Coronavirus (COVID-19)
Frequently Asked Questions

1. **How do vaccines work?** Vaccines trigger a response in your body which cause it to produce antibodies to fight an infection. Vaccines are made several different ways. The new mRNA vaccines against COVID-19 contain information that teaches your cells to produce antibodies that fight the infection.

2. **How are vaccines developed?** Each vaccine that is under development goes through many steps to ensure safety and that the vaccine works.
   Research. Research is conducted to identify effective ways of making a vaccine. The goal is to trigger your body's immune system to fight an infection.
   Clinical Trials. The vaccine is then tested in human clinical trials to assess safety, immune response, right dose, and response in different age groups and people.
   Regulatory Review and Approval. After clinical trials are complete, the vaccine data is submitted to the FDA to review safety.
   Quality Control. The vaccine is continuously tracked and monitored for its performance, safety, and effectiveness

3. **How was the COVID-19 vaccine developed so fast? Is it safe?** The global coronavirus pandemic spurred cooperation for vaccine research across the world. Amid a global pandemic, time was a luxury the world could not afford. Researchers quickly mobilized to share their coronavirus data with other scientists. Vaccines are very costly and can take years due to lack of funding. Funders came together across the world, which helped speed up the timeline.

4. **What are the ingredients in the COVID-19 vaccine, and are they safe?** Pfizer and Moderna vaccines are safe and effective. Their ingredients include mRNA, lipids, potassium chloride, monobasic potassium phosphate, sodium chloride, dibasic sodium phosphate dihydrate, and sucrose. These confusing names are fats, sugars, minerals, and salts. Other vaccines are in the works and may include different ingredients.

5. **How does the COVID-19 vaccine work?** COVID-19 mRNA vaccines give instructions for our cells to make a harmless piece of what is called the "spike protein". The spike protein is found on the surface of the virus that causes COVID-19. The immune system is then "trained" to recognize these spikes, and if someone becomes infected with COVID-19 the body will attack the virus.

6. **Should people who have already had COVID-19 get vaccinated?** Re-infection with COVID-19 is possible. Individuals should get a COVID-19 vaccine even if they have been sick with COVID-19 before. Having had COVID-19 virus does not mean you are immune for a long time, but it offers protection for a short time.

7. **How effective is the COVID-19 vaccine?** Pfizer and Moderna COVID-19 vaccines have shown effectiveness over 90%.

8. **How many doses needs to be administered?** Two doses are needed for both the Pfizer and Moderna vaccine. For the Pfizer vaccine, the interval is 21 days between the first and second dose. For the Moderna vaccine, the interval is 28 days. You can receive the vaccine four days earlier than the above recommendations. If you do not receive the second dose when recommended you should get the second dose as soon as you can.

9. **How quickly is the vaccine effective after the last dose?** After you get the vaccine, it will take time for your body to build an immune response to keep you safe and protected. Most people will be protected between two weeks to a month after their second dose.

10. **What are the side effects of the COVID-19 vaccine?** Common side effects include pain and swelling at the injection site and headache, tiredness, chills, and fever. These side effects mean your body is building an immune response to protect you from COVID-19 infection.

11. **Can the vaccine give someone COVID-19?** No. None of the approved and recommended COVID-19 vaccines or COVID-19 vaccines currently in development in the United States contain the live virus that causes COVID-19. This means that a COVID-19 vaccine cannot make you sick with COVID-19.

12. **If the survival rate is so high, why should we get vaccinated?** Most people who get COVID-19 are able to recover, however, it's also true that some people develop serious complications. The disease may also cause long-term health complications that are unknown at this point. Getting vaccinated will help those around you.

13. **Does mRNA alter your DNA?** No, mRNA cannot change your DNA. mRNA quickly dissolves once in the body which is why there is a need for two doses. DNA is stored in the nucleus of your cells. mRNA vaccines are designed to do the work outside of the nucleus.

14. **What is the difference between the Moderna and Pfizer vaccine?** Both Moderna and Pfizer have very similar protection against COVID-19, structure, and side effects. The main difference being the temperatures that the vaccines are stored at. Moderna is also administered as two doses given 28 days apart, whereas Pfizer is two doses given 21 days apart. Moderna is also available for those 18 years and older, Pfizer is authorized for people 16 and older.

15. **Can someone spread COVID-19 if they had the vaccine?** The COVID-19 vaccine offers protection against COVID-19, but you still can get infected with COVID-19 and spread the infection. If you do contract COVID-19 you will not get as sick and have less risk of hospitalization or bad outcomes.

16. **Will I still have to physical distance and wear a mask after receiving the vaccine?** Yes, you will still need to follow guidance to help slow the spread of COVID-19.

17. **Will a vaccine end the pandemic?** The COVID-19 vaccine is a very important tool to end the pandemic, however many people will need to be vaccinated. Herd immunity occurs when most people are immune to an infection and the virus cannot spread quickly. Vaccination increases the immunity of people. Getting enough people vaccinated will be challenging and will take time.

If you have questions specific to your health, please contact your primary care provider.