

Breakthrough Biotechnology

(a.k.a. Cool Science)

Messenger RNA (mRNA) biotechnology has been tested on cancer, allergies and SARS (the family of viruses that COVID-19 belongs to).

mRNA is not new science but before COVID-19 – it wasn't effective.

mRNA breaks down very quickly in the body, so it needs a carrier

Scientists found that fat bubbles work great for carrying the mRNA to fight COVID-19.

With COVID-19, mRNA vaccines are very safe and effective.



Answers for Parents

About COVID-19 Vaccinations for Kids

Should kids be vaccinated? Yes.

- Over 30% of new COVID-19 infections are in children and adolescents.
- Nearly 1,300 kids have died of COVID-19 since the start of the pandemic.*
- COVID-19 is a top 10 cause of death for children in the U.S.
- Close to 20% of children (12 million) in the U.S. have had COVID-19 infections.*
- COVID-19 vaccines are 90%+ effective in clinical trials. No severe cases of COVID-19 during study.

If my child had COVID-19 do they need to be vaccinated? Yes.

- Kids still need to be vaccinated to better protect them from new variants.
- The vaccine strengthens kids' immune responses (antibody and T-cell protection).
- Vaccines prevent long COVID-19 and improve symptoms of those who already have it.

Are there serious side effects of the COVID-19 vaccine? No.

- Side effects that may come with COVID-19 vaccines are short-term.
- Fever, fatigue, headaches, chills, diarrhea, and muscle pain are possible.
- Myocarditis after vaccination is very rare, and very mild compared to myocarditis cases after COVID-19 infection.
- It's biologically impossible for messenger RNA (mRNA) vaccines to alter DNA.

Was the COVID-19 vaccine for kids rushed? No.

- Decades of previous work were leveraged to get us a vaccine in 9 months.
- Previous research started in 2003 thanks to SARS, COVID-19's cousin.
- High rates of disease meant it was easy to find and study cases during clinical trials.
- Over 150,000 people flooded to participate in the U.S. trials.
- COVID-19 vaccines are held to the highest safety standard.

Learn more and find a vaccination location for your child at MaxTheVaxNE.org

Adapted from a patient handout by Epidemiologist, Dr. Katelyn Jetelina, MPH, PhD