COVID-19

Myths and Facts about COVID-19 Vaccines

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How do I know which COVID-19 vaccine information sources are accurate?

Accurate vaccine information is critical and can help stop common myths and rumors.

It can be difficult to know which sources of information you can trust. Before considering vaccine information on the Internet, check that the information comes from a credible source and is updated on a regular basis. Learn more about finding credible vaccine information.

More Questions? See answers to other commonly asked questions about COVID-19 vaccination.

Bust Common Myths and Learn the Facts

Can COVID-19 vaccines cause variants?

No

. COVID-19 vaccines do not create or cause variants of the virus that causes COVID-19.

New variants of a virus happen because the virus that causes COVID-19 constantly changes through a natural ongoing process of mutation (change). Even before the COVID-19 vaccines, there were several variants of the virus. Looking ahead, variants are expected to continue to emerge as the virus continues to change.

COVID-19 vaccines can help prevent new variants from emerging. As it spreads, the virus has more opportunities to change. High vaccination coverage in a population reduces the spread of the virus and helps prevent new variants from emerging. CDC recommends that everyone 12 years of age and older get vaccinated as soon as possible.

Learn more about variants.

Are all events reported to the Vaccine Adverse Event Reporting System (VAERS) caused by vaccination?

No.

 VAERS data alone cannot determine if the reported adverse event was caused by a COVID-19 vaccination. Anyone can report events to VAERS, even if it is not clear whether a vaccine caused the problem. Some VAERS reports may contain information that is incomplete, inaccurate, coincidental, or unverifiable. These adverse events are studied by vaccine safety experts who look for unusually high numbers of health problems, or a pattern of problems, after people receive a particular vaccine.

Recently, the number of deaths reported to VAERS following COVID-19 vaccination has been misinterpreted and misreported as if this number means deaths that were proven to be caused by vaccination. Reports of adverse events to VAERS following vaccination, including deaths, do not necessarily mean that a vaccine caused a health problem.
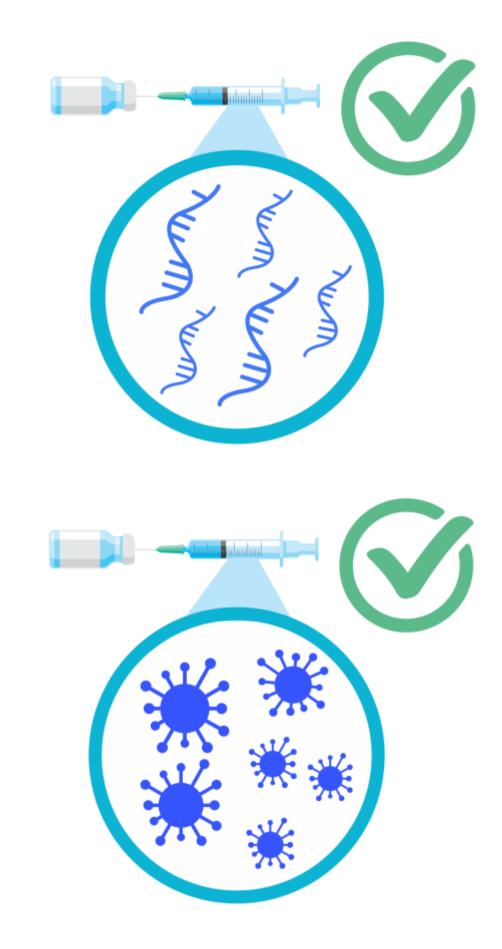
Learn more about VAERS.

Is the mRNA vaccine considered a vaccine?

Yes. mRNA vaccines, such as Pfizer-BioNTech and Moderna, work differently than other types of vaccines, but they still trigger an immune response inside your body. This type of vaccine is new, but research and development on it has been under way for decades.

The mRNA vaccines do not contain any live virus. Instead, they work by teaching our cells to make a harmless piece of a "spike protein," which is found on the surface of the virus that causes COVID-19. After making the protein piece, cells display it on their surface. Our immune system then recognizes that it does not belong there and responds to get rid of it. When an immune response begins, antibodies are produced, creating the same response that happens in a natural infection.

In contrast to mRNA vaccines, many other vaccines use a piece of, or weakened version of, the germ that the vaccine protects against. This is how the measles and flu vaccines work. When a weakened or small part of the virus is introduced to your body, you make antibodies to help protect against future infection.

Learn more about how mRNA COVID-19 vaccines work.

Do COVID-19 vaccines contain microchips?

No. COVID-19 vaccines do not contain microchips. Vaccines are developed to fight against disease and are not administered to track your movement. Vaccines work by stimulating your immune system to produce antibodies, exactly like it would if you were exposed to the disease. After getting vaccinated, you develop immunity to that disease, without having to get the disease first.

Learn more about the ingredients in the COVID-19 vaccinations authorized for use in the United States.

Learn more about how mRNA COVID-19 vaccines work.

Can receiving a COVID-19 vaccine cause you to be magnetic?

No. Receiving a COVID-19 vaccine will not make you magnetic, including at the site of vaccination which is usually your arm. COVID-19 vaccines do not contain ingredients that can produce an electromagnetic field at the site of your injection. All COVID-19 vaccines are free from metals.

Learn more about the ingredients in the COVID-19 vaccinations authorized for use in the United States.

Do any of the COVID-19 vaccines authorized for use in the United States shed or release any of their components?

No. Vaccine shedding is the term used to describe the release or discharge of any of the vaccine components in or outside of the body. Vaccine shedding can only occur when a vaccine contains a weakened version of the virus. None of the vaccines authorized for use in the U.S. contain a live virus. mRNA and viral vector vaccines are the two types of currently authorized COVID-19 vaccines available.
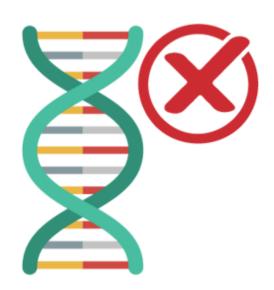
Learn more about mRNA and viral vector COVID-19 vaccines.

Will a COVID-19 vaccine alter my DNA?

No. COVID-19 vaccines do not change or interact with your DNA in any way. Both mRNA and viral vector COVID-19 vaccines deliver instructions (genetic material) to our cells to start building protection against the virus that causes COVID-19. However, the material never enters the nucleus of the cell, which is where our DNA is kept.

Learn more about mRNA and viral vector COVID-19 vaccines.

Other Myths and Facts

Is it safe for me to get a COVID-19 vaccine if I would like to have a baby one day?

Yes. COVID-19 vaccination is recommended for everyone 12 years of age or older, including people who are trying to get pregnant now or might become pregnant in the future, as well as their partners.

Currently no evidence shows that any vaccines, including COVID-19 vaccines, cause fertility problems (problems trying to get pregnant) in women or men. Learn more about COVID-19 vaccines and people who would like to have a baby.

Can a COVID-19 vaccine make me sick with COVID-19?

No. None of the authorized COVID-19 vaccines in the United States contain the live virus that causes COVID-19. This means that a COVID-19 vaccine **cannot** make you sick with COVID-19.

COVID-19 vaccines teach our immune systems how to recognize and fight the virus that causes COVID-19. Sometimes this process can cause symptoms, such as fever. These symptoms are normal and are signs that the body is building protection against the virus that causes COVID-19. Learn more about how COVID-19 vaccines work.

Can being near someone who received a COVID-19 vaccine affect my menstrual cycle?

No. Your menstrual cycle cannot be affected by being near someone who received a COVID-19 vaccine.

Many things can affect menstrual cycles, including stress, changes in your schedule, problems with sleep, and changes in diet or exercise. Infections may also affect menstrual cycles.

Will getting a COVID-19 vaccine cause me to test positive for COVID-19 on a viral test

No. None of the authorized and recommended COVID-19 vaccines cause you to test positive on viral tests, which are used to see if you have a **current infection.**

If your body develops an immune response to vaccination, which is the goal, you may test positive on some antibody tests. Antibody tests indicate you had a **previous**

infection and that you may have some level of protection against the virus.

Learn more about the possibility of COVID-19 illness after vaccination

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