

## COVID-19 Vaccine FAQ

### When will the Covid-19 vaccine be available to me and how can I get it?

- Due to the limited amount of COVID-19 vaccine available right now, it is being made available in phases to different segments of the population based on risk factors. We do not yet have a precise timeline for when the vaccine will be available to groups in different phases/tiers.
- For updated information and details about the Sonoma County Vaccine Distribution Plan please visit: <https://socoemergency.org/emergency/novel-coronavirus/vaccine-information/>

### What is a vaccine?

- A vaccine is a kind of medication that helps protect against certain diseases. It helps your immune system recognize a microbe that gets into your body and destroy it before it can cause an infection.
- Vaccines train our bodies to fight viruses and bacteria, without giving us the virus or bacterial illness. If our bodies do not already have the tools to fight something off, we cannot make a vaccine for it (HIV, Hepatitis C).

### What is an mRNA vaccine?

- mRNA is a guide for making proteins. It is not DNA or RNA. The piece of mRNA in the Pfizer and Moderna vaccines *contain NO virus*, they contain copies of the instructions to make the “spikes” on the outside of the coronavirus. The spike is the ‘key’ that the virus uses to get into our cells.
- When we get the vaccine in our arm, our cells assemble the virus spike proteins.
- The vaccine mRNA falls apart fast naturally and is deleted quickly.
- Our cells put the spikes they make onto their cell membranes, where they are noticed by surveillance immune cells.
- The immune system cells make antibodies and teach our B and T cells to recognize the spikes, so when SARS-CoV2 comes along, our immune system is already prepared and will protect us.
- [New York Times Article - How Moderna's vaccine works](#)

### What happens without a vaccine?

- Without a vaccine, SARS-CoV2 uses its spikes to get into our respiratory cells, uses our cells to make more of itself, and when our cells are full of virus they burst and the virus spreads. It causes damage and can panic our immune system, leading to severe and dangerous illness.

### What are the mRNA vaccines available?

- Pfizer:
  - 2 doses, 21 days apart (requires very cold freezers)
  - 95% effective (50% efficacy 3-4 weeks after 1<sup>st</sup> dose, 94% 3-4 weeks after second dose)
  - Does not contain eggs, preservatives or latex [Link to full Pfizer Vaccine ingredients](#)
- Moderna:
  - 2 doses, 28 days apart (more stable, requires regular freezers)
  - 94% effective (80% efficacy 3-4 weeks after 1<sup>st</sup> dose, 94% 3-4 weeks after second dose)

### Was the vaccine rushed?

- **No.** The mRNA vaccine technology was developed in 2003 for SARS-CoV-1 virus (another coronavirus). This technology has been used for other vaccines, including influenza, RSV, and Zika. Chinese scientists provided the genetic sequence for SARS-CoV-2 in January 2020, which US scientists used to create the SARS coronavirus template. Clinical trials started in February. This, plus more money invested more quickly than for any other vaccine, allowed for rapid development and safety testing.

### Are the vaccines safe?

- **~75,000 people volunteered to test the first two vaccines, and as of 12/31, 2.6 million doses have been given in the US.** All trials went all the way to Phase 3, so they have had sufficient testing to be shown to be safe for most people, and all will continue to be watched closely.
- The first three pharmaceutical companies have been very transparent with their trial data and ingredients, and hundreds of scientists have looked at this data and will continue to do so.

### What might I feel after the vaccine?

- Most side effects are related to the body's immune response to the vaccine and are common (a good thing!). These symptoms include injection site reaction (84%), fatigue (62%) headache (55%), muscle pain (38%), chills (31%), joint pain (23%), fever (14%). These are more common after the second injection indicating a stronger immune response (a good thing!).
- Serious reactions:
  - Anaphylactic-like: a few patients had reactions requiring epinephrine and hospital treatment. If someone experiences this reaction, they should not have the second dose. We will be asking everyone to wait and be observed after getting the vaccine injection.
  - Bell's Palsy: Seven participants in phase 3 trials had episodes of short-lived Bells' Palsy. All cases resolved on their own.
  - There were no neurologic, neuro-inflammatory, or blood clotting events.
- Link to CDC [What to expect after the COVID-19 Vaccine](#)
- [V-safe](#) - mobile app used for immediate reporting of vaccine side effects.

### What about pregnancy?

- The first part of Phase 3 trials did not look at pregnancy, but 23 pregnancies occurred during the study with no adverse events: the FDA statement is that pregnancy is *not a contraindication to vaccination*.
- The American College of Obstetrics and Gynecology and the Society for Maternal-fetal Medicine **recommend** the vaccine for pregnant women.

### What about children?

- Children younger than 16 were not included in Phase 3 trials and so are not eligible for the existing vaccines.

### How long will the vaccine provide protection?

- Based on the level of immune response and virus mutation rate, the vaccine will likely be effective for 1-3 years. Studies are ongoing.

### Is it possible to get infected with the virus after vaccination?

- The vaccines are 95% protective against Covid-19 and decrease severity in the 5% that do get it, but we do not know yet if people can pass an infection to others once they have been vaccinated.
- We will need to wear masks and practice social distancing until this is clear.

### Is this vaccine mandatory?

- **NO.** The FDA gave this vaccine an “Emergency Use Authorization,” and will revoke it if there are concerns. The vaccine cannot be required by a public health order.
- Federal rules allow businesses to require vaccinations, but we don’t know if any will. Certain types of businesses may require vaccination, such as some airlines.
- WCHC will not require it unless new guidance becomes available, but it is strongly encouraged.

### What if I already had COVID-19 through a natural infection?

- People who have had COVID-19 should still get the vaccine but are advised to wait 90 days from the time of their infection since immune response from natural COVID-19 is variable – vaccine immunity is better tested and may be more effective.

### What if I have an underlying medical condition or immune deficiency?

- It is highly recommended that people with certain underlying medical conditions, such as cancer, autoimmune diseases, diabetes, heart disease, and kidney disease should get vaccinated.
- The mRNA vaccine trials included participants with a range of health conditions, ages, and demographics in the rigorous phase 3 trials and did not show any difference across groups.
- If you have HIV that isn’t under control with medications, or are undergoing cancer treatment, we don’t know how *well* the vaccine will work, but so far it has been safe. It is likely safer for you to have the vaccine than to become infected with the coronavirus.

### VACCINE FACTS:

- No vaccine, including COVID-19 vaccines, can track people or gather personal information. Vaccine microchips and/or Nano transducers in the brain do not exist.
- The current mRNA vaccines do not cross into the part of any cell that holds DNA (nucleus) and cannot be incorporated into a human genetic material. *No Vaccine, including the COVID-19 vaccines, will alter human DNA.*
- You cannot get COVID-19 from any of the vaccines. Only the genetic blueprint for one tiny part of the COVID-19 was used to develop the vaccines. It is not possible to become infected with the virus from this material.
- mRNA vaccines do not use fetal tissue for development.
- *No Vaccine, including the COVID-19 vaccines, will cause infertility.* There is absolutely no data from any of the clinical trials to indicate any risk of infertility or effect on the hormonal system of the body in a negative way.

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