CDC Centers for Disease
Control and Prevention

COVID-19

Safety of COVID-19 Vaccines

Updated Apr. 30, 2021   Print

What you need to know

- COVID-19 vaccines are **safe and effective**.
- Millions of people in the United States have received COVID-19 vaccines under the most intense safety monitoring in U.S. history.
- CDC recommends you get a COVID-19 vaccine as soon as possible.
- Many people have reported only mild side effects after COVID-19 vaccination.

Millions of people have safely received a COVID-19 vaccine

Over 245 million doses of COVID-19 vaccine have been given in the United States from December 14, 2020, through May 3, 2021.

COVID-19 vaccines are **safe and effective**. COVID-19 vaccines were evaluated in tens of thousands of participants in clinical trials. The vaccines met the Food and Drug Administration's (FDA) rigorous scientific standards for safety, effectiveness, and manufacturing quality needed to support emergency use authorization (EUA). Learn more about EUAs in this video ⬈ .

Millions of people in the United States have received COVID-19 vaccines, since they were authorized for emergency use by FDA. These vaccines have undergone and will continue to undergo the most intensive safety monitoring in U.S. history. This monitoring includes using both established and new safety monitoring systems to make sure that COVID-19 vaccines are safe.

Results are reassuring

Results from vaccine safety monitoring efforts are reassuring. Some people have no side effects. Others have reported common side effects after COVID-19 vaccination, like

- swelling, redness, and pain at injection site
- fever
- headache
- tiredness
- muscle pain
- chills
- nausea

Serious safety problems are rare

To date, the systems in place to monitor the safety of these vaccines have found only two serious types of health problems after vaccination, both of which are rare. These are anaphylaxis and thrombosis with thrombocytopenia syndrome (TTS) after vaccination with J&J/Janssen COVID-19 Vaccine.

Anaphylaxis

A small number of people have had a severe allergic reaction (called "anaphylaxis") after vaccination, but this is **rare**. Anaphylaxis can occur after any vaccination. If this occurs, vaccination providers have medicines available to effectively and immediately treat the reaction.

After you get a COVID-19 vaccine, you will be asked to stay for 15–30 minutes so you can be observed in case you have a severe allergic reaction and need immediate treatment.

Thrombosis with Thrombocytopenia Syndrome (TTS) after vaccination with J&J/Janssen COVID-19 vaccination

After receiving the J&J/Janssen COVID-19 Vaccine, there is risk for a rare but serious adverse event—blood clots with low platelets (thrombosis with thrombocytopenia syndrome, or TTS). Women younger than 50 years old should especially be aware of their increased risk for this rare adverse event. There are other COVID-19 vaccines available for which this risk has not been seen.

This adverse event is rare, occurring at a rate of about 7 per 1 million vaccinated women between 18 and 49 years old. For women 50 years and older and men of all ages, this adverse event is even more rare.

Long-term side effects are unlikely

Serious side effects that could cause a long-term health problem are extremely unlikely following any vaccination, including COVID-19 vaccination. Vaccine monitoring has historically shown that side effects generally happen within six weeks of receiving a vaccine dose. For this reason, the FDA required each of the authorized COVID-19 vaccines to be studied for at least two months (eight weeks) after the final dose. Millions of people have received COVID-19 vaccines, and no long-term side effects have been detected.

CDC continues to closely monitor the safety of COVID-19 vaccines. If scientists find a connection between a safety issue and a vaccine, FDA and the vaccine manufacturer will work toward an appropriate solution to address the specific safety concern (for example, a problem with a specific lot, a manufacturing issue, or the vaccine itself).

Help protect yourself and others by getting vaccinated

Getting vaccinated against COVID-19 and following CDC recommendations on wearing masks and social distancing are the best ways to protect yourself against COVID-19. CDC recommends you get a COVID-19 vaccine as soon as possible.

CDC, FDA, and other federal agencies will continue to monitor the safety of COVID-19 vaccines as they continue to become more broadly used in the population.

Have you experienced a side effect following COVID-19 vaccination?

You can report it to VAERS ↗ .

More Information

ACIP COVID-19 Vaccines Safety Technical Sub-Group (VaST)

VaST Subgroup Technical Report

Last Updated Apr. 30, 2021