

Understanding the Viral Vector COVID-19 Vaccine

A viral vector vaccine for COVID-19 is now available. You may also hear it called “adenovirus type 26 (Ad26)” vaccine. What do you need to know about getting this COVID-19 vaccine? What can you expect after you get it?

Viral vector COVID-19 vaccine fast facts

- The vaccine is given as a shot in a muscle in your upper arm.
- You will need 1 dose of the vaccine.
- The viral vector vaccine does not use live, dead, or weak COVID virus.
- The vaccine will not give you COVID-19.
- The vaccine will not make you sick with another virus.
- Side effects of the vaccine mean your immune system is working, not that you have the virus.

What does the viral vector COVID-19 vaccine do?

This COVID-19 vaccine has been shown to help prevent moderate to severe COVID-19 illness and the need for hospital care. If you get the virus after you get the vaccine, it may help your symptoms be milder. You are less likely to need time in the hospital. The COVID-19 vaccine may also help protect people around you from getting the infection.

COVID-19 vaccines may also lead to more widespread changes. The more people who get the COVID-19 vaccine, the less likely the virus will be able to spread in the community. As more people get the vaccine, local and regional policies may be able to change about what types of businesses can be open and how people can gather together.

Schools may back in session in person faster. Workplaces may reopen. Events may be allowed, travel may resume for many people, and it may be easier to see family and friends.

When can I get a COVID-19 vaccine?

Not everyone can get a COVID-19 vaccine right away. It will take a while for the vaccine to be available for many people.



Contact your healthcare provider, pharmacy, or your local or state health department to see when you're eligible to get the vaccine.

Should I get a COVID-19 vaccine?

The most important thing to do is talk with your healthcare provider. The vaccines are approved for adults age 18 and older. Experts don't yet know how well the vaccine works in children younger than 16 or how safe it is for them. They also don't have this information for pregnant or breastfeeding people, but research is being done. Talk with your provider about your specific situation and risk.

People who have had COVID-19 may still be helped by the vaccine. Researchers don't yet exactly know how long natural immunity lasts after you have COVID-19. Your healthcare provider may advise you to get the vaccine if you had COVID-19 more than 90 days ago, if vaccine supplies are available, and if you're at high risk.

Tell your healthcare provider if you have ever had a severe allergic reaction to food or medicine. Talk with them about your risks if you carry an epinephrine autoinjector. This may affect your provider's advice to you about the vaccine.

How does a viral vector COVID-19 vaccine work?

Researchers make this vaccine with a viral vector. This means they use another type of virus to carry instructions into your body's cells. The virus is an adenovirus. This is a very common type that causes colds. For this vaccine, adenovirus type 26 (Ad26) is used. But this virus has been changed so it can't reproduce in your cells or cause illness. This means you can't get a cold from the vaccine. Instead, it has been given instructions to tell your cells how to make a harmless piece of a protein called a spike protein.

A spike protein is found on the outside of the SARS-CoV-2 virus that causes COVID-19. Your immune system sees this spike protein as a threat, and creates antibodies and other defenses against it.

After the spike protein is found and attacked by your immune cells, the instructions and the viral vector are destroyed. Antibodies and immune cells against the spike protein of SARS-CoV-2 are now part of your immune system.



This will help your body's immune system recognize and fight the real SARS-CoV-2 virus if it ever shows up. It's kind of like recognizing someone by the hat they wear. Your body is then prepared to spot COVID-19 and fight it off before it grows in your body's cells.

How was this COVID-19 vaccine approved for safety?

The COVID-19 viral vector vaccine has passed many tests in labs and in tens of thousands of people, and meets strict standards from the FDA.

The vaccine was tested first in animals. It was then tested in a series of clinical trials that included thousands of people. All of the data from these tests was collected and submitted to the FDA and other scientific groups. These committees of scientists and public health experts carefully look at the data to see if a vaccine is safe and effective. If the vaccine meets the FDA's strict standards of safety and quality, the agency tells the vaccine company they can make the vaccine for emergency use.

How is this vaccine ready so quickly?

Researchers have been studying and using viral vectors for vaccines and other uses for decades.

Vaccines have typically taken longer to be approved and come to market. But over many years of creating vaccines, research groups and public health agencies have been making the vaccine process work faster. For COVID-19, a special program called Operation Warp Speed (OWS) was created to help get COVID-19 vaccines ready even more quickly.

OWS is a partnership of the U.S. Department of Health and Human Services, the U.S. Department of Defense, and many medical research and manufacturing groups. These organizations agreed to work together as closely as possible to communicate and move through a robust process to develop safe COVID-19 vaccines more quickly. Learn more about [Operation Warp Speed](#).

How much does the vaccine cost?

The U.S. government is providing the vaccine free to U.S. residents. But the site where you get your vaccine may bill a fee to your health insurer for giving you the vaccine. Talk with your health insurer, local pharmacy, employer, or healthcare provider to find out more about a



possible fee. You can't be denied a vaccine if you don't have health insurance or can't pay the fee yourself.

Getting the viral vector COVID-19 vaccine

The vaccine is given as a shot in a muscle in your upper arm. You will need one dose.

Follow instructions from the healthcare staff. Tell the staff if you have ever had a severe allergic reaction to food or medicine, or carry an epinephrine autoinjector. Tell them if you feel any reaction after you have the shot. You may be asked to stay for some time after getting the vaccine so you can be monitored.

Side effects: What to report

The vaccine will have side effects for some people. A vaccine activates a person's immune system. It causes the immune system to create antibodies and immune cells to fight off a specific virus or bacteria. When your immune system goes into action, you may feel your immune system kick into gear as though it's fighting an illness. This does not mean you are infected with an illness. It means that your immune system is working.

People in the COVID-19 vaccine trials for this vaccine commonly had soreness where the shot was given, tiredness, headaches, muscle aches, and nausea for a day or two. Fewer people had redness and swelling at the injection site. These are all signs that your immune system is working on its defense. You can get these kinds of effects after many kinds of vaccines. But these symptoms should last a short time. In comparison, COVID-19 symptoms can be severe and last much longer, and cause complications, long-term illness, and death. The FDA approval process makes sure that the discomfort and risks of a vaccine outweigh the risks and complications of the illness it helps prevent.

Allergic reactions

In general, the COVID-19 vaccines are very safe. They have been tested on thousands of people. Non-severe allergic reactions have happened in a few people up to 4 hours after getting the vaccine. The vaccine clinic may ask you to stay on-site for a period of time after you get the vaccine. This is to make sure you don't have an immediate reaction, and to treat you if you have one.



Talk with your healthcare provider before you get a COVID-19 vaccine. Tell them if you have ever had an immediate reaction to any vaccine, even if the reaction was not severe. Your provider will help you weigh the risks and benefits of the COVID-19 vaccine for you.

The CDC has a smartphone app called V-Safe to help you report side effects. To access this app, see "To learn more" below.

Severe symptoms

If you get a COVID-19 vaccine and think you may be having a severe allergic reaction after leaving the vaccine clinic, call 911. Severe symptoms include:

- Trouble breathing
- Wheezing
- Trouble swallowing or feeling like your throat is closing
- Cool, moist, pale, or blue-tinted skin
- Hoarse voice or trouble speaking
- Chest pain
- Fainting
- Swelling in the eyes, mouth, face, or tongue
- Seizure
- Feeling very drowsy or having trouble awakening
- Fast heart rate
- Nausea, vomiting, diarrhea, stomach cramps, or abdominal pain

After you get the COVID-19 vaccine

When you get any COVID-19 vaccine:

- It's still possible to get COVID-19. Like most vaccines, the COVID-19 vaccines are not 100% effective at preventing the disease. You should still take care to prevent contact with sick people and follow local advice about staying safe.
- You should still follow instructions for masks and social distancing. Follow your local, state, and national instructions about wearing a mask. Follow guidelines about social distancing and staying away from crowds.

Talking with your healthcare provider



You may have a lot of questions about the vaccine for yourself. Should you get it? If so, when? What are the risks and benefits to you? The best way to answer these questions is to talk with your healthcare provider. They can let you know when and what kind of vaccine is available, and what you should consider.

To learn more

- [CDC: COVID-19 Vaccines](#)
- [FDA: COVID-19 Vaccines](#)
- [Operation Warp Speed](#)
- [V-Safe After Vaccination Health Checker](#)