

Frequently asked questions about the COVID-19 vaccine

These vaccines were developed fast. How do we know the vaccine is safe?

A vaccine must be proven to be safe and effective before it's available to the public. That's what the clinical trial process is for.

The COVID-19 vaccines have excellent safety records in clinical trials, where information from tens of thousands of study participants helped the FDA determine the vaccines' safety and effectiveness.

While the COVID-19 vaccines are new, the technology used to develop them—messenger RNA (mRNA) and adenoviruses—has been studied for years. This previous research gave scientists a head start on developing the COVID-19 vaccines.

How effective are the vaccines?

All of the COVID-19 vaccines are highly effective and will help prevent COVID-19—regardless of what kind you get. During clinical trials, Pfizer's vaccine was proven to be 95% effective at preventing COVID-19, and Moderna's vaccine was proven to be 94% effective. Johnson & Johnson's vaccine is 72% effective, which is still above the preferred effectiveness rate for vaccines.

Can I get COVID-19 from the vaccine?

No. The vaccines do not contain a live or weakened version of the virus that causes COVID-19, so the vaccine cannot make you sick with COVID-19.

What's in the COVID-19 vaccine?

The Pfizer and Moderna COVID-19 vaccines contain messenger RNA (mRNA), and Johnson and Johnson's vaccine contains an inactivated adenovirus. None of those cause an infection. The mRNA and adenovirus tell the cells to make a harmless copy of the spike protein, which is found on the surface of the virus that causes COVID-19. This teaches the immune system to recognize and fight the real virus. The material in the vaccine does not stay in the body, and it cannot change your DNA.

The vaccines also lack some other ingredients some people may be concerned about. They do not have:

- Preservatives, such as thimerosal (which contains an organic form of mercury). Most other vaccines do not use thimerosal or mercury.
- Formaldehyde, which is used to help make some vaccines.
- Eggs, latex, or antibiotics. Some people are allergic to these things.
- Microchips. Scientists are not putting microchips in the vaccines to track us. In fact, it's not even possible to do so.

I've heard there are side effects, especially after the second dose. What should I expect?

After getting the vaccine, you may have some side effects. Common side effects include:

- Soreness or redness at the injection site
- Fever
- Chills
- Headache
- Tiredness
- Muscle or joint pain

These are normal signs that your body is building protection, and the symptoms usually go away within a few days.

I wear a mask and social distance. Do I still need to get the vaccine?

Safety precautions and vaccines all help protect you from COVID-19, but they work in different ways. The vaccine helps prepare your immune system to fight the COVID-19 virus if you're exposed to it. Masks and social distancing help limit your exposure and lower the chance of you spreading the virus. To end the pandemic, we need to use all the tools available.