

# The COVID-19 vaccine is safe and effective

The COVID-19 vaccine is a vital tool to help end the pandemic. Due to the fast arrival of the vaccine, there's been a lot of conflicting information about its safety and effectiveness. It's OK if you have questions. Here's fact-based information from our medical experts and doctors.

## Vaccine safety and effectiveness

#### Is the COVID-19 vaccine safe?

Yes. Studies including participants with diverse backgrounds, races, and ethnicities have all shown the vaccine to be safe. Millions of people in the United States have received a COVID-19 vaccination, and the vaccines have undergone the most intensive safety monitoring in U.S. history.

#### How effective is the COVID-19 vaccine?

All of the approved COVID-19 vaccines are life-saving vaccines. For a COVID-19 vaccine to receive authorization from the Food and Drug Administration (FDA), it needs to be proven safe, and that it can prevent disease (or decrease its severity) in at least 50% of people who are vaccinated. In clinical trials, the COVID-19 vaccines all showed an 85% or higher efficacy rate for preventing severe COVID-19 illness – showing they're all highly effective.<sup>1</sup>

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<sup>1.</sup> Kathy Katella, "Comparing the COVID-19 Vaccines: How Are They Different?" YaleMedicine.org, May 13, 2021.

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# How was the COVID-19 vaccine developed so quickly?

Researchers began developing a vaccine for COVID-19 in January 2020, based on decades of understanding immune response and how vaccines work. The COVID-19 vaccine went through the exact same development process as any other vaccine — only faster. No shortcuts were taken. Due to the serious public health emergency, the common reasons vaccine development takes a long time were removed. For example:

- Shared research To speed up the process, scientists and researchers shared more than 30 years of research on technology and vaccine development with each other.
- Funding Billions of dollars were urgently invested in vaccine development to help stop the rapid spread of COVID-19.
- Vaccine participants Many people wanted to help and volunteered for clinical trials.
- Rapid results Vaccine results could be measured sooner since high numbers of people were getting infected with COVID-19 so quickly.

Due to all these extraordinary efforts and unprecedented circumstances, the COVID-19 vaccine was developed in record time following all the FDA's safety, effectiveness, and manufacturing standards.

#### Vaccine side effects

#### What are the potential side effects?

Like most vaccines, the COVID-19 vaccines can produce side effects, which are temporary and expected. It's a sign that your body is building immunity to the virus. These side effects may include injection site pain, headache, fatigue, muscle aches, nausea, chills, and fever. Most side effects are usually mild or moderate and resolve within 1 to 2 days.

Women younger than 50 years old should be aware of a rare but increased risk of blood clots with low platelets experienced by a small number of people who received the Johnson & Johnson vaccine. The FDA and the Centers for Disease Control and Prevention (CDC) reviewed the available data and have determined that the known and potential benefits of the Johnson & Johnson vaccine outweigh its known and potential risks.<sup>2</sup>

## Can a COVID-19 vaccination make me sick with COVID-19?

No. None of the approved COVID-19 vaccines or those currently in development in the United States contain the live virus that causes COVID-19. This means that a COVID-19 vaccination can't make you sick with COVID-19.

### Getting a vaccine

#### Is there a cost for the vaccine?

No. You should not be charged anything for a COVID-19 vaccination no matter where you get it.



**<sup>2.</sup>** "CDC Recommends Use of Johnson & Johnson's Janssen COVID-19 Vaccine Resume," CDC.gov, May 6, 2021.