



Can the mRNA vaccine give someone COVID-19?

No, they cannot give someone COVID-19. mRNA vaccines do not use the live virus that causes COVID-19.

Will the mRNA vaccine affect or alter my DNA in any way?

No, mRNA never enters the nucleus of the cell, which is where our DNA (genetic material) is kept. The cell breaks down and gets rid of the mRNA soon after it is finished using the instructions.

Are mRNA Vaccines new?

mRNA Vaccines are new, but not unknown. Researchers have been studying and working with mRNA vaccines for decades. Interest has grown in these vaccines because they can be developed in a laboratory using readily available materials. This means the process can be standardized and scaled up, making vaccine development faster than traditional methods of making vaccines.

mRNA vaccines have been studied before for flu, Zika, rabies, and cytomegalovirus (CMV). As soon as the necessary information about the virus that causes COVID-19 was available, scientists began designing the mRNA instructions for cells to build the unique spike protein into an mRNA vaccine. Future mRNA vaccine technology may allow for one vaccine to provide protection for multiple diseases, thus decreasing the number of shots needed for protection against common vaccine-preventable diseases. Beyond vaccines, cancer research has used mRNA to trigger the immune system to target specific cancer cells.

How does an mRNA vaccine work?

mRNA vaccines contain material from the virus that causes COVID-19 that gives our cells instructions for how to make a harmless protein that is unique to the virus. After our cells make copies of the protein, they destroy the genetic material from the vaccine. Our bodies recognize that the protein should not be there and build T-lymphocytes and B-lymphocytes that will remember how to fight the virus that causes COVID-19 if we are infected in the future.

Are the COVID-19 vaccines rigorously tested?

Yes. Clinical trials are evaluating investigational COVID-19 vaccines in tens of thousands of study participants to generate the scientific data and other information needed by FDA to determine safety and effectiveness. These clinical trials are being conducted according to the rigorous standards set forth by the FDA.

Is the COVID Vaccine free?

Yes. The vaccine is given to people free of charge since the vaccine was purchased with U.S. taxpayer dollars. However, some private vaccination providers are allowed to charge administration or other administrative fees for giving the shot. Vaccination 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.

Can children receive the COVID Vaccine?

Only to teenagers 16 yrs of age and older (as long as they fall into the priority populations in the current phase). Only the Pfizer vaccine included teenagers as young as 16 yrs of age on their initial trials and showed that it was safe and effective. More studies are being carried out on children as young as 12 years of age by Pfizer and Moderna.

I have my first shot, can I still get COVID?

While some experts say that one dose of either the vaccine (Moderna or Pfizer) offer partial protection in the 50%-60% effective range, efficacy after one dose has been less carefully studied. However, both doses of either vaccine are heavily recommended as they are more than 94% effective in the few weeks after receiving both of the doses.

What happens if I don't get my second shot? and what is the time frame of when I should receive the shots?

The currently authorized vaccines to prevent COVID-19 in the United States require 2 shots to get the most protection:

- Pfizer-BioNTech doses should be given 3 weeks (21 days) apart
- Moderna doses should be given 1 month (28 days) apart

You should get your second shot as close to the recommended 3-week or 1-month interval as possible. However, there is no maximum interval between the first and second doses for either vaccine. You should not get the second dose earlier than the recommended interval.

Can the vaccine give someone COVID-19? Will I test positive for COVID if I take the vaccine?

No, they cannot give someone COVID-19. mRNA vaccines do not use the live virus that causes COVID-19.

If I already had COVID-19 and recovered, is it necessary for me to be vaccinated with the COVID-19 vaccine?/How long am I "naturally immune" after recovering from COVID-19?

Yes. Due to the severe health risks associated with COVID-19 and the fact that reinfection with COVID-19 is possible, you should be vaccinated regardless of whether you already had COVID-19 infection. If you were treated for COVID-19 symptoms 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.

How long am I "naturally immune" after recovering from COVID-19?

Experts do not yet 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. It is rare for someone who has had COVID-19 to get infected again. It also is uncommon for people who do get COVID-19 again to get it within 90 days of when they recovered from their first infection. We won't know how long immunity produced by vaccination lasts until we have more data on how well the vaccines work.

Both natural immunity and vaccine-induced immunity are important aspects of COVID-19 that experts are working to learn more about, and CDC will keep the public informed as new evidence becomes available.