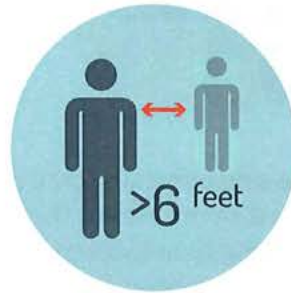


COVID-19 Vaccines

Vaccines (shots) are one of the tools we have to fight the COVID-19 pandemic.



To stop this pandemic, we need to use all of our prevention tools. Vaccines are one of the most effective tools to protect your health and prevent disease. Vaccines work with your body's natural defenses so **your body will be ready to fight the virus**, if you are exposed (also called immunity). Other steps, like wearing a mask that covers your nose and mouth and staying at least 6 feet away from other people you don't live with, also help stop the spread of COVID-19.

Studies show that COVID-19 **vaccines are very effective** at keeping you from getting COVID-19. Experts also think that getting a COVID-19 vaccine may help keep you from getting seriously ill even if you do get COVID-19. These vaccines cannot give you the disease itself.



The vaccines are safe. The U.S. vaccine safety system makes sure that all vaccines are as safe as possible. All the COVID-19 vaccines that are being used have gone through the same safety tests and meet the same standards as any other vaccines produced through the years. A system in place across the entire country that allows CDC to watch for safety issues and make sure the vaccines stay safe.

Different types of COVID-19 vaccines will be available. Most of these vaccines are given in two shots, one at a time and spaced apart. The first shot gets your body ready. The second shot is given at least three weeks later to make sure you have full protection. If you are told you need two shots, make sure that you get both of them. The vaccines may work in slightly different ways, but all types of the vaccines will help protect you.



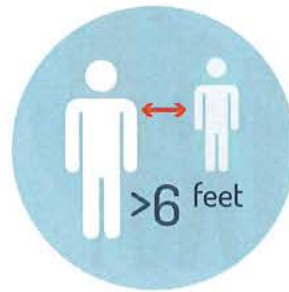
www.cdc.gov/coronavirus/vaccines



The vaccines may cause side effects in some people, like sore muscles, feeling tired, or mild fever. These reactions mean the vaccine is working to help teach your body how to fight COVID-19 if you are exposed. For most people, these side effects will last no longer than a day or two. **Having these types of side effects does NOT mean that you have COVID-19.** If you have questions about your health after your shot, call your doctor, nurse, or clinic. As with any medicine, it is rare but possible to have a serious reaction, such as not being able to breathe. It is very unlikely that this will happen, but if it does, call 911 or go to the nearest emergency room.

When you get the vaccine, you *and* your healthcare worker will both need to wear masks.

CDC recommends that during the pandemic, people wear a mask that covers their nose and mouth when in contact with others outside their household, when in healthcare facilities, and when receiving any vaccine, including a COVID-19 vaccine.



Even after you get your vaccine, you will need to keep wearing a mask that covers your nose **and** mouth, washing your hands often, and staying at least 6 feet away from other people you do not live with. This gives you and others the best protection from catching the virus. Right now, experts don't know how long the vaccine will protect you, so it's a good idea to continue following the guidelines from CDC and your health department. **We also know not everyone will be able to get vaccinated right away, so it's still important to protect yourself and others.**

Myths and Facts about COVID-19 Vaccines

Updated Feb. 3, 2021

Can a COVID-19 vaccine make me sick with COVID-19?



No. None of the authorized and recommended [COVID-19 vaccines](#) or [COVID-19 vaccines currently in development in the United States](#) contain the live virus that causes COVID-19. This means that a COVID-19 vaccine **cannot** make you sick with COVID-19.

There are several different types of vaccines in development. All of them teach our immune systems how to recognize and fight the virus that causes COVID-19. Sometimes this process can cause symptoms, such as fever. These symptoms are normal and are a sign that the body is building protection against the virus that causes COVID-19. Learn more about [how COVID-19 vaccines work](#).

It typically takes a few weeks for the body to build immunity (protection against the virus that causes COVID-19) after vaccination. That means it's possible a person could be infected with the virus that causes COVID-19 just before or just after vaccination and still get sick. This is because the vaccine has not had enough time to provide protection.

After getting a COVID-19 vaccine, will I test positive for COVID-19 on a viral test?



No. Neither the recently authorized and recommended vaccines nor the other COVID-19 vaccines currently in clinical trials in the United States can cause you to test positive on [viral tests](#), which are used to see if you have a **current infection**.

If your body develops an immune response—the goal of vaccination—there is a possibility you may test positive on some [antibody tests](#). Antibody tests indicate you had a **previous infection** and that you may have some level of protection against the virus. Experts are currently looking at how COVID-19 vaccination may affect antibody testing results.

Myths and Facts about COVID-19 Vaccines

Updated Feb. 3, 2021

If I have already had COVID-19 and recovered, do I still need to get vaccinated with a COVID-19 vaccine?



Yes, you should be vaccinated regardless of whether you already had COVID-19. That's because experts do not yet know how long you are protected from getting sick again after recovering from COVID-19. Even if you have already recovered from COVID-19, it is possible—although rare—that you could be infected with the virus that causes COVID-19 again. Learn more about [why getting vaccinated is a safer way to build protection](#) than getting infected.

If you were treated for COVID-19 with monoclonal antibodies or convalescent plasma, you should wait 90 days before getting a COVID-19 vaccine. Talk to your doctor if you are unsure what treatments you received or if you have more questions about getting a COVID-19 vaccine.

Experts are still learning more about how long vaccines protect against COVID-19 in real-world conditions. CDC will keep the public informed as new evidence becomes available.

Will a COVID-19 vaccination protect me from getting sick with COVID-19?



Yes. COVID-19 vaccination works by teaching your immune system how to recognize and fight the virus that causes COVID-19, and this protects you from getting sick with COVID-19.

Being protected from getting sick is important because even though many people with COVID-19 have only a mild illness, others may get a [severe illness](#), have [long-term health effects](#), or even die. There is no way to know how COVID-19 will affect you, even if you don't have an [increased risk of developing severe complications](#). Learn more about [how COVID-19 vaccines work](#).

Myths and Facts about COVID-19 Vaccines

Updated Feb. 3, 2021



Will a COVID-19 vaccine alter my DNA?

No. COVID-19 mRNA vaccines do not change or interact with your DNA in any way.

Messenger RNA vaccines—also called mRNA vaccines—are the first COVID-19 vaccines authorized for use in the United States. mRNA vaccines teach our cells how to make a protein that triggers an immune response. The mRNA from a COVID-19 vaccine never enters the nucleus of the cell, which is where our DNA is kept. This means the mRNA cannot affect or interact with our DNA in any way. Instead, COVID-19 mRNA vaccines work with the body's natural defenses to safely develop immunity to disease. Learn more about [how COVID-19 mRNA vaccines work](#).

At the end of the process, our bodies have learned how to protect against future infection. That immune response and making antibodies is what protects us from getting infected if the real virus enters our bodies.

Is it safe for me to get a COVID-19 vaccine if I would like to have a baby one day?



Yes. People who want to get pregnant in the future may receive the COVID-19 vaccine.

Based on current knowledge, experts believe that COVID-19 vaccines are unlikely to pose a risk to a person trying to become pregnant in the short or long term. Scientists study every vaccine carefully for side effects immediately and for years afterward. The COVID-19 vaccines are being studied carefully now and will continue to be studied for many years, similar to other vaccines.

The COVID-19 vaccine, like other vaccines, works by training our bodies to develop antibodies to fight against the virus that causes COVID-19, to prevent

Myths and Facts about COVID-19 Vaccines

Updated Feb. 3, 2021

future illness. There is currently no evidence that antibodies formed from COVID-19 vaccination cause any problems with pregnancy, including the development of the placenta. In addition, there is no evidence suggesting that fertility problems are a side effect of ANY vaccine. People who are trying to become pregnant now or who plan to try in the future may receive the COVID-19 vaccine when it becomes available to them.

<https://www.cdc.gov/coronavirus/2019-ncov/vaccines/facts.html>



How mRNA COVID-19 Vaccines Work

Understanding the virus that causes COVID-19.

Coronaviruses like the one that causes COVID-19 are named for the crown-like spikes on their surface, called **spike proteins**. These **spike proteins** are ideal targets for vaccines.

What is mRNA?

Messenger RNA, or mRNA, is genetic material that tells your body how to make proteins.

What is in the vaccine?

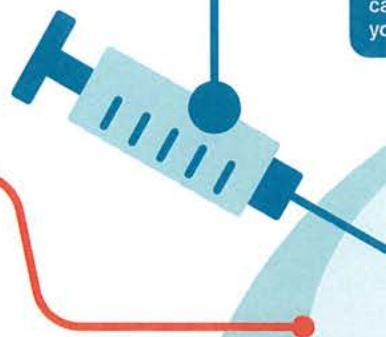
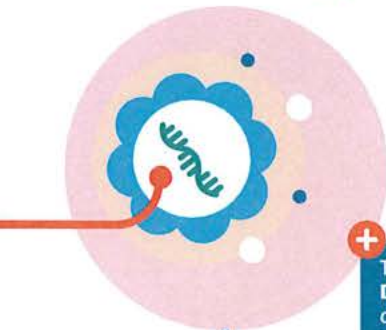
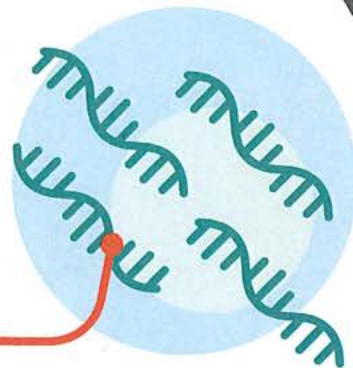
The vaccine is made of mRNA wrapped in a coating that makes delivery easy and keeps the body from damaging it.

How does the vaccine work?

The mRNA in the vaccine teaches your cells how to make copies of the **spike protein**. If you are exposed to the real virus later, your body will recognize it and know how to fight it off.

Getting vaccinated?

For information about COVID-19 vaccine, visit: [cdc.gov/coronavirus/vaccines](https://www.cdc.gov/coronavirus/vaccines)



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The vaccine **DOES NOT** contain **ANY** virus, so it cannot give you COVID-19.

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When your body responds to the vaccine, it can sometimes cause a mild fever, headache, or chills. This is completely normal and a sign that the vaccine is working.

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After the mRNA delivers the instructions, your cells break it down and get rid of it.

Antibody



