

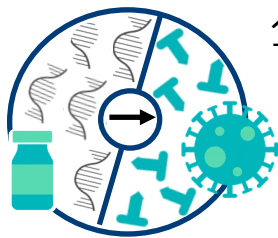
HOW OUR BODIES RESPOND TO THE COVID-19 VACCINE



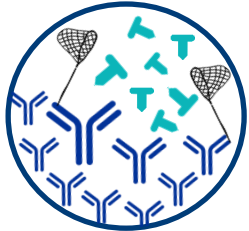
Vaccines protect us against bacteria or viruses by triggering our immune system to recognize a particular bacteria or virus and build immunity to defend against it.

HOW COVID-19 VACCINES WORK

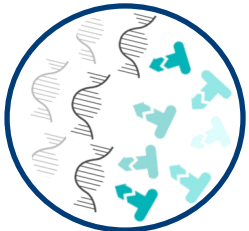
Pfizer and Moderna have **mRNA vaccines**, Johnson & Johnson has a **viral vector vaccine**, and Novavax has a **protein vaccine** with an adjuvant that helps your body respond to the vaccine. These vaccines use different technologies but all help our bodies build protection against COVID-19. None of these vaccines can give you COVID-19.



1. Pfizer, Moderna, and Johnson & Johnson COVID-19 vaccines deliver instructions (using mRNA or a harmless virus) to teach our bodies to make a coronavirus spike protein, the same protein that is found on the surface of the COVID-19 virus. The Novavax vaccine contains a spike protein that is premade. The spike protein is harmless on its own.



2. Over the next few days our immune system is activated and it creates **antibodies** to attack the spike proteins. When our immune system gets activated, some people feel tired, sore, or feverish.



3. The vaccine and spike proteins are destroyed and disappear from your body in a few days. The mRNA, viral vector, and spike protein **do not** interact with, or change, our DNA in any way. In fact, they never even enter the part of the cell, the nucleus, where DNA is kept.



4. Two weeks after vaccination our bodies have built up protection. Our immune system's memory cells remember how to fight COVID-19. Now we are less likely to get severely sick if we are infected with COVID-19.



5. Over time, our immune system's memory cells **may decline** in numbers and so does our protection.



6. A vaccine booster dose increases antibodies and memory cells and boosts our protection.



WHY SIDE EFFECTS OCCUR

Side effects are caused by our body's immune response and are **common after vaccination**. They can be a sign that your immune system is **working and building protection** against COVID-19.

- When our immune response is triggered, the cells of our immune system get to work.
- Some of our immune cells act fast to gather at the injection site. This is what causes **pain and swelling of the arm**.
- Other immune cells continue to gather throughout the rest of the body producing side effects like **fever, chills, and tiredness**.
- These side effects typically only last a few days.

When you feel run down or sick after getting the vaccine, it is because your body is putting a lot of energy towards an immune response. This preparation is what protects you if your body comes into contact with COVID-19.

Decades of vaccine data show that all serious side effects, if there are any, show up within two months of vaccination - not years later.

GET THE BEST PROTECTION

- + Stay up to date with COVID-19 vaccines by receiving all recommended doses, including a booster dose when you are eligible.
- + Receiving only one dose does not provide you with the full protection and does not give you the full effectiveness of the vaccine.

For more information about boosters and staying up to date with your COVID-19 vaccines, visit <https://www.dhs.wisconsin.gov/covid-19/vaccine-booster.htm>.

Visit vaccines.gov, text your zip code to 438829, or call 211 to find free COVID-19 vaccine and booster doses near you.