

COVID-19 VACCINE

# MYTHBUSTING

Now that authorized and recommended COVID-19 vaccines are available in the United States, accurate vaccine information is critical. The healthcare experts at Harris County Public Health caution residents to be on the lookout for misinformation about these vaccines. Rely on the advice of licensed healthcare professionals when it comes to your health recommendations. Mass vaccination is our best hope to end the pandemic. Before giving in to fear of a vaccine, let's separate fact from fiction. Most of the myths about COVID-19 vaccination are easily busted!



STAY SMART. DO YOUR PART.

## **MYTH:**

You will get COVID-19 if you get the vaccine.

## **FACT:**

COVID-19 vaccines will not give you COVID-19.

None of the COVID-19 vaccines currently in development or in use in the United States contain the live virus that causes COVID-19. There are several different types of vaccines in development. However, the goal for each of them is to 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 a sign that the body is building immunity. 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.

## **MYTH:**

COVID-19 vaccines are not safe because they were developed and tested quickly.

## **FACT:**

The COVID-19 vaccine is proven to be safe.

The COVID-19 vaccines are approved by the Federal Drug Administration (FDA). The pandemic warranted an emergency response. However, that does not mean pharmaceutical companies bypassed safety protocols or performed inadequate testing. All the COVID-19 vaccines were subjected to large, rigorous clinical trials. Clinical trials of all vaccines must first show they are safe and effective before any vaccine can be authorized or approved for use, including COVID-19 vaccines.

## MYTH:

You will test positive on a COVID-19 viral test if you have been vaccinated.

## FACT:

COVID-19 vaccines will not cause you to test positive on COVID-19 viral tests.

The recently authorized and recommended vaccines nor the other COVID-19 vaccines currently in clinical trials in the United States cause you to test positive on viral test. If your body develops an immune response, which is the goal of vaccination, there is a possibility you may test positive on some antibody tests. Antibody tests are not used to determine if you have COVID-19. Antibody tests indicate you had a previous infection and that you may have some level of protection against the virus. Experts are currently looking at how COVID-19 vaccination may affect antibody testing results.

## MYTH:

People who have had COVID-19 do not need to get vaccinated.

## FACT:

People who have gotten sick with COVID-19 may still benefit from getting vaccinated.

Harris County residents should get a vaccine even if they have been sick with COVID-19 before because of the severe health risks associated with COVID-19. COVID-19 reinfection is possible, and experts do not know how long someone has protection from reinfection 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. Experts won't know how long the immunity provided by the vaccine lasts until many people are vaccinated and more data becomes available on how well the vaccine works on a mass scale. They are trying to learn more about both natural immunity and vaccine-induced immunity from COVID-19.

## **MYTH:**

You will never contract COVID-19 if you are vaccinated.

## **FACT:**

Getting vaccinated can help prevent getting sick with COVID-19.

The COVID-19 vaccination helps protect you by creating an antibody response without having to experience sickness. You may need additional vaccination in the future and that vaccination isn't a lifetime cure, but mass vaccination can help end the pandemic. While some people infected with COVID-19 experience only mild symptoms or no symptoms, others experience a severe illness or even die. The vaccine will help reduce your risk of getting COVID-19. There is no way to know how COVID-19 will affect you, even if you are not at increased risk of severe complications. If you get sick, you also may spread the disease to friends, family, and others around you while you are sick.

## **MYTH:**

The mRNA vaccine will have an affect on my DNA.

## **FACT:**

Receiving an mRNA vaccine will not alter your DNA.

mRNA stands for messenger ribonucleic acid and can most easily be described as instructions for your body on how to make a protein or even just a piece of a protein. mRNA is not able to alter or modify a person's genetic makeup (DNA). The mRNA from a COVID-19 vaccine never enter the nucleus of the cell, which is where our DNA are kept. This means the mRNA does not touch, affect, or interact with our DNA in any way. Instead, COVID-19 vaccines that use mRNA work with the body's natural defenses to safely develop immunity to disease.

## MYTH:

The viral vector vaccine will affect my DNA.

## FACT:

Receiving a viral vector vaccine will not alter your DNA.

The genetic material delivered by the viral vector in Johnson & Johnson's vaccine does not affect or interact with a person's DNA in any way. Like all vaccines, viral vector vaccines for COVID-19 are rigorously tested for safety before being authorized or approved for use in the United States. Vaccines of this type have been well-studied in clinical trials, and viral vector vaccines have been used successfully to respond to recent Ebola outbreaks. Viral vector vaccines use a modified version of a different virus as a vector to deliver instructions on how to fight the COVID-19 virus to a cell in the form of genetic material (a gene). The vaccine does not cause infection with either COVID-19 or the virus that is used as the vector.