

Flu

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

Contagious Period: COVID-19 vs. 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 remain contagious for about 7 days. Infants and people with weakened immune systems can be contagious for even longer.

COVID-19

It’s possible for people to spread the virus for about 2 days before experiencing signs or symptoms 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.

Please note: How long someone can spread the virus that causes COVID-19 is still under investigation.
Flu Vaccines during the COVID-19 Pandemic

Is there Guidance for Safely Administering Vaccines during the COVID-19 Pandemic?

CDC has released Interim Guidance for Immunization Services during the COVID-19 Pandemic. This guidance is intended to help immunization providers in a variety of clinical and alternative settings with the safe administration of vaccines during the COVID-19 pandemic. This guidance will be continually reassessed and updated based on the evolving epidemiology of COVID-19 in the United States. Healthcare providers who give vaccines should also consult guidance from state, local, tribal, and territorial health officials.

For the complete interim guidance for immunization services during the COVID-19 pandemic, visit https://www.cdc.gov/vaccines/pandemic-guidance/index.html.

Why is it Important for Influenza (Flu) Vaccines to be given during the COVID-19 Pandemic?

Efforts to reduce the spread of COVID-19, such as stay-at-home and shelter-in-place orders, have led to decreased use of routine preventive medical services, including immunization services. Ensuring that people continue or start getting routine vaccinations during the COVID-19 pandemic is essential for protecting people and communities from vaccine-preventable diseases and outbreaks, including flu. Routine vaccination prevents illnesses that lead to unnecessary medical visits and hospitalizations, which further strain the healthcare system.

For the upcoming flu season, flu vaccination will be very important to reduce flu because it can help reduce the overall impact of respiratory illnesses on the population and thus lessen the resulting burden on the healthcare system during the COVID-19 pandemic. A flu vaccine may also provide several individual health benefits, including keeping you from getting sick with flu, reducing the severity of your illness if you do get flu and reducing your risk of a flu-associated hospitalization.

Who Should Get Their Flu Vaccine During the COVID-19 Pandemic?

Annual flu vaccination is recommended for everyone 6 months of age and older, with rare exceptions, because it is an effective way to decrease flu illnesses, hospitalizations, and deaths.

During the COVID-19 pandemic, reducing the overall burden of respiratory illnesses is important to protect vulnerable populations at risk for severe illness, the healthcare system, and other critical infrastructure. Thus, healthcare providers should use every opportunity during the influenza vaccination season to administer influenza vaccines to all eligible persons, including;
Essential workers: Including healthcare personnel (including nursing home, long-term care facility, and pharmacy staff) and other critical infrastructure workforce.

Persons at increased risk for severe illness from COVID-19: Including adults’ aged 65 years and older, residents in a nursing home or long-term care facility, and persons of all ages with certain underlying medical conditions. Severe illness from COVID-19 has been observed to disproportionately affect members of certain racial/ethnic minority groups.

Persons at increased risk for serious influenza complications: Including infants and young children, children with neurologic conditions, pregnant women, adults aged 65 years and older, and other persons with certain underlying medical conditions.

Should a Flu Vaccine Be Given to Someone with Suspected or Confirmed COVID-19?

No. Vaccination should be deferred (postponed) for people with suspected or confirmed COVID-19, regardless of whether they have symptoms, until they have met the criteria to discontinue their isolation. While mild illness is not a contraindication to flu vaccination, vaccination visits for these people should be postponed to avoid exposing healthcare personnel and other patients to the virus that causes COVID-19. When scheduling or confirming appointments for vaccination, patients should be instructed to notify the provider’s office or clinic in advance if they currently have or develop any symptoms of COVID-19.

Additionally, a prior infection with suspected or confirmed COVID-19 or flu does not protect someone from future flu infections. The best way to prevent seasonal flu is to get vaccinated every year.

How Do I Know If I Have Flu?

Your respiratory illness might be the flu if you have fever, cough, sore throat, runny or stuffy nose, body aches, headache, chills and/or fatigue. Some people may have vomiting and diarrhea, though this is more common in children. People may be sick with flu and have respiratory symptoms without a fever. Flu viruses usually cause the most illness during the colder months of the year. However, influenza can also occur outside of the typical flu season. In addition, other viruses can also cause respiratory illness similar to flu. So, it is impossible to tell for sure if you have flu based on symptoms alone. If your doctor needs to know for sure whether you are sick with flu, there are laboratory tests that can be done.
What Kinds of Flu Tests Are There?

- A number of flu tests are available to detect influenza viruses in respiratory specimens. The most common are called "rapid influenza diagnostic tests (RIDTs)." RIDTs work by detecting the parts of the virus (antigens) that stimulate an immune response. These tests can provide results within approximately 10-15 minutes but are not as accurate as other flu tests. Therefore, you could still have flu, even though your rapid test result is negative. Other flu tests are called “rapid molecular assays” that detect genetic material of the virus. Rapid molecular assays produce results in 15-20 minutes and are more accurate than RIDTs. In addition, there are several more accurate and sensitive flu tests available that must be performed in specialized laboratories, such as those found in hospitals or state public health laboratories. All of these tests require that a health care provider swipe the inside of your nose or the back of your throat with a swab and then send the swab for testing. Results may take one to several hours.

How Well Can Rapid Tests Detect Flu?

- During an influenza outbreak, a positive rapid flu test is likely to indicate influenza infection. However, rapid tests vary in their ability to detect flu viruses, depending on the type of rapid test used, and on the type of flu viruses circulating. Also, rapid tests appear to be better at detecting flu in children than adults. This variation in ability to detect viruses can result in some people who are infected with flu having a negative rapid test result. (This situation is called a false negative test result.) Despite a negative rapid test result, your health care provider may diagnose you with flu based on your symptoms and their clinical judgment.

- Will my health care provider test me for flu if I have flu-like symptoms?

- Your respiratory illness might be flu if you have fever, cough, sore throat, runny or stuffy nose, body aches, headache, chills and/or fatigue. Some people may have vomiting and diarrhea, though this is more common in children. People may be sick with flu and have respiratory symptoms without a fever. Flu viruses usually cause the most illness during the colder months of the year. However, influenza can also occur outside of the typical flu season. In addition, other viruses can also cause respiratory illness similar to flu. So, it is impossible to tell for sure if you have flu based on symptoms alone. If your doctor needs to know for sure whether you are sick with flu, there are laboratory tests that can be done.

- Please visit diagnosing flu for more information.
Can I Have Flu and COVID-19 at the Same Time?

- Yes. It is possible to have flu, as well as other respiratory illnesses, and COVID-19 at the same time. Health experts are still studying how common this can be.
- Some of the symptoms of flu and COVID-19 are similar, making it hard to tell the difference between them based on symptoms alone. Diagnostic testing can help determine if you are sick with flu or COVID-19.
- Is there a test that can detect both flu and COVID-19?
  - Yes. CDC has developed a test that will check for A and B type seasonal flu viruses and SARS CoV-2, the virus that causes COVID-19. This test will be used by U.S. public health laboratories. Testing for these viruses at the same time will give public health officials important information about how flu and COVID-19 are spreading and what prevention steps should be taken. The test will also help public health laboratories save time and testing materials, and to possibly return test results faster.
  - The Food and Drug Administration (FDA) has given CDC an Emergency Use Authorization external icon for this new test. Initial test kits were sent to public health laboratories in early August 2020. CDC will continue to manufacture and distribute these kits.
- More information for laboratories is available.
- Will the new test that detects both flu and COVID-19 replace other tests?
  - No. This new test is designed for use at CDC-supported public health laboratories at state and local levels, where it will supplement and streamline surveillance for flu and COVID-19. The use of this specialized test will be focused on public health surveillance efforts and will not replace any COVID-19 tests currently used in commercial laboratories, hospitals, clinics, and other healthcare settings.
  - CDC’s first viral test for SARS-CoV-2 (the CDC 2019-nCoV Real-Time RT-PCR Diagnostic Panel (ER-34)) will still be available for qualified laboratories to order through the International Reagent Resource (IRR) external icon. The new multiplex assay can also be ordered through the IRR. Check the IRR website for details.
- For additional questions, please visit: Clinical Questions about COVID-19: Questions and Answers: Testing, Diagnosis, and Notification

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