

How do mRNA vaccines work?



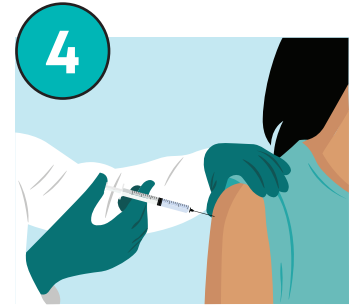
1
COVID-19 is a disease that has made many people sick; some people have even died.



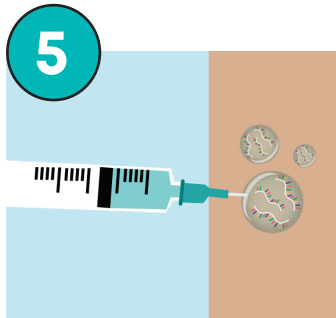
2
Now, there are medicines called vaccines that can keep people from getting sick with COVID-19.



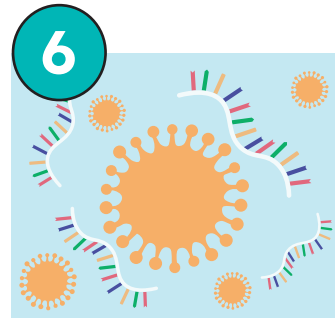
3
Some of the vaccines are called mRNA vaccines. mRNA are sets of instructions that tell the cells in your body to do things.



4
The COVID-19 mRNA vaccines are given to you with a shot in your arm.



5
The vaccine goes into your body and a special bubble carries the mRNA to the muscle cells in your arm.



6
The mRNA goes into your cells and tells them to make a protein called Spike.



7
Spike is a small piece of the virus that causes COVID-19. It can't make you sick.



8
When your cells show Spike to your body, your body makes defenses against the virus that causes COVID-19.



9
Both the mRNA from the vaccine and the Spike protein get cleaned up and go away after helping your body make defenses.



10
Sometimes, you need two doses of a vaccine, so it can work really well.



11
Making new defenses against a virus is hard work for your body. Sometimes after you get the vaccine, your arm feels sore, you may be tired, or get a fever. This won't last long.



12
Now, if the COVID-19 virus tries to infect you, your body has the defenses that can keep you from getting sick.