COVID-19 Vaccine FAQ

Overview

There is a lot of excitement and some anxiety over the much awaited COVID-19 vaccine. If we continue to mask and distance and we can get a high percentage of individuals to receive the vaccine we have a very good chance of turning the tide of the SARS-CoV2 pandemic. But the important part is to get people vaccinated. There are many great resources about the vaccines, but there is also a lot of misinformation, particularly online. Answers to some of the most common vaccine questions are below.

Is it Safe? Really, how do we know it's safe?

- The FDA requires vaccines to show at least 50% efficacy and 8 weeks of safety data. Most adverse side effects of vaccines occur within 6 weeks of vaccine administration. The FDA requires at least 3,000 individuals be monitored for safety. The Pfizer and Moderna COVID-19 vaccines have monitored over 40,000 and 25,000 individuals respectively. So, you will not be an early guinea pig. The FDA also requires 2 independent advisory committees without conflict of interest to review the vaccines. The Vaccine and Related Biological Products Advisory Committee advises the FDA and the Advisory Committee on Immunization Practices (ACIP) advises the CDC. After approval, vaccines require ongoing monitoring for adverse effects. So, *(1) You won't be a guinea pig, (2) There has been independent review without conflict of interest, and (3) There is ongoing safety monitoring.*

Yeah, but I've already heard about side effects from individuals vaccinated in the UK?

- Two individuals in the UK National Health Service who had a previous history of anaphylactic reactions had an allergic reaction. Both already carried epinephrine. You should discuss the vaccine with your primary physician if you have a history of severe allergic reactions.

Is it effective?

- The efficacy data remains very impressive for the initial vaccines. Both Pfizer and Moderna vaccines are showing a 94-95% reduction in people getting infected after they've had 2 doses of the vaccine.

How did it get developed in "record time" (and still be safe)?

- The mRNA technology has been in development and studied for over 10 years. It has been used in cancer treatments. While these are the first vaccines to use the mRNA technology, the approach is well tested. The mRNA gets taken up by our cells to create a small protein that looks like the "spike protein" found in the COVID-19 virus. Our bodies then recognize the protein should not be there and creates antibodies to get rid of it. In the process, once used, our body gets rid of the mRNA and the antibodies get rid of the protein. The antibodies remain giving us our immunity to the COVID-19 virus. Other technologies required many more steps to develop a vaccine, including isolating the virus, synthesizing the virus and inactivating the virus or identifying part of a part that would then need to be manufactured. This technology eliminates many of the steps previously required so your own body can do the work. *There is no COVID-19 virus in the vaccine so the mRNA vaccine can't give you COVID-19. mRNA can not change your cells or your DNA and your cells get rid of it once used.*

Why are we able to develop the vaccine quickly now?

- In addition to the technology being developed over the last 10+ years, there has been a global effort of the world's leading scientists. Many countries have poured tremendous financial, technologic and intellectual resources into the vaccine development well beyond anything we've ever seen. Finally, as noted above there has been a very large pool of diverse adult volunteer participants to test the vaccine.

What if I already had COVID-19 or if I show antibodies? Should I still get the vaccine?

- Yes. We do not know yet how long immunity will last after an infection. Getting the vaccine if already infected will boost any immunity you may have and not cause any adverse effects.

I've made it this far without getting COVID-19, maybe I won't get it. Why should I get vaccinated now?

- Experience has shown that individuals who have not been infected with SARS-CoV2 remain at high risk. In our nursing homes we've seen that we still can have outbreaks in facilities that previously had COVID-19 and those who have not experienced COVID-19 in a previous outbreak are at higher risk of more widespread outbreaks. So, if you have not gotten COVID-19 you remain at high risk of getting infected while community spread remains. The best way to stop community spread is through vaccination combined with mitigation efforts of masking and distancing.

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Will we still need to mask and distance after getting the vaccine?

- Yes, for a while until enough people have been vaccinated. However, we'll be able to stop masking and distancing much sooner with the vaccine combined with ongoing masking and distancing than if we do not.

What are the most common side effects?

- Most common side effects include pain or redness at the injection site, fatigue, headache, fevers and chills. Most reactions were observed within the first 1 to 2 days and resolved shortly thereafter. (NEJM)

Why 2 doses?

- The first dose starts to show 52% efficacy within 7 days. After the second dose there is 91% efficacy within 7 days. (NEJM)

What information can I trust and where can I direct others for the best information?

- Reputable sites include the CDC, FDA and The American Medical Directors Association's COVID19-Toolkit (paltc.org)

Avoid sites not sanctioned by a medical board or are not from a peer-reviewed medical journal such as the New England Journal of Medicine. There is tremendous misinformation online and being picked up by the media.