




# What is a mRNA COVID-19 Vaccine?

 COVID-19 has spread throughout the world, killing more than 2.3 million people

 Conventional vaccine approaches take a long time to manufacture and are not as effective against rapidly evolving viruses

 mRNA vaccines have been studied since the 1990s and are a promising new type of vaccine<sup>1</sup>

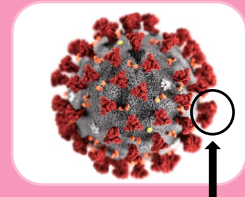
This pandemic calls for a **low-cost** vaccine which can be developed **rapidly** and **easily distributed** to the many corners of the world.

## mRNA



- mRNA provide the instructions for the cell to make a protein
- mRNA is **faster** and **cheaper** to produce than traditional vaccine components<sup>1</sup>
- mRNA vaccines are **safer** since they do not use copies of the live virus like some vaccines<sup>1</sup>

## mRNA Vaccines

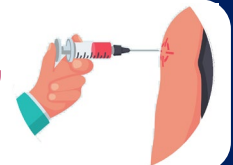


- COVID-19's signature **spike protein** is produced by your cells using the vaccine's mRNA, triggering an immune response
- The mRNA is harmlessly degraded after use
- The body will then recognize the spike protein on COVID-19 if it enters the body, and be equipped to fight it

**COVID-19 mRNA vaccines are 100% effective at preventing death and hospitalization from the novel coronavirus<sup>2</sup>**

**Herd immunity will help end the COVID-19 pandemic.**

**Get Vaccinated,  
Save Lives**



<sup>1</sup>Pardi N, Hogan MJ, Porter FW, et al. Nat Rev Drug Discov. 2018; 17(4): 261-279.

<sup>2</sup>Meo SA, Bukhari IA, Akram J, Meo AS, Klonoff DC. Eur Rev Med Pharmacol Sci. 2021 Feb;25(3):1663-1669.