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COVID-19 vaccines

COVID-19 vaccines are used to prepare the body's immune system to protect against COVID-19.

Everyone ages 6 months and older should get a 2024-2025 COVID-19 vaccine. This includes pregnant women and those planning to become pregnant. You should get an updated 2024-2025 COVID-19 vaccine even if:

- You have already had COVID-19
- You previously have been vaccinated with earlier versions of the vaccine

Information

HOW COVID-19 VACCINES WORK

COVID-19 vaccines protect people from getting COVID-19 and from getting more severe symptoms if they do get COVID-19. These vaccines teach your body how to defend against the SARS-CoV-2 virus, which causes COVID-19.

COVID-19 vaccines have been shown to do a very good job of:

- Preventing infection with the SARS-CoV-2 virus, which causes COVID-19
- Protecting against serious illness, hospitalization, and death from COVID-19
- Reducing the risk of people spreading COVID-19



mRNA VACCINES

The mRNA vaccines approved in the United States work differently from many other vaccines.

- COVID-19 mRNA vaccines use messenger RNA (mRNA) to tell cells in the body how to briefly create a harmless piece of spike protein that is unique to the SARS-CoV-2 virus. Cells then get rid of the mRNA.
- This spike protein triggers an immune response inside your body, making antibodies that protect against COVID-19. Your immune system then learns to attack the SARS-CoV-2 virus if you are ever exposed to it.
- There are two mRNA COVID-19 vaccines currently approved for use in the United States, the Pfizer-BioNTech and the Moderna COVID-19 vaccines.

The COVID-19 mRNA vaccine is given as an injection (shot) in the arm. The 2024-2025 mRNA vaccines protect against the current strains of the COVID-19 virus.

SUBUNIT VACCINE

The Novavax vaccine is a protein subunit vaccine. The vaccine includes harmless pieces of the spike protein that causes COVID-19. The vaccine triggers the body to develop antibodies to protect you from the virus. The 2024-2025 Novavax vaccine also protects against current strains of the COVID-19 virus.

VACCINATION SCHEDULE

The vaccination schedule is based on your age, vaccination history, and whether you are moderately or severely immunocompromised.

- **Everyone ages 5 years and older** should get 1 dose of the 2024-2025 Pfizer-BioNTech or Moderna COVID-19 vaccine. People age 65 and older need 2 doses, 2 to 6 months apart to be up to date.
- **People who are moderately or severely immunocompromised** may get additional doses of the 2024-2025 Pfizer-BioNTech or Moderna COVID-19 vaccines. Talk with your health care provider about additional doses.
- **Children ages 6 months and older** may need multiple doses of the 2024-2025 Pfizer-BioNTech or Moderna COVID-19 vaccines, depending on their COVID-19 vaccination history. Talk with your provider about what is right for your child.
- **People ages 12 years and older** also have the option to get the 2024-2025 Novavax vaccine. You will get 1 dose of the vaccine unless you have never received any COVID-19 vaccine before. In that case, you will need 2 doses of the 2024-2025 Novavax vaccines to be up to date. People age 65 and older need a 3rd vaccine dose of any type 6 months later.

People who recently had COVID-19 may delay getting a COVID-19 vaccine for 3 months. You are much less likely to get COVID-19 in the weeks and months after having the illness. You may choose to get the vaccine sooner if you or someone in your family are at severe risk of illness or if there are high local rates of COVID-19.

VACCINE MYTHS

COVID-19 vaccines:

- **Do not** contain any live virus, and they cannot give you COVID-19
- **Do not** affect or interfere with your genes (DNA)
- **Do not** affect or interfere with pregnancy, nor do they make you infertile

To get up-to-date accurate information about COVID-19 vaccines, go to the Centers for Disease Control and Prevention (CDC) website:

- COVID-19 vaccines - www.cdc.gov/covid/vaccines/index.html [<https://www.cdc.gov/covid/vaccines/index.html>]

VACCINE SIDE EFFECTS

While COVID-19 vaccines will not make you sick, they may cause certain side effects and flu-like symptoms. This is normal. These symptoms are a sign that your body is making antibodies against the virus.

Side effects can vary from person to person. Common side effects include:

- Pain, redness, or swelling on the arm where you got the shot
- Tiredness
- Headache
- Muscle pain
- Chills
- Fever
- Nausea
- Swollen lymph nodes



 ADAM

Some side effects from the shot may affect your ability to do daily activities, but any side effects will go away in a few days. Any side effects from the vaccine are far less dangerous than the potential for serious illness or death from COVID-19.

HOW TO GET THE VACCINE

There are several ways you can look for vaccination providers near you.

- Ask your health care provider if they offer COVID-19 vaccines.
- Check your local pharmacy's website or call the pharmacy to see if vaccination appointments are available.

- Contact your state or local health department [<https://www.cdc.gov/public-health-gateway/php/communications-resources/health-department-directories.html>] to find additional vaccination locations in your area.
- Go to the CDC website Vaccines.gov/en/ [<https://Vaccines.gov/en/>]

Learn what to expect when you get your COVID-19 vaccine.

VACCINE SAFETY

The safety of vaccines is the top priority, and COVID-19 vaccines have passed rigorous safety standards before approval. Millions of people have received the vaccine, and no long-term side effects have been reported. They continue to be closely monitored to ensure they are safe and effective.

There have been reports of some people who have had an allergic reaction to the current vaccines. So it is important to follow certain precautions:

- If you have ever had a severe allergic reaction (anaphylaxis) to a particular type of COVID-19 vaccine, you should not get that vaccine. You may be able to get another type of COVID-19 vaccine.
- If you have a non-severe allergic reaction after getting the first shot of the COVID-19 vaccine, you may be able to get another dose in some cases. Your provider may refer you to an allergy and immunology provider for care before considering getting the vaccine.
- If you only had a skin rash on the arm in which you got the shot (COVID-19 arm), you should still get additional shots.

If you have had an allergic reaction, even if not severe, to other vaccines or injectable therapies, you should ask your provider if you should get a COVID-19 vaccine. Your provider will help you decide if it is safe to get vaccinated.

Serious health events from COVID-19 vaccines, such as an allergic reaction, are rare. Adverse events after COVID-19 vaccination are very rare.

Rare cases of myocarditis (inflammation of the heart muscle) and pericarditis (inflammation of the outer lining of the heart) have been reported in children and teens ages 5 years and older after getting the COVID-19 vaccine.

This reaction has tended to occur more often in male adolescents and young adults ages 12 to 39 years. However, it has also occurred in females, in other age groups, after other doses, and after receiving the Novavax vaccine.

- It occurs more often after getting a second dose, most often within 7 days after vaccination. Studies show that this rare risk may be reduced by waiting 8 weeks between the first and second dose.
- With proper care and rest, most people who had the reaction got better quickly without any lasting effects.
- For people who had this rare reaction, it is important to talk with a cardiologist (heart doctor) about how and when to return to exercise and sports.

Symptoms of myocarditis and pericarditis include:

- Chest pain
- Shortness of breath
- Fast-beating heart, fluttering, or pounding heart

If your child or teenager has any of these symptoms, get medical help right away.

All these associations are so rare that they should not cause hesitation in receiving any of these vaccines.

CDC recommends that people may still get vaccinated if they have a history of:

- Severe allergic reactions not related to vaccines or injectable medicines -- such as food, pet, venom, environmental, or latex allergies
- Allergies to oral medicines or a family history of severe allergic reactions

Alternative Names

Vaccines for COVID-19; COVID-19 vaccinations; COVID-19 shots; Vaccinations for COVID-19; COVID-19 immunizations; COVID-19 prevention - vaccines; mRNA vaccine - COVID-19; COVID-19 vaccine booster shots; Booster shots for COVID-19

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