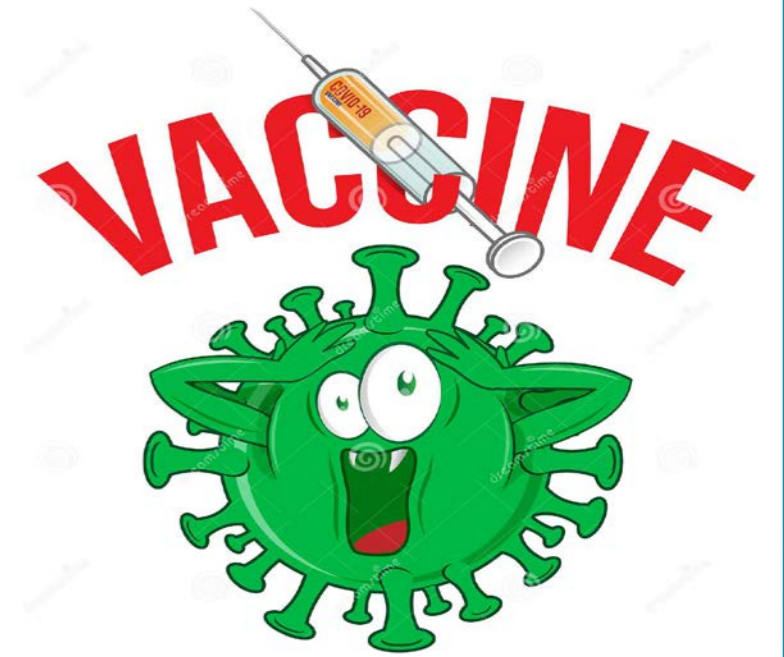


Vaccines: How They Work...



mRNA Vaccines (Pfizer/Moderna): 60 years in the Making



1961

Discovery

Jacob, Brenner, and Meselson discover mRNA.

1994

Self-Amplifying mRNA

SAM vaccines produce strong immune response.

2007

Vaccine Stability

Engineering mRNA shown to help with stability.

2017

Personalized Immunotherapy

Vaccine for melanoma shows promise.

1990

Therapeutics

Scientists first express a therapeutic protein from mRNA.

2003

Cancer Vaccine

First human trials show promise for immunotherapy.

2010

Commercialization

Biotech company Moderna founded to commercialize mRNA research.

2020

COVID-19

Two mRNA vaccines proven effective for COVID-19.

Kids....

- ▶ Current Authorizations / Approvals
 - ▶ Full FDA Approval: Pfizer 16 & Older
 - ▶ FDA EUA Authorization: Pfizer / Moderna 12 & Older
- ▶ ETA: October / November 2021
 - ▶ 5-11 Pfizer FDA EUA Approval
- ▶ ETA: End of 2021
 - ▶ 2 & up FDA EUA Approval
- ▶ Under 2: Unknown



Kids...expected EUA for Pfizer vaccine

▶ Pfizer Vaccine

- ▶ 1/3 the dose of the adult vaccine given as 2 doses 3 weeks apart
- ▶ Same safety & side effect profile (extremely safe!)
 - ▶ Normal Side Effects (last 24-72 hours):
 - ▶ Injection site pain, redness, swelling
 - ▶ Fever, fatigue, headache, chills, muscle pain, joint pain
- ▶ Effectiveness similar to that of kids 12-15 (extremely well!)
 - ▶ 100% effective against symptomatic infection kids 12-15 (original study)
 - ▶ Age 5-11 specific numbers coming soon



COVID-19 Vaccine Myths



MYTH #1



The vaccine can affect my DNA

Why it's false: The genetic material in COVID-19 vaccines cannot interact with or change your DNA in any way.

MYTH #5

COVID-19
POSITIVE



I don't need the vaccine because I've already had COVID-19

Why it's false: You may experience some level of immunity after having COVID-19, but it's unclear how long this protection might last.

MYTH #2



A vaccine developed so quickly can't be safe

Why it's false: Available vaccines have undergone thorough testing and external review. These vaccines may seem new, but there's decades of research behind them.

MYTH #6



I don't need the vaccine because I'm young and healthy

Why it's false: Even mild COVID-19 can cause uncomfortable and/or lingering symptoms. Plus, even those who are young and healthy must be vaccinated to achieve herd immunity.

MYTH #3



The vaccine can give me COVID-19

Why it's false: The mild side effects associated with the vaccines are a sign that your body is building immunity to the virus. These vaccines cannot give you COVID-19.

MYTH #4



The COVID-19 vaccine can affect my fertility

Why it's false: There's no data to suggest that these vaccines pose a risk to someone who is pregnant or wants to become pregnant.

MYTH #7



I don't need to wear a mask after being vaccinated

Why it's false: Until herd immunity is reached, wearing a mask and social distancing continue to be important safety measures.

Vaccines & Religion

- ▶ Many religious organizations, including the Catholic Church, The Vatican, The Jewish Orthodox Union, and The Rabbinical Council of America have encouraged vaccination despite any connection to fetal stem cells.
- ▶ Remote use of stem cells ONLY in the TESTING of Pfizer & Moderna.
 - ▶ Same method as MOST common medications including acetaminophen, ibuprofen, Benadryl,
- ▶ NO fetal / stem cells used in the production of Pfizer / Moderna vaccines.
- ▶ No pork products are part of the Pfizer, Moderna, or Astra-Zeneca vaccines.

Game Plan: Get Vaccinated



... and WEAR A MASK!

Community Resources

- ▶ **Sonoma Valley Hospital:** <https://www.sonomavalleyhospital.org>
- ▶ **Sonoma Valley Health Partners:** <https://www.svhpvaccines.org>
- ▶ **Sonoma Valley Community Health Center:** <https://svchc.org>
- ▶ **City of Sonoma:** <https://www.sonomacity.org>
- ▶ **Sonoma County Emergency:** <https://socoemergency.org>
- ▶ **Schedule Your Additional Dose (immunocompromised):** <https://myturn.ca.gov>
- ▶ **Need A Copy of Your Vaccination Record:** <https://cairweb.org>
- ▶ **UCSF Covid-19 Resources:** <https://coronavirus.ucsf.edu>

QUESTIONS?

