

COVID-19 Vaccine Frequently Asked Questions

What vaccines have been authorized by the FDA?

On Friday, December 11, the FDA issued Emergency Use Authorization (EUA) for the Pfizer vaccine. This is the only vaccine currently allowed to be distributed in the United States. The FDA continues the process of evaluating other vaccine candidates for EUA.

Are the COVID-19 vaccines safe?

mRNA vaccines are being held to the same rigorous safety and effectiveness standards as all other types of vaccines in the United States. The only COVID-19 vaccines the Food and Drug Administration (FDA) will make available for use in the United States (by approval or emergency use authorization) are those that meet these standards.

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

This vaccine process was rushed. How do I trust that it is safe and has followed proper processes?

While this vaccine was developed quickly, that was a product of efficient work and unprecedented collaboration. All vaccines undergo a series of rigorous clinical trials using thousands of study participants to generate data and other information for the Food and Drug Administration (FDA) to determine their safety and effectiveness to approve or authorize for emergency use. Following approval or authorization, many vaccine safety monitoring systems watch for adverse events or possible side effects. <https://www.cdc.gov/coronavirus/2019-ncov/vaccines/safety.html>

What is mRNA?

mRNA vaccines are a new type of vaccine that are relatively quick and inexpensive to make, and potentially safer than traditional vaccines. To trigger an immune response, many vaccines use a weakened or inactivated virus. Instead, mRNA vaccines use a small piece of the genetic code of the virus that teaches our cells how to make a piece of COVID-19 that triggers an immune response inside our bodies.

That immune response produces antibodies which protects us from getting infected if the real virus enters our bodies. In other words, mRNA vaccines use a small sequence of RNA from the spike of the COVID virus.

This enables our bodies to develop an immune response to the spike. This is enough for our immune system to identify the whole virus and protect us.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5906799/>

https://www.nejm.org/doi/full/10.1056/NEJMoa2022483?query=featured_coronavirus

How effective are the vaccines?

Pfizer is reporting that their vaccine is 95% effective against COVID-19, with one vaccinated patient developing severe COVID infection. Moderna is reporting a 94.1% effectiveness against COVID-19 and 100% effectiveness against severe COVID-19 for their vaccine.

Effectiveness for both vaccines were consistent across all age, race and ethnicity, and gender demographics.

Vaccine details:

The Pfizer vaccine requires two doses separated by at least 21 days, but no more than 28 days.

The Moderna vaccine requires two doses separated by at least 28 days.

Getting both doses is key to full vaccine effectiveness.

How long will immunity last?

It is too early to determine how long immunity will last. On-going research is taking place to determine if any additional inoculations (besides the two initial injections) will be needed.

What are the expected side effects?

The most common adverse reactions included injection site pain and redness, fatigue, muscle and/or joint pain, headache, possibly even feeling poorly for a day or so. The COVID-19 vaccine does not give you COVID-19. These side effects show that the immune system is reacting the way it is supposed to in order to fight the virus, should you become exposed.

Based upon preliminary data, the first dose has fewer side effects than the second dose and older recipients experience fewer side effects.

Jackson et al. An mRNA Vaccine against SARS-CoV-2- Preliminary report. NEJM 2020; 20:1920-1931. <https://www.nejm.org/doi/full/10.1056/nejmoa2022483>

Walsh et al. Safety and immunogenicity of two RNA-Based COVID-19 vaccine candidates. NEJM 2020; online publication Oct 14. <https://www.nejm.org/doi/full/10.1056/NEJMoa2027906>

Anderson et al. Safety and immunogenicity of SARS-CoV-2 mRNA-1273 vaccine in older adults. NEJM 2020; online publication Sept 29
<https://www.nejm.org/doi/full/10.1056/NEJMoa2028436>

Walsh et al. Safety and immunogenicity of two RNA-Based COVID-19 vaccine candidates. NEJM 2020; online publication Oct 14 Data from published Phase I/II trials Community-dwelling older adults <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7583697/>

What are the differences between vaccines?

The CDC reports that currently there are three main types of COVID-19 vaccines that are undergoing large-scale clinical trials in the United States.

mRNA vaccines contain material from the virus that gives our cells instructions for how to make a harmless piece of COVID-19. Our bodies recognize that the piece should not be there and builds an immune response that will remember how to fight the virus that causes COVID-19 if we are infected in the future.

Protein subunit vaccines include harmless pieces of the virus that cause COVID-19 instead of the entire virus. Once vaccinated, our immune system recognizes that the proteins don't belong in the body and builds an immune response. If we are ever infected in the future, our immune system will recognize and fight the virus.

Vector vaccines contain a weakened version of a live virus—a different virus than the one that causes COVID-19—that has genetic material from the virus that causes COVID-19 inserted in it. Once it is inside our cells, the genetic material gives cells instructions to make a small piece of the COVID-19 virus. This prompts our bodies to build an immune response that will remember how to fight that virus if we are infected in the future.

https://www.cdc.gov/coronavirus/2019-ncov/vaccines/different-vaccines/how-they-work.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fcoronavirus%2F2019-ncov%2Fvaccines%2Fabout-vaccines%2Fhow-they-work.html

Who can be vaccinated?

There are currently no contraindications (reasons why a drug/medication should not be used) for the vaccines. The FDA will determine what age groups and other populations are eligible for each vaccine. Vaccine trials have only recently included children.

The FDA has stated pregnant women can receive the Pfizer vaccine. They are encouraged to discuss the benefits and any risks with their medical provider. The Pfizer vaccine has been approved for everyone 16 and older.

If I have a pre-existing condition, should I be more cautious in receiving the vaccine?

Persons at risk for complications from COVID-19 infection are recommended to get vaccinated as soon as vaccine becomes available to them.

Isn't it better to wait and see that it is working and safe before I receive the vaccine?

Clinical trials of COVID-19 vaccines must first show they are safe and effective before any vaccine can be authorized or approved for use. The known and potential benefits of a COVID-19 vaccine must outweigh the known and potential risks of the vaccine for use under what is known as an Emergency Use Authorization (EUA). When the FDA authorizes use of a vaccine, this means the vaccine is determined to be safe and effective. The U.S. vaccine safety system ensures that all vaccines are as safe as possible. Safety is a top priority while federal partners work to make a coronavirus disease 2019 (COVID-19) vaccine(s) available. Following approval or authorization, many vaccine safety monitoring systems watch for adverse events or possible side effects.

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

Can I still contract COVID-19 after taking the vaccine?

Early clinical trials only tracked how many vaccinated people became ill with COVID-19. That leaves open the possibility that some vaccinated people get infected without developing symptoms and could then silently transmit the virus to others.

Additionally, it typically takes a few weeks for the body to build immunity 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 get sick. This is because the vaccine has not had enough time to provide protection. We won't know how long immunity produced by vaccination lasts until we have more data on how well it works.

If I take the vaccine, can I stop wearing a mask?

NO. Early clinical trials only tracked how many vaccinated people became ill with COVID-19. That leaves open the possibility that some vaccinated people get infected without developing symptoms and could then silently transmit the virus to others. While experts learn more about the protection that COVID-19 vaccines provide under real-life conditions, it will be important for everyone to continue using all the tools available to us to help stop this pandemic, like covering your mouth and nose with a mask, washing hands often and staying at least 6 feet away from others. Together, COVID-19 vaccination and following the CDC's recommendations for **how to protect yourself and others** will offer the best protection from getting and spreading COVID-19.

Once the vaccine is distributed to the general public, who will choose who gets the vaccine next and how will I know when I can get the vaccine?

- Phase 1 will begin when there is limited vaccine availability and will focus on target priority groups to receive vaccination. These groups will include those at highest risk of exposure to or developing complications from COVID-19, including:
 - Healthcare workers, residents and staff of long-term care facilities, first responders
 - People at significantly higher risk of severe COVID-19 illness
- Phase 2 will include people in critical infrastructure roles, including essential non-healthcare and transportation workers, and people at moderately higher risk of severe COVID-19 illness.
- Phase 3 will be a wide-scale distribution of the vaccine associated with broad availability to the general population of the state.

Where can I get a vaccine?

The initial distribution of vaccine will be limited until manufacturing ramps up. During the first phase of limited supply, the Federal government will ship vaccine directly to hospitals, contracted pharmacies and State Health Departments. State governments will prioritize groups who should receive the initial doses.

The first groups recommended to receive vaccine are health care workers and staff and residents of nursing homes. As the supply of vaccine increases, vaccine will become available to more people until all who want vaccine are able to get it.

Will families/households be vaccinated at the same time?

Initially, people will need to register individually for vaccine appointments online.

If I had COVID, will the vaccine work on me?

Due to the severe health risks associated with COVID-19 and the fact that re-infection with COVID-19 is possible, people may be advised to get a COVID-19 vaccine even if they have been sick with COVID-19 before.

If I had COVID already, does that mean that I have to wait longer to get vaccine?

No. People who have gotten sick with COVID-19 may still benefit from getting vaccinated. Due to the severe health risks associated with COVID-19 and the fact that re-infection with COVID-19 is possible, people may be advised to get a COVID-19 vaccine even if they have been sick with COVID-19 before. At this time, experts do not know how long someone is protected from getting sick again after recovering from COVID-19. The immunity someone gains from having an infection, called natural immunity, varies from person to person. Some early evidence suggests natural immunity may not last very long.

Will it cost anything to get the vaccine?

According to the CDC, vaccine doses purchased with U.S. taxpayer dollars will be given to the American people at no cost. However, vaccination providers will be able to charge an administration fee for giving the shot to someone. Vaccine providers can get this fee reimbursed by the patient's public or private insurance company or, for uninsured patients, by the Health Resources and Services Administration's Provider Relief Fund.

<https://www.cdc.gov/coronavirus/2019-ncov/vaccines/faq.html#:~:text=Vaccine%20doses%20purchased%20with%20US,the%20shot%20to%20someone.>

If I get ill from taking this vaccine, who will be responsible?

As people get vaccinated, CDC, FDA, and other federal partners will use the following existing, robust systems and data sources to conduct ongoing safety monitoring. CDC is also implementing a new smartphone-based tool called **v-safe** to check-in on people's health after they receive a COVID-19 vaccine. When you receive your vaccine, you should also receive a **v-safe** information sheet telling you how to enroll in **v-safe**. If you enroll, you will receive regular text messages directing you to surveys where you can report any problems or adverse reactions you have after receiving a COVID-19 vaccine. <https://www.cdc.gov/coronavirus/2019-ncov/vaccines/safety.html>