## **Understanding COVID-19 Vaccines**

Stopping COVID-19 requires using all available tools, including vaccination. Vaccines work with your immune system so your body will be ready to fight the virus. Safe and effective vaccines are critical to protecting families and ending the spread of the virus.

Vaccines have been shown as safe and effective in large trials of more than 20,000 people, including Native American participants.

COVID-19 vaccination will help stop this crisis. To stop the spread of the coronavirus in our communities, we need to wear masks, practice social distancing, and get vaccinated as soon as we can! Together, these steps will protect our communities from COVID-19.



Without vaccines, germs can make us sick.



Vaccines help our body fight germs. COVID-19 vaccines help stop people from getting sick with COVID-19.



## COVID-19 vaccines prevent people from getting sick with COVID-19

COVID-19 vaccines approved for use in the U.S. have been shown in large trials to be safe and effective. During the trials, people who got the COVID-19 vaccine were protected from COVID-19 disease.

Like other vaccines used in the U.S., COVID-19 vaccines may cause temporary side effects such as:

- · soreness where the shot is given
- chills or fever
- · headache
- muscle or joint pain
- nausea, vomiting, or diarrhea
- tiredness

Side effects are normal for any vaccine. These side effects tell us that our immune system is working to keep us safe by creating antibodies against COVID-19.

## Vaccines help our body fight germs

Vaccines are instructions we give to our bodies to create defenses against germs, including viruses. A vaccine for a specific virus allows our bodies to create antibodies to fight that virus. Once our bodies learn new instructions we remember them just in case we need to use them again. Vaccines are made in several ways, including using:

- · a weakened, inactive virus
- pieces of the virus, but not the whole thing
- mRNA
- · viral vector

mRNA vaccines deliver instructions to our cells that teach them how to make the spike protein, which is a harmless piece of the COVID-19 virus. Our bodies will then generate anitbodies against the spike protein so that we are protected when we are exposed to the real virus.

Viral vector vaccines use a modified version of a different, harmless virus to deliver important instructions to our cells. This allows our body to produce antibodies needed to fight COVID-19.

COVID-19 vaccines cannot cause COVID-19 disease and do not alter our own DNA.

## Safe and effective vaccines can bring the crisis to an end

Even though COVID-19 vaccines are being produced in a short time, scientists must still go through all required steps to prove they are safe and effective.

The speed by which COVID-19 vaccines were created was possible because a global community of scientists worked together to develop lifesaving treatments. Large trials have confirmed the vaccines to be safe and effective.

In the U.S., multiple vaccines have successfully gone through this process and are FDA approved. Now, millions of people are safely getting vaccinated every day!

COVID-19 vaccines decrease serious illness and death related to COVID-19 complications. COVID-19 vaccines are one tool we can use to end this crisis.



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