

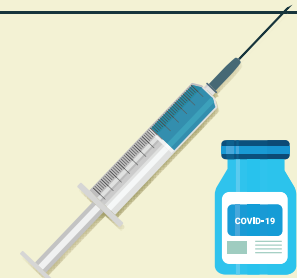
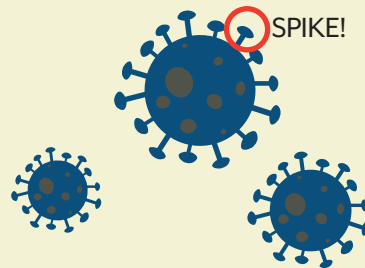
# Moderna & Pfizer vaccines—how do they work?

It's important to know that scientists had a head start making these COVID-19 vaccines.



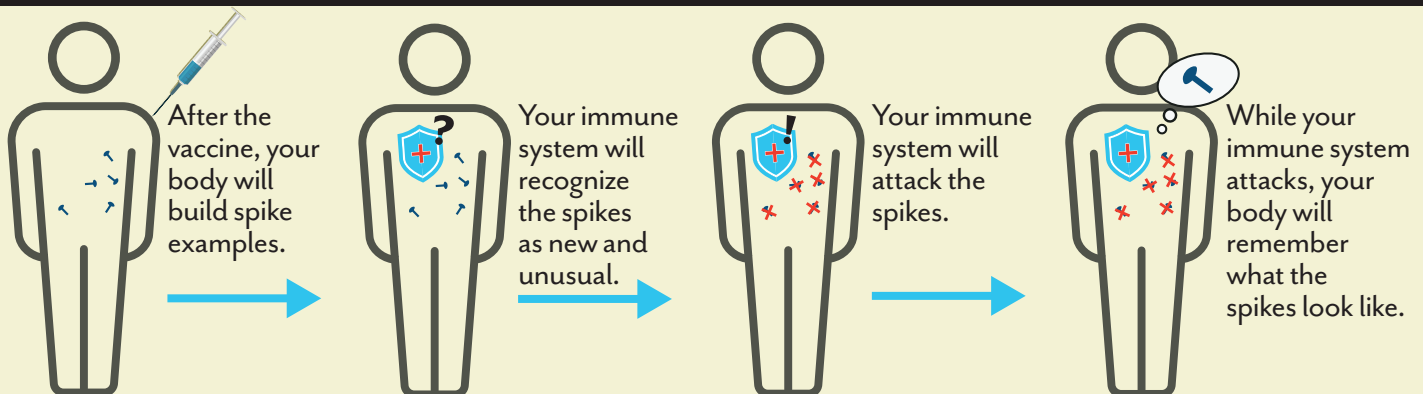
Scientists at the National Institutes of Health and the University of Pennsylvania started working on these vaccines after previous coronavirus outbreaks.

They isolated one part of the virus—the spike. This would help them make the vaccines.

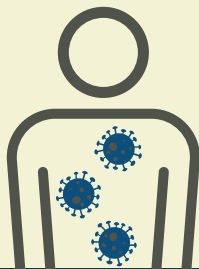


These COVID-19 vaccines are mRNA vaccines. Basically, they're instructions for bodies to make examples of COVID-19 spikes.

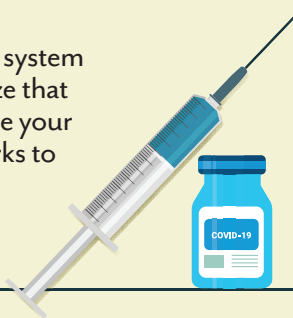
## HERE'S HOW THE VACCINE WORKS IN YOUR BODY



## THE SECOND SHOT HELPS THE VACCINE BECOME EVEN MORE EFFECTIVE.



**Without vaccine**, your immune system won't be fast enough to recognize that the COVID-19 virus is bad. While your immune system desperately works to protect your body, the virus has plenty of time to spread and make you sick.



**With vaccine**, your body already knows to be on the lookout for the spike. If the virus enters your body, your immune system quickly gets to work destroying the virus.



**You won't get sick when your body builds spike examples because the spikes aren't virus.** The vaccine does NOT involve injecting you with the COVID-19 virus and it does NOT change your DNA or your genetic code.

**After vaccine, you might have some side effects—they will go away in a few days.** Side effects are normal signs your body is building protection. Side effects include:

- Pain and swelling on the arm with the shot.
- Fever, chills, tiredness and headache.



Visit [MyVaccine.FL.gov](https://www.myvaccine.fl.gov) for more information or to pre-register for vaccine at state-supported sites in your area.

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