

Important Facts about the COVID-19 Vaccines

The U.S. Food & Drug Administration (FDA) has provided emergency use authorization for the use of three vaccines to protect against the virus that causes COVID-19. There is a lot of information, and misinformation, out there about the vaccines. Here are the facts:

The vaccines are safe and effective.

All three vaccines had to go through difficult trials to determine how safe they are and how well they work. The vaccines were found by the FDA to be safe and effective, and no safety concerns were found during the FDA's review. By using a 2-dose system (this means that you will get two separate shots) the vaccines are 95% effective at protecting us against the virus that causes COVID-19. The single-dose Johnson & Johnson vaccine was found to be 72% effective in the United States.

Getting the vaccine will not make you sick with COVID-19.

None of the vaccines that are currently available have any of the live COVID-19 virus inside of them. You may feel some pain in your arm after you get your shot, and you may develop a headache, fever, or feel tired for a few days after getting the vaccine. More serious symptoms are extremely rare.

What are the differences between the three vaccines? Which one should I get?

Any of the vaccines are safe for you to get. The only difference is that the Pfizer vaccine is approved for persons over the age of 16 and the Moderna and Johnson & Johnson vaccines are approved for persons over the age of 18.

Both the Pfizer/BioNTech and Moderna vaccines require two separate doses (two different shots). The time in between the first dose and the second dose differs for the Pfizer/BioNTech and the Moderna vaccines. The recommendation for the Pfizer/BioNTech vaccine is to wait three weeks (21 days) between the first and second doses. For the Moderna vaccine, the recommendation is to wait one month (28 days) between the first and second doses. The J&J vaccine only requires a single dose.

When you receive your first dose, your healthcare provider, pharmacist, or other healthcare worker will schedule your next appointment to receive your second dose based on the timelines above.

You still need to get vaccinated even if you are healthy OR if you have had COVID-19 in the past.

Healthy adults of all ages are still extremely susceptible to getting COVID-19 disease. This is also true of otherwise healthy adults without any co-morbid and/or pre-existing conditions. Even if you do not develop symptoms of COVID-19 or have a severe case of COVID-19, you could still be spreading the virus to others.

While recovering from COVID-19 can give you limited immunity to the virus, no one knows how long this natural immunity will last. You may be able to get the virus again if you do not get a vaccine.

The vaccine will not change your DNA or genetic makeup.

Both the Pfizer-BioNTech and Moderna vaccines are what is known as Messenger RNA (mRNA) vaccines, which helps your body's cells to create a protein, called an antibody, that jumpstarts your immune system to fight the virus. The mRNA never goes into your cells (the nucleus) where your DNA is kept, so it cannot change or harm your DNA. The Johnson & Johnson vaccine is an adenovirus vector vaccine which delivers instructions to our DNA to jumpstart our immune response, protecting us against COVID-19 illness.

Getting the COVID-19 vaccine does not cause infertility.

There is no scientific evidence to suggest that the vaccine could cause infertility in women or men. In addition, infertility is not known to occur as the result of natural COVID-19 disease, further demonstrating that immune responses to the virus, whether caused by infection or a vaccine, are not a cause of infertility.

None of the COVID-19 vaccines were created using fetal tissue.

Fetal tissue was not used during any development or production stages of any of the three currently available COVID-19 vaccines. In other words, no fetal cells were used to manufacture the vaccine, nor are they found inside the vaccine shots you receive from your doctor.

Even if you get the vaccine, you should still wear a mask, wash your hands, and social distance.

Getting the vaccine is another layer of protection against the virus. People who get the vaccine are protected, but still may be able to spread the virus. For the best protection against the virus, you still need to wear a mask, wash your hands, and social distance from others.

The COVID-19 vaccines are not a cure for COVID-19. The vaccines are only one tool in our toolbox to fight the virus. Vaccines are a great step in the right direction for a return to normal. Keep doing your part by getting vaccinated, and continue to wear your mask, wash your hands, and social distance from others.

Content created by Dr. Bryan Mader, Assistant Professor & Health Specialist for the Department of Family and Consumer Sciences. Dr. Mader can be reached at bmader@uaex.edu for further questions.