

Pfizer-BioNTech

Type of vaccine: Messenger RNA, or mRNA, a genetic material that tells your body how to make proteins that triggers an immune response inside our bodies

Effectiveness: 95% based on clinical trials

Common side effects: Pain and/or swelling in the arm and tiredness, headache, muscle pain, chills, fever, or nausea in the body that may last two days

Recommended Ages: 16 and older (currently testing the vaccine in kids ages 12-15)

Dosage: Two shots, 21 days apart

Moderna

Type of vaccine: Messenger RNA, or mRNA, a genetic material that tells your body how to make proteins that triggers an immune response inside our bodies

Effectiveness: 94.1% based on clinical trials

Common side effects: Pain and/or swelling in the arm and tiredness, headache, muscle pain, chills, fever, or nausea in the body that may last two days

Recommended Ages: 18 years and older (currently testing the vaccine in kids ages 12-17)

Dosage: Two shots, 28 days apart

Johnson & Johnson

Type of vaccine: A viral vector, it uses a harmless version of a different virus, called a "vector," to deliver information to the body that helps it protect you

Effectiveness: 66.3% effective in clinical trials

Common side effects: Pain and/or swelling in the arm and tiredness, headache, muscle pain, chills, fever, or nausea in the body

Recommended Ages: 18 years and older

Dosage: One shot

Help stop the pandemic by getting vaccinated

Even if you are undocumented and/or don't have insurance, you can get the vaccine—for free.

- ✓ Visit [VaccinateALL58.com](https://www.vaccinateall58.com) for the newest information about when and where the vaccine will be available to you.
- ✓ Sign up at myturn.ca.gov or call 1-833-422-4255 to find out if it's your turn to get vaccinated and schedule vaccination appointments.



Follow us on social media for more COVID-19 tips and information.

@ELSOLNEC    



COVID-19 Response

Different Types of COVID-19 Vaccines:

Understanding How They Work



COVID-19 Response

Understanding the COVID-19 Vaccines and how they are different



COVID-19 vaccines help our bodies develop immunity to the virus that causes COVID-19 without us having to get the illness. Different types of vaccines work in different ways to offer protection. But with all types of vaccines, the body is left with a supply of “memory” T-lymphocytes as well as B-lymphocytes that will remember how to fight that virus in the future.

It typically takes a few weeks after vaccination for the body to produce T-lymphocytes and B-lymphocytes. It is possible that a person could be infected with the virus that causes COVID-19 just before or just after vaccination and then get sick because the vaccine did not have enough time to provide protection.

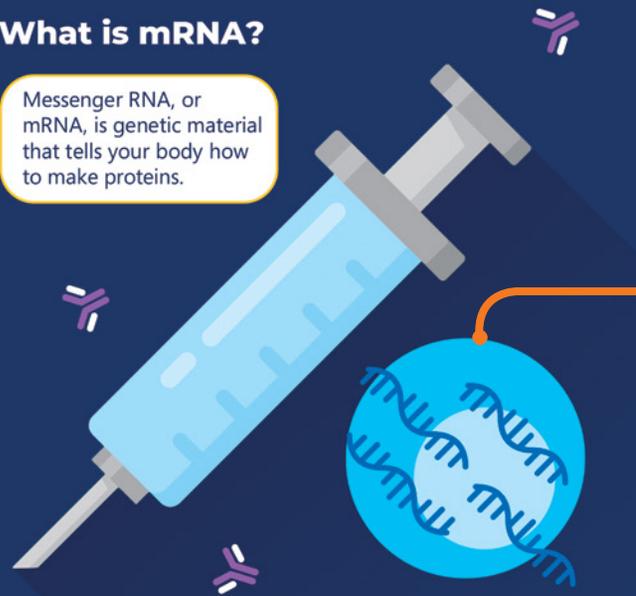
Sometimes after vaccination, the process of building immunity can cause symptoms, such as fever and/or headache. These symptoms are normal and are signs that the body is building immunity.

There are three main types of COVID-19 vaccines that are currently authorized and recommended, or undergoing Phase 3 clinical trials in the U.S.

Learn how each type of vaccine prompts our bodies to recognize and protect us from the virus that causes COVID-19. **None of these vaccines can give you COVID-19.**

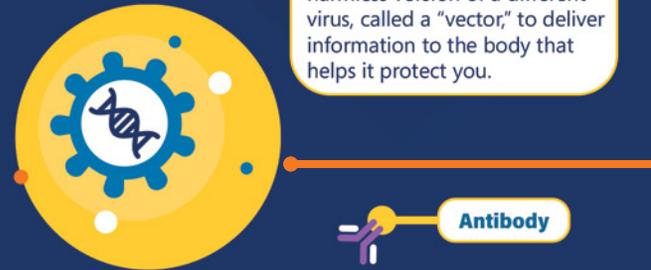
What is mRNA?

Messenger RNA, or mRNA, is genetic material that tells your body how to make proteins.



What is a Viral Vector?

A viral vector vaccine uses a harmless version of a different virus, called a “vector,” to deliver information to the body that helps it protect you.



What is Protein Subunit?

It uses pieces of a virus surface to focus your immune system on a single target.



Messenger RNA (mRNA) Vaccine

This type of vaccine uses genetically engineered mRNA to give your cells instructions for how to make a harmless piece of the S protein found on the surface of the COVID-19 virus. After vaccination, your immune cells begin making the S protein pieces and displaying them on cell surfaces. This causes your body to create antibodies. If you become infected with the COVID-19 virus, these antibodies will fight the virus.

Viral Vector Vaccine

This type of vaccine contains a modified version of a different virus than the one that causes COVID-19. Inside the shell of the modified virus, there is material from the virus that causes COVID-19. This is called a “viral vector.” Once the viral vector is inside our cells, the genetic material gives cells instructions to make a protein that is unique to the virus that causes COVID-19. Using these instructions, our cells make copies of the protein. This prompts our bodies to build T-lymphocytes and B-lymphocytes that will remember how to fight that virus if we are infected in the future.

Protein Subunit Vaccine

Subunit vaccines include only the parts of a virus that best stimulate your immune system. This type of COVID-19 vaccine contains harmless S proteins. Once your immune system recognizes the S proteins, it creates antibodies and defensive white blood cells. If you become infected with the COVID-19 virus, the antibodies will fight the virus.

Novavax is working on a protein subunit COVID-19 vaccine.