

COVID-19

Vaccine Q & A

With Fresno County Superintendent of Schools

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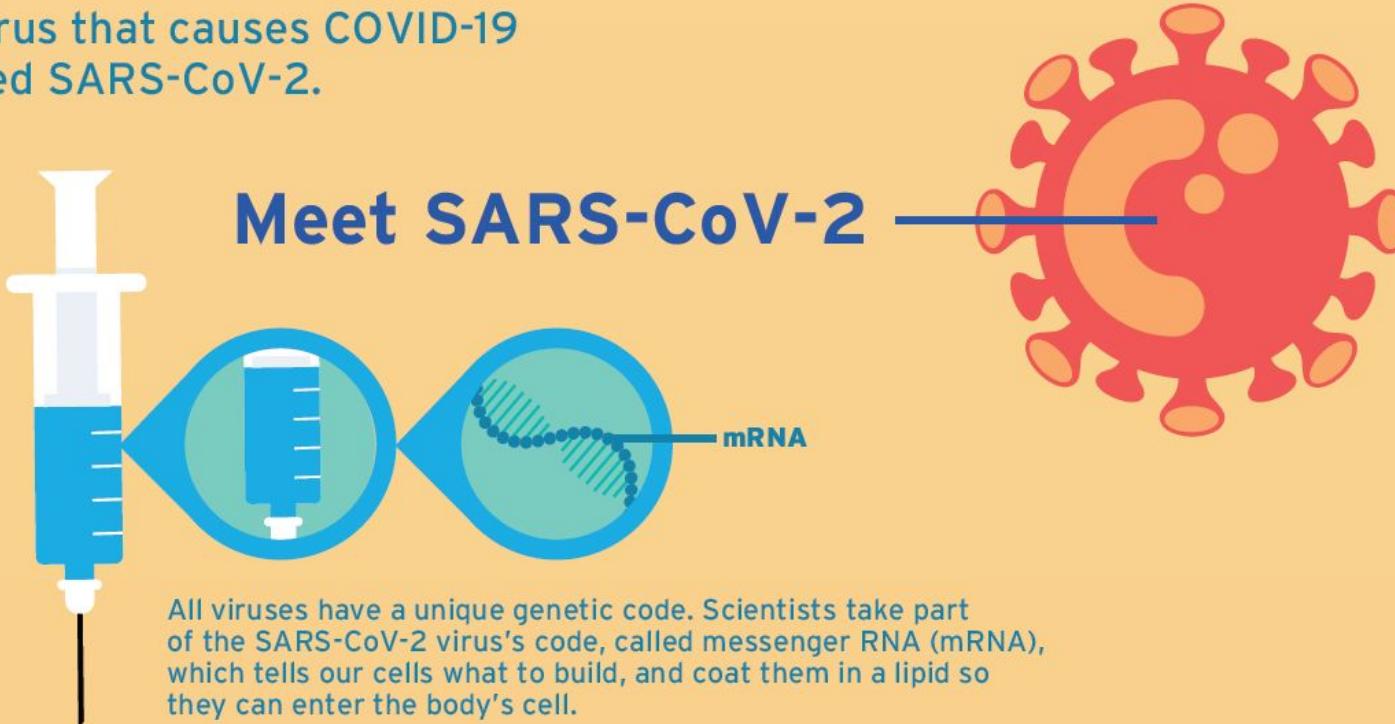
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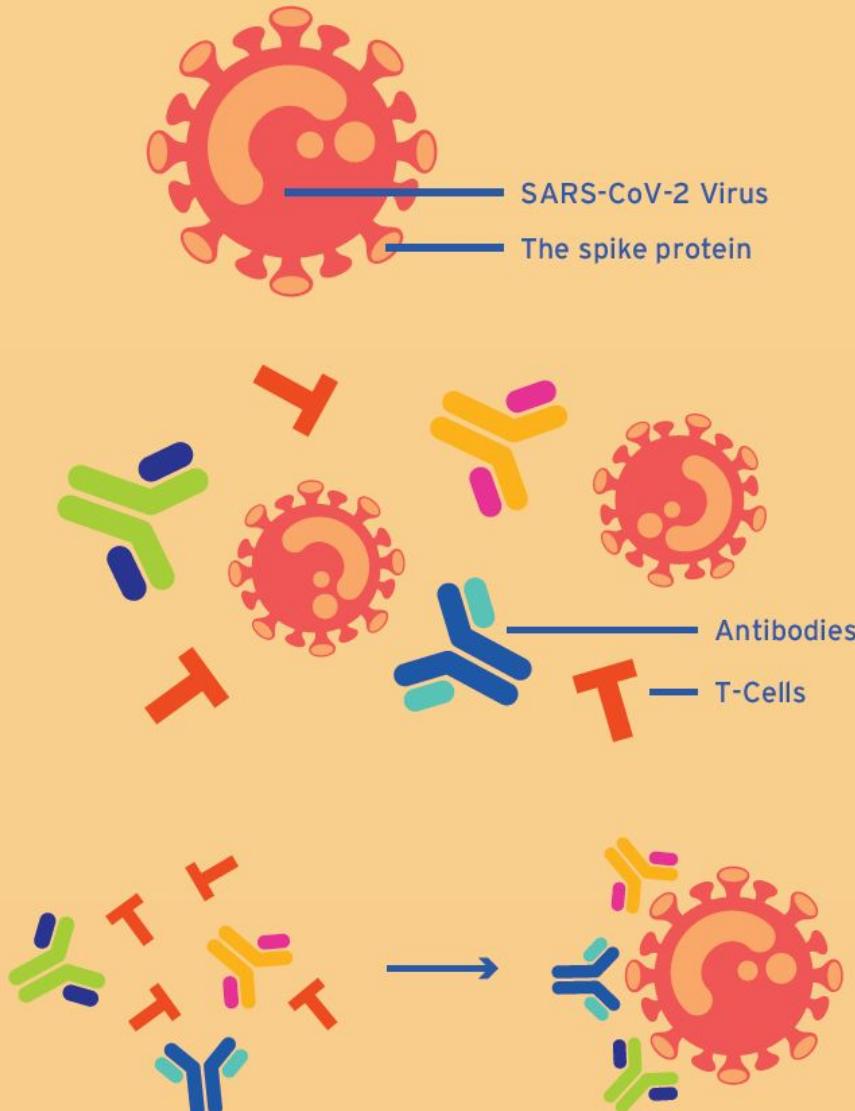


How mRNA vaccines work

Every virus is different.

The virus that causes COVID-19
is called SARS-CoV-2.





CREATE

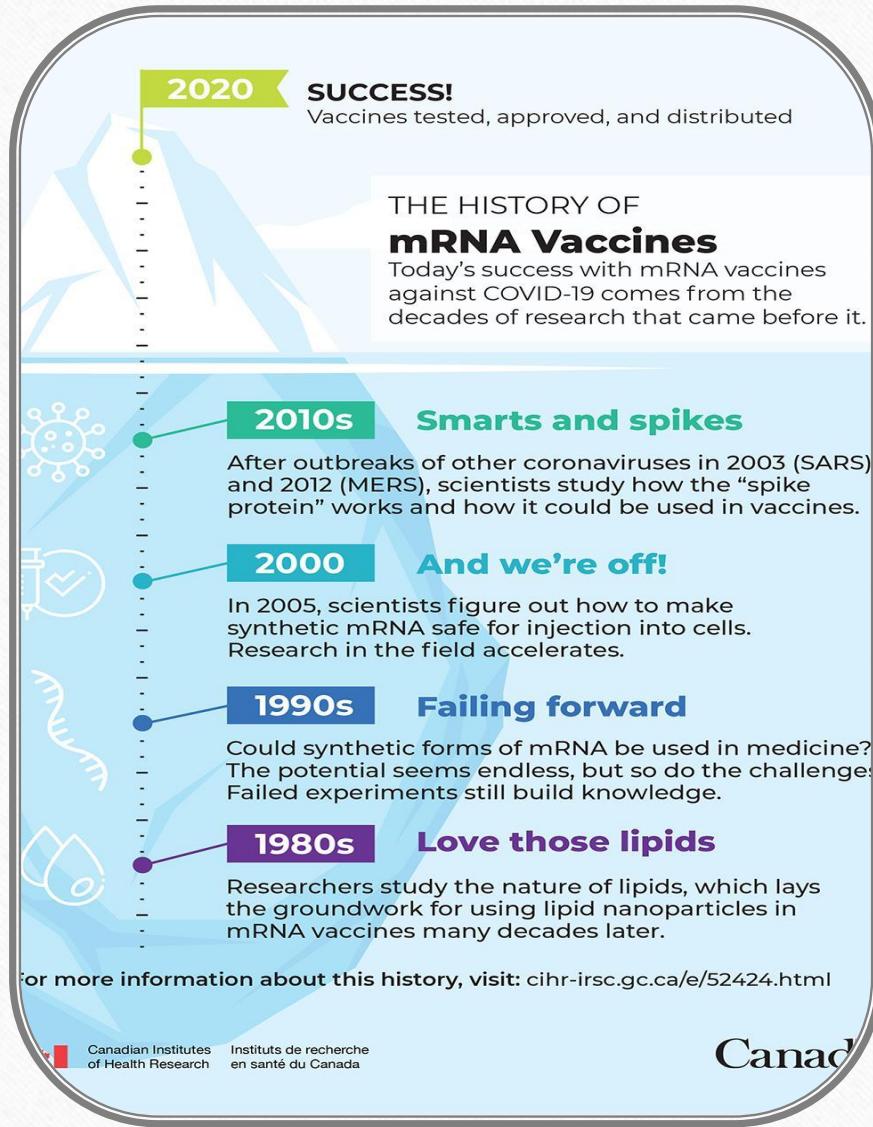
The mRNA tells the cells to make a specific part of the SARS-CoV-2 virus: the spike protein.

LEARN

The immune system then produces antibodies and activates T-cells to destroy the spike proteins.

PROTECT

If you are exposed to the virus in the future, your immune system will quickly recognize the spike protein and has the antibodies and T-cells ready to begin destroying the virus.



Canada Institutes of Health Research. (2021). The history of mRNA vaccines. (Infographic). <https://cihr-irsc.gc.ca/e/52484.html>

Is the vaccine safe for teenagers?

- Authorized by the FDA for children ages 12 and up.
- Highly effective at preventing symptomatic COVID.
- Clinical trials are currently evaluating safety in children down to 6 months of age.

What are the risks?

RISKS vs. BENEFITS

What to expect after the vaccine:

- Milder reaction after the 1st dose, unless the person previously developed COVID-19
- Local tenderness at the injection site is very common
- Headache, body aches, fever, nausea, and even vomiting can occur, but are a sign of a robust immune response
- Over-the-counter analgesics can help alleviate those symptoms
- Clotting, which is a very rare side effect after the J&J vaccine, has not been associated with the Pfizer vaccine.

What about the rarer side effects?

- **Anaphylaxis**
- Occurs in appx 5/1,000,000
- Allergies to consider:
 - Polyethylene Glycol
 - Polysorbate
 - Previous anaphylaxis to another vaccine
- **Myocarditis**
- Occurs in appx 2/50,000 males between the ages 16-39 years old
- Generally mild, short-lived, and self-resolving

What about long-term side effects?

Can it affect my child's fertility?

What about the variants?

- The vaccine is still highly effective against all variants.
- Variants develop over time through clinically significant mutations.
- More opportunities to replicate create more opportunities to mutate.

Risks vs. Benefits

What have our experiences been with the
vaccine?

Helpful Resources

- [Fresno County COVID Vaccine Clinics](#)
- [Children's Hospital of Philadelphia COVID Vaccine Center](#)
- [How COVID-19 mRNA Vaccines Work](#)
- [Development of mRNA Vaccines](#)
- [Study Reviewing Development & Research Trials for mRNA Vaccine](#)