The different types of COVID-19 vaccines

Vaccines will play a major role in ending the COVID-19 pandemic. COVID-19 vaccines have already been proven highly effective at preventing severe illness, hospitalisation and death.

**Approach**

- Inactivated or attenuated virus
- Viral vector (non-replicating)
- Protein subunit
- DNA
- RNA

**How does it work?**

**SARS-CoV-19 vaccines**

- Uses a form of the virus that has been inactivated or weakened so it doesn’t cause disease, but still generates an immune response

**Similar vaccines**


**Viral vector**

- Uses a virus that has been genetically engineered so that it can’t cause disease but produces coronavirus proteins to safely generate an immune response

**Epidemiology, AstraZeneca, Novavax**

**Protein subunit**

- Uses harmless fragments of proteins that mimic the COVID-19 virus to safely generate an immune response

**EpiVacCorona, Novavax, CanSino Biological Inc., Johnson & Johnson**

**DNA**

- Synthetic DNA fragment (plasmid) that encodes a COVID-19 antigen

**Inactivated or attenuated virus**

- Typically the RNA segment of the viral genome that codes for the virus spike protein (or other antigenic region) is prepared in a suspension of lipid nanoparticles

**Typically for vaccines produced using similar processes may be equal to or more effective or still under trial. Icons designed by Freepik from Flaticon.com.**