# How the mRNA COVID-19 vaccines work

Getting vaccinated helps protect you, and may protect your family and friends.

Two mRNA COVID-19 vaccines are available in the U.S.: Pfizer-BioNTech and Moderna.

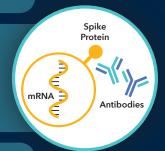


## 1. Instruct

mRNA enters your body with instructions to make a spike protein that is found on the virus that causes COVID-19.

### 2. Produce

Your body makes the spike protein. This causes the body to make antibodies.





### 3. Remove

Your body breaks down and gets rid of the mRNA.

# 4. Defend

If the virus that causes COVID-19 enters your body, the antibodies will recognize and fight the virus, protecting you from getting sick.



# mRNA Vaccine Facts

- The COVID-19 vaccines have gone through extensive clinical studies that have been reviewed by the Food and Drug Administration (FDA) and other experts. The vaccines have been shown to be safe and very effective at protecting people from severe COVID-19 illness.
- The mRNA vaccines do not contain the virus that causes COVID-19.
- You cannot get COVID-19 from the vaccines.
- The vaccines cannot change your DNA.

For information on vaccination eligibility, visit **nyc.gov/covidvaccinedistribution**. To find a vaccination site and make an appointment, visit **nyc.gov/vaccinefinder** or call **877-VAX-4NYC (877-829-4692)**.

To learn more about COVID-19 vaccines, talk to your health care provider, visit nyc.gov/covidvaccine or call 311.

