

QUESTIONS ABOUT COVID19 VACCINES? GET THE FACTS.

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What is the COVID19 Vaccine?

Vaccines work with your body to build protection from diseases. It's a preventative measure that helps prevent you from getting sick. The vaccine does not contain the live COVID19 virus. This means that you cannot "get" COVID19 from the vaccine. You cannot test positive for COVID19 from the vaccine because you do not receive any form of the live virus. After vaccination, your body recognizes & fights COVID19, destroying it before you become sick.



The COVID19 vaccine is a messenger-RNA (mRNA) vaccine that has been developed by top scientists, researchers, & health care providers.

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Why were researchers able to develop the COVID19 vaccine in 1 year when it has taken many years for vaccines to be developed in the past?

Research & development of mRNA vaccines has been going on for 30 years. The combination of years of research and the prioritization of COVID19 vaccine development funding in 2020 has allowed the scientific community to develop a COVID19 vaccine rapidly during the pandemic.

The funding for this research was crucial to its speedy development. Instead of funding a few researchers to study each phase of the vaccine trials over several years, federal funds allowed many researchers to look at the vaccine all at the same time. This approach allowed researchers to replicate the study over and over in a short amount of time, shaving off years in the development of the vaccine.

What's the evidence?

The final trials looked like this:

- 43,661 diverse clinical trial participants received 2 doses of vaccine or placebo, 21 days apart
- at the completion of the trial and after exposure to COVID19, 170 individuals tested positive for the virus
- 162 of those cases were in the placebo group, while only 8 cases were in the vaccinated group

These findings helped demonstrate that the vaccine can safely prevent COVID19 in clinical trials. The COVID19 vaccine continues to be evaluated in ongoing clinical trials.

What's the process for approving the use of a vaccine?

The vaccine has gone through the same rigorous Food and Drug Administration process as every other vaccine, meeting all safety standards. No steps were skipped. The US Food and Drug Administration's (FDA's) Center for Biologics Evaluation and Research (CBER) is responsible for regulating vaccines in the United States. The sponsor of a new vaccine product follows a multi-step approval process, which typically includes

- An Investigational New Drug application
- Pre-licensure vaccine clinical trials
- A Biologics License Application (BLA)
- Inspection of the manufacturing facility
- Presentation of findings to FDA's Vaccines and Related Biological Products Advisory Committee (VRBPAC)
- Usability testing of product labeling

After approving a vaccine, FDA continues to oversee its production to ensure continuing safety. The vaccine and its production is monitored and this continues as long as the manufacturer holds a license for the vaccine product. This monitoring includes periodic facility inspections.

Why get vaccinated?

Getting vaccinated is not required but is recommended. The goal of vaccination is to achieve herd immunity. Herd immunity, or community immunity, is when a large part of an area's population is immune to a specific disease. If enough people are resistant to the cause of a disease, such as a virus or bacteria, it has nowhere to go. While not every single individual may be immune, the group as a whole has protection because there are fewer high-risk people overall. The infection rates drop, and the disease peters out. Herd immunity protects at-risk populations. These include babies and those whose immune systems are weak and can't get resistance on their own.

There are two ways herd immunity is achieved: vaccines and natural infection. Vaccines create immunity without causing illness or resulting complications. Herd immunity makes it possible to protect the population from disease, including those who can't be vaccinated, such as newborns or those who have compromised immune systems. Natural infection creates herd immunity when many people in the population have recovered from a disease and have developed antibodies against future infection.

The coronavirus viruses are known to mutate and result in potential variants. While some evidence suggests that these variants are more contagious than the original strain of COVID19, none seem to be resistant to current treatment or vaccines. The approved vaccines in the US appear to be effective against all strands of COVID19 variants. Research experts around the globe are closely monitoring the mutations/variants/strands.

What are the risks involved with getting the vaccine?

The COVID-19 vaccine may cause some mild side effects after the first or second dose. Some of these include pain, redness or swelling where the shot was given, fever, fatigue, headache, muscle pain, chills, and joint pain. Most side effects happen within the first three days after vaccination and typically last only one to two days. Before getting the COVID19 vaccine, you should talk to your vaccination provider. Let them know if you have any medical conditions, including allergies, medications, current symptoms, etc.

Even if you already had COVID-19, the CDC's Advisory Committee for Immunization Practices (ACIP) still recommends vaccination. Reinfection is uncommon in the first 90 days after infection, so you can wait to get vaccinated until 90 days after your infection. If you currently have COVID19, you should wait until you recover and are out of isolation before getting vaccinated.

Do I still have to wear a mask and maintain social distance?

It's important to remember that the duration of protection continues to be studied. Even when vaccinated, you still need to practice public health measures such as wearing a mask, social distancing, washing hands, and avoiding large crowds. To fight this pandemic, we have to use all of the tools we have.

What are some other COVID19 vaccine myths and facts?

1.Myth: the vaccine will give you Covid-19

- Fact: The vaccines will not give you COVID-19.

There is absolutely no way you can get COVID-19 from the vaccine. It is not possible. None of the vaccines currently in development use the live virus. There is nothing in the vaccine that could cause COVID-19.

2.Myth: the vaccine will make you test positive for Covid-19

- Fact: You cannot test positive because of the vaccines

There is no part of the virus in either vaccine. You can't test positive on a PCR or an antigen test. You will test positive for antibodies because your body will have built them up as part of your immune response.

3.Myth: The COVID-19 vaccine is unsafe because it was developed so quickly.

- Fact: The vaccine is proven safe and effective.

Although it was developed in record time, it has gone through the same rigorous Food and Drug Administration process as every other vaccine, meeting all safety standards. No steps were skipped. The clinical trials and safety reviews took about the same amount of time as other vaccines.

4.Myth: The COVID-19 vaccine will alter my DNA.

- Fact: The first vaccines granted emergency use authorization contain messenger RNA (mRNA), which instructs cells to make the “spike protein” found on the new coronavirus.

When the immune system recognizes this protein, it builds an immune response by creating antibodies — teaching the body how to protect against future infection. The mRNA never enters the cell’s nucleus, where our DNA (genetic material) resides. The body gets rid of the mRNA soon after it’s finished using the instructions.

5.Myth: I’ve already been diagnosed with COVID-19, so I don’t need to receive the vaccine.

- Fact: If you have already had COVID-19, there’s evidence that you can still benefit from the vaccine.

At this time, experts don’t know how long someone will have protection 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.

6.Myth: Once I receive the COVID-19 vaccine, I no longer need to wear a mask.

- Fact: Masking, handwashing, and physical distancing remain necessary until a sufficient number of people are immune.

The best protection we can offer each other right now is to continue to follow current guidelines. As more people are vaccinated, and experts have a better idea of how long natural and vaccine immunity last, public health experts will update their guidance as necessary.

7.Myth: The COVID-19 vaccine includes a tracking device.

- Fact: A video shared thousands of times on Facebook makes false claims about the products of syringe maker Apject Systems of America, which has a contract with the government to provide medical-grade injection devices for vaccines.

The company has an optional version of its product that contains a microchip on the syringe *label* that helps providers confirm a vaccine dose’s origin. The chip itself is not in the syringe and is never injected into the person who is getting the vaccine.

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