

# COVID-19 Vaccine Myths Debunked



## Myth #1: Vaccines were rushed and shortcuts were taken

**Facts:** mRNA Vaccines (Pfizer & Moderna) development:

- The science of vaccine development has been around for a decade.
- Previously used to develop vaccines against Zika, CMV, influenza and rabies, all of which went through human trials and were found to be safe ([CDC1](#)).
- Went through same rigorous safety procedures as ALL FDA approved vaccines- NO SHORTCUTS!
- Had over 70,000 (Moderna & Pfizer) individuals safely participate in the trials before receiving Emergency Use Authorization (EUA) by the FDA.



## Myth #2: mRNA will somehow rearrange my DNA

**Facts**

- mRNA is injected into your muscle, usually the upper arm and enters into the cytoplasm (the water part) of your muscle cells, where it triggers your body to produce protective antibodies to the COVID "spike protein."
- It does not (and cannot) enter into the nucleus, where our DNA is housed ([CDC1](#)).



## Myth #3: Vaccines could induce sterility in women

**Facts**

- Infertility is not identified as an adverse outcome in any of the mRNA vaccine trials performed to date ([CDC2](#)).
- ACOG recommends vaccination of individuals who are actively trying to become pregnant or are contemplating pregnancy and meet the criteria for vaccination based on ACIP prioritization recommendations. Additionally, it is not necessary to delay pregnancy after completing both doses of the COVID-19 vaccine ([ACOG](#)).
- COVID-19 mRNA vaccines are not thought to cause an increased risk of infertility (ACOG). Concerns related to "the spike protein" found in popular media have not been established in research ([CDC1](#)).



## Myth #4: Pregnant (or trying) and the vaccines could be harmful for my unborn child

**Facts:** Pregnant women

- Are NOT usually included in initial trials for vaccines or medications including the COVID-19 Vaccine.
- Are at an increased risk of severe illness from COVID-19 including respiratory failure, need for mechanical ventilation (or ECMO), and death. There may also be an increased incidence of adverse outcomes of pregnancy, including preterm births and stillbirths ([CDC2](#)).
- Are encouraged to speak with their healthcare provider if they are pregnant or are considering pregnancy.
- Routinely and safely receive vaccines that are not live viruses, e.g. annual flu and Tdap. The mRNA COVID vaccines are NOT live vaccines.

## References

1. Centers for Disease Control and Prevention. Understanding and Explaining mRNA COVID-19 Vaccines. Retrieved from <https://www.cdc.gov/vaccines/covid-19/hcp/mrna-vaccine-basics.html>
2. Centers for Disease Control and Prevention. Vaccination Considerations for People who are Pregnant or Breastfeeding. Retrieved from <https://www.cdc.gov/coronavirus/2019-ncov/vaccines/recommendations/pregnancy.html>
3. American College of Obstetricians and Gynecologists. Vaccinating Pregnant and Lactating Patients Against COVID-19. Retrieved from <https://www.acog.org/clinical/clinical-guidance/practice-advisory/articles/2020/12/vaccinating-pregnant-and-lactating-patients-against-covid-19>