



1. How do vaccines work?

Vaccines help people develop defenses against a virus or other germ. A vaccine introduces a harmless part of that germ — or something created to look or behave like it — into a person's body. The body's immune system develops antibodies that fight that germ and keep the person from getting sick. Later, if the germ is encountered, the immune system can "recognize" it and "remember" how to fight it.

2. Are COVID-19 vaccines safe?

Yes. The COVID-19 vaccines available in the U.S. today have gone through the most intensive safety monitoring in U.S. history. The U.S. Food and Drug Administration (FDA) has authorized for emergency use three COVID-19 vaccines: those made by Pfizer-BioNTech, Moderna and Johnson & Johnson. All have been tested in large clinical trials. The U.S. vaccine safety system works in three key ways:

- **Careful testing.** All vaccines go through clinical trials to test how safe they are and how well they work. The government has very strict rules.
- **Authorization for emergency use.** During public health emergencies, vaccines that meet FDA standards can be authorized based on the best available scientific evidence.
- **Monitoring for problems and side effects.** After authorization, safety reviews continue to track any problems or side effects that may not have been seen during clinical trials.

3. How were the vaccines developed so quickly?

In the past, vaccines have taken years to develop. However, the quick development of these vaccines does not mean safety measures were skipped. Here's why COVID-19 vaccines were ready faster:

- The science used to develop the COVID-19 vaccines has been in progress for years to prepare for virus outbreaks — so the manufacturing process had a head start.
- Vaccine developers did not skip any testing steps. They completed some steps at the same time to gather data as quickly as possible.
- Governments gave money to vaccine developers at the start of the pandemic.
- Many people wanted to help, so there were enough research participants to test the COVID-19 vaccines in large trials of many kinds of people.
- Because the COVID-19 coronavirus is everywhere and spreads easily, many volunteers who got a vaccine were exposed to the virus, so it took a shorter time to see if it worked.
- Companies started making the vaccines as soon as trials were completed.



Use your mobile device's camera to scan this QR code and link to the latest COVID-19 vaccine information.

Facts About COVID-19 Vaccines

Updated 5/10/21

4. Were the vaccines tested on people like me?

The three vaccines were tested and found safe among thousands of people. The clinical trials included underrepresented minorities (about 25% or more of participants), older age groups (about 25% or more) and a significant number of people with conditions such as obesity, diabetes, and heart and respiratory conditions. The trials did not include pregnant women or children under age 12. Trials with these groups are in progress or scheduled to begin soon.

5. Can I get COVID-19 from the vaccines?

You cannot get COVID-19 from the vaccines. They do not contain the live virus that causes COVID-19.

6. Can the vaccine change my DNA?

No. COVID-19 vaccines do not enter the part of your cells where your DNA is located, so they cannot affect your DNA or change your genes.

7. Can my child get a COVID-19 vaccine?

It depends on the age of your child. The FDA has now authorized the Pfizer-BioNTech vaccine for emergency use in children 12 and older. The Moderna and Johnson & Johnson vaccines are currently authorized for emergency use for ages 16 and older. Additional trials including infants and children up to age 12 (with their parents' permission) are still in progress, and the vaccines may not be authorized for those age groups until late 2021 or early 2022.

8. Will the COVID-19 vaccines affect my fertility?

No. Getting a COVID-19 vaccine will not affect your fertility. Women trying to conceive may be vaccinated, and there is no reason to wait to become pregnant after getting a vaccine.

9. Why aren't there vaccines for other viruses, like HIV or those that cause colds?

The thousands of viruses that cause diseases are all very different. Developing vaccines for some viruses is harder than for others. For example, HIV can make itself invisible to our immune system, which makes creating a vaccine difficult. A cold can be caused by hundreds of different viruses, so a vaccine for just one of them would not work very well.

10. I have a medical condition. Is it safe to get a COVID-19 vaccine?

COVID-19 vaccines are safe for people with medical conditions, except for those with an allergy to the vaccine itself. Also, the vaccine may potentially not be as effective in people with impaired immune systems. To learn more, visit hopkinsmedicine.org/coronavirus/covid-19-vaccine/for-patients.html



Use your mobile device's camera to scan this QR code and link to the latest COVID-19 vaccine information.

