

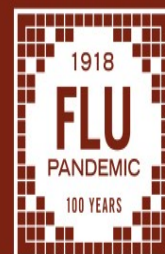


While everyone is anxiously awaiting a COVID-19 vaccine, let's take advantage of the vaccines we already have. Flu season in the northern hemisphere begins around November, so you'll benefit the most if you schedule your flu shot now.

Flu shot amidst COVID-19

While the flu vaccine won't protect you against COVID-19, it is especially important to get your flu shot and get it early this year.

Getting a flu shot is important every year because it directly protects you from getting infected with influenza, which can be really miserable while you're sick, but can also be fatal. A flu shot also indirectly protects your contacts – since you're less likely to get infected after getting immunized, you're also less likely to infect your friends and family. Getting a flu shot this year is particularly important because, like SARS-CoV-2, influenza is a respiratory virus and we want to do everything we can to minimize having two respiratory outbreaks circulating simultaneously in our populations. We don't know what co-infection or sequential infections for these two viruses looks like, but we worry that infection with one could increase the severity of the other. It's also possible that infection with one could weaken the immune system and increase susceptibility to the other. A small study from China indicates co-infection may increase the infectious period for COVID-19 and prolong hospital stays. Last year in the US, before COVID, the CDC estimated that influenza infections sent around 500,000 people to the hospital. If flu vaccine coverage this year is only about the same as last year, the compound effects of influenza and COVID could quickly overwhelm local health care systems. The more people who get their flu shot this year, the more cases of influenza we can prevent.



WE REMEMBER. WE PREPARE.

Key Facts About Influenza (Flu)

Influenza (Flu) Viruses

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.



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.

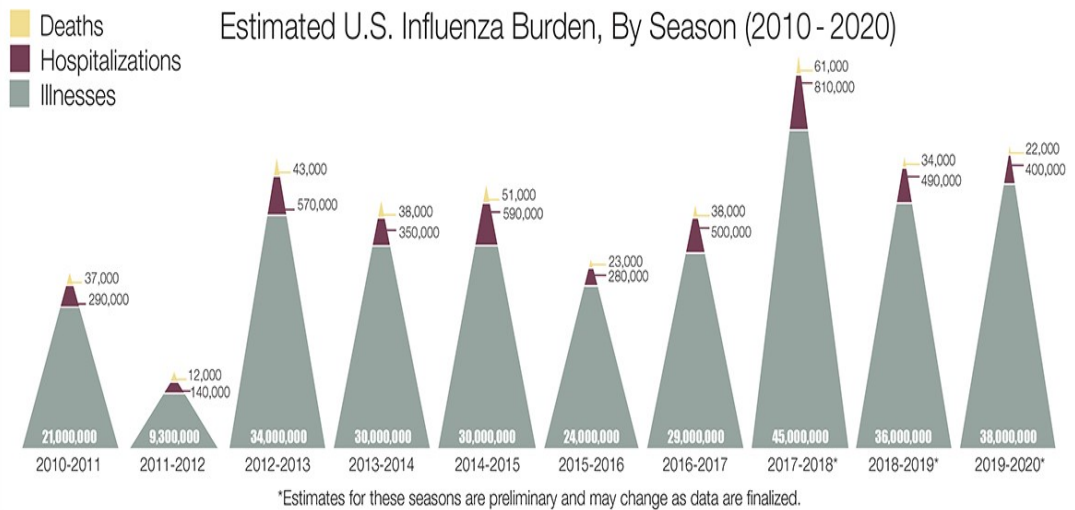
Flu Symptoms

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'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.

The proportion of people who get sick from flu varies. CDC found that between 3% and 11% of the U.S. population gets infected and develops flu symptoms each year. The estimated incidence of flu illness during the last two seasons was around 11%; 2012-2013 was an H3N2-predominant season classified as being of moderate severity, while 2014-2015 was an H3N2 predominant season classified as being of high severity.

Who is most likely to be infected with influenza?

The same CDC found that children are most likely to get sick from flu and that people 65 and older are least likely to get sick from influenza. Median incidence values (or attack rate) by age group were 9.3% for children 0-17 years, 8.8% for adults 18-64 years, and 3.9% for adults 65 years and older. This means that children younger than 18 are more than twice as likely to develop a symptomatic flu infection than adults 65 and older.



Period of Contagiousness

You may be able to spread 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 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 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 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 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.



FAQs about Influenza (Flu) and COVID-19



Influenza and COVID-19 are both contagious respiratory illnesses, but they are caused by different viruses. COVID-19 is caused by infection with a new coronavirus (called SARS-CoV-2) and flu is caused by infection with influenza viruses. Because some of the symptoms of flu and COVID-19 are similar, it may be hard to tell the difference between them based on symptoms alone, and testing may be needed to help confirm a diagnosis. There are some key differences between flu and COVID-19. COVID-19 seems to spread more easily than flu and causes more serious illnesses in some people. It can also take longer before people show symptoms and people can be contagious for longer. Another important difference is there is a vaccine to protect against flu. There is currently no vaccine to prevent COVID-19. The best way to prevent infection is to avoid being exposed to the virus.

While more is learned every day, there is still a lot that is unknown about COVID-19 and the virus that causes it.

Will there be flu along with COVID-19 this winter?

It is highly likely that flu viruses and the virus that causes COVID-19 will both be spreading. Getting a flu vaccine will be more important than ever. CDC recommends that all people 6 months and older get a yearly flu vaccine.

Can I have flu and COVID-19 at the same time?

Yes. It is possible 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 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.

Will the flu vaccine protect me from COVID-19?

Getting a flu vaccine will not protect against COVID-19, however flu vaccination has many other important benefits. Flu vaccines have been shown to reduce the risk of flu illness, hospitalization and death. Getting a flu vaccine this fall will be more important than ever, not only to reduce your risk from flu but also to help conserve potentially scarce health care resources.

FAQs about Influenza (Flu) and COVID-19 (cont)

What is CDC doing to promote flu vaccine during a COVID-19 pandemic?

To address the importance of influenza vaccination, especially during the COVID-19 pandemic, CDC will maximize flu vaccination by increasing availability of vaccine, including purchasing an additional 2 million doses of pediatric flu vaccine and 9.3 million doses of adult flu vaccine, by emphasizing the importance of flu vaccination for the entire flu season, and by conducting targeted communication outreach to specific groups who are at higher risk for complications from flu. These same groups are often at higher risk for COVID-19 too, so protecting them from influenza is important to decrease their risk of co-infection. Communication strategies for providers and the public will include:

Educational outreach activities by CDC, including social media, press conferences, web page spotlights, radio media tours, op-eds, and other publications,

A digital campaign to educate the general public and people with who are at increased risk from influenza and COVID-19 complications,














Special educational efforts to inform the general population, people with underlying health conditions, and African American and Hispanic audiences about the importance of flu vaccination, and

Updated vaccination websites for the public and providers that highlight the safety precautions being implemented in healthcare facilities during the pandemic.

Is COVID-19 more dangerous than the flu?

Flu and COVID-19 can both result in serious illness, including illness resulting in hospitalization or death. While there is still much to learn about COVID-19, recent studies show it does seem as if COVID-19 is more deadly than seasonal influenza.

IS IT THE FLU OR COVID-19?

	SYMPTOM	FLU	COVID-19
	FEVER	✓	✓
	FATIGUE	✓	✓
	COUGH	✓	✓
	SORE THROAT	✓	✓
	HEADACHES	✓	✓
	RUNNY NOSE	✓	✓
	SHORTNESS OF BREATH	✓	✓
	BODY ACHES	✓	✓
	DIARRHEA AND/OR VOMITING	✓	✓
	ONSET	1-4 days after infection	About 5 days after infection but can range from 2-14 days
	LOSS OF TASTE AND/OR SMELL		✓
	RED, SWOLLEN EYES*		✓
	SKIN RASHES*		✓

*EMERGING SYMPTOMS BASED ON RECENT DATA

2019-2020 Flu Season: Burden and Burden Averted by Vaccination

During the 2019-2020 season, CDC estimates flu caused:

38
million
flu illnesses

400,000
flu hospitalizations

22,000
flu deaths

It could have been even worse without flu vaccines.

Nearly 52% of the U.S. population 6 months and older got a flu vaccine during the 2019-2020 flu season, and this prevented an estimated:

7.5
million
flu illnesses



More than the combined
population of Kentucky and
Kansas

105,000
hospitalizations



Enough people to fill
Michigan Stadium at the
University of Michigan

6,300
deaths



Equivalent to saving about
17 lives per day over the
course of a year

Imagine the impact if more Americans chose to get a flu vaccine. Many more flu illnesses, flu hospitalizations, and flu deaths could be prevented. The estimates for the 2019-2020 influenza season are preliminary pending additional data from the season.

<https://www.cdc.gov/flu/about/burden/index.html>



get vaccinated
www.cdc.gov/flu

September 2020

Administering Flu Vaccines During the COVID-19 Pandemic

Vaccination of people at high risk for flu complications is especially important to decrease their risk of severe flu illness. Many people at higher risk from flu also seem to be at higher risk from COVID-19. If you are at high risk, it is especially important for you to get a flu vaccine this year.

Is there guidance for safely administering the flu shot during the COVID-19 pandemic?

The COVID-19 pandemic has caused healthcare providers to change how they operate to continue to provide essential services to patients. Ensuring immunization services are maintained or reinitiated is essential for protecting individuals and communities from vaccine-preventable diseases and outbreaks and reducing the burden of respiratory illness during the upcoming influenza season.

Why is it important for flu vaccines to be given during COVID-19?



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.

Should flu vaccine be given to someone who is 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.

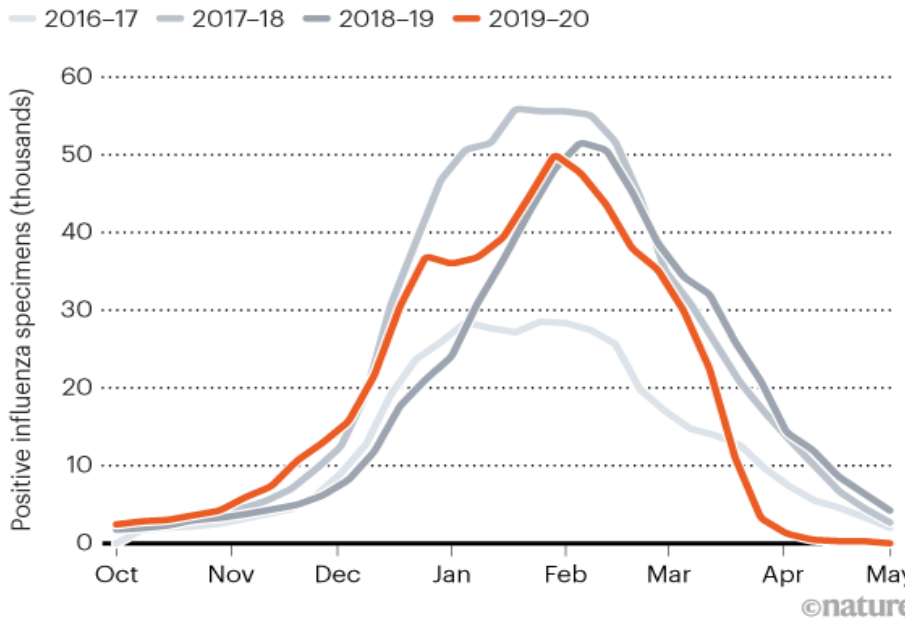
	Virus Properties
Influenza Virus 	<ul style="list-style-type: none">• 4 strains, multiple subtypes• (-) strand, segmented RNA genome• HA and NA surface proteins• Enveloped
SARS-CoV-2 	<ul style="list-style-type: none">• 1 strain• (+) strand, non-segmented RNA genome• Spike (S) protein• Enveloped

Selinsgrove Area School District



FLU SEASON CUT SHORT BY COVID-19 MEASURES

Influenza infections in the northern hemisphere fell sharply after worldwide measures to curtail the coronavirus pandemic were instituted. Compared to previous years, the season was cut short by about 6 weeks.



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Selinsgrove Pa 17870

FLU	COVID-19
Symptoms: Begin 1-4 days after exposure	Symptoms: Begin 1-14 days after exposure
Cause: Influenza virus (there are many strains)	Cause: SARS-CoV-2 virus
Complications: Less likely to occur because of immunity built up over time	Complications: Severe respiratory complications may come on extremely quickly
Prevention: Flu shot	Prevention: Self-isolation

Epidemiological Comparison of Respiratory Viral Infections

Disease	Flu	COVID-19	SARS	MERS
Disease Causing Pathogen	 Influenza virus	 SARS-CoV-2	 SARS-CoV	 MERS-CoV
R₀ Basic Reproductive Number	1.3	2.0 - 2.5 *	3	0.3 - 0.8
CFR Case Fatality Rate	0.05 - 0.1%	~3.4% *	9.6 - 11%	34.4%
Incubation Time	1 - 4 days	4 - 14 days *	2 - 7 days	6 days
Hospitalization Rate	2%	~19% *	Most cases	Most cases
Community Attack Rate	10 - 20%	30 - 40% *	10 - 60%	4 - 13%
Annual Infected (global)	~ 1 billion	N/A (ongoing)	8098 (in 2003)	420
Annual Infected (US)	10 - 45 million	N/A (ongoing)	8 (in 2003)	2 (in 2014)
Annual Deaths (US)	10,000 - 61,000	N/A (ongoing)	None (since 2003)	None (since 2014)

* COVID-19 data as of March 2020.