



## COVID VACCINE FREQUENTLY ASKED QUESTIONS (UPDATED 12/17/20)

**Matt Swanson M.D.**

**Hospitalist Director, Skyline Health**

[mattswanson@skylinehospital.org](mailto:mattswanson@skylinehospital.org)

- 1. Dr. Swanson, are you going to get the vaccine?** Yes! I plan to get the vaccine as soon as it is available and I hope you do too. This vaccine has been shown to be safe and effective in a careful study involving tens of thousands of people. The small risk of having a serious side effect from vaccination is much less than the high risk of getting sick from the coronavirus. By getting vaccinated I believe I'm doing my part to reduce the risk of coronavirus infection to myself, my family, my patients and all of you here at Skyline. The way we can move on from this pandemic is to have as many people as possible get the vaccine. Let's go for it!
- 2. Am I eligible for vaccination?** Anyone who is 16 years old and older, and who does not have a history of serious allergic reaction to other vaccines previously, is eligible for vaccination.
- 3. If I have an underlying health condition, can I get the vaccine?** Yes, you can get the vaccine. There is currently no data that suggest having an underlying health condition is a reason to avoid getting the vaccine. In fact, those with an underlying illness or health conditions are at an increased risk of developing severe side effects or hospitalization due to COVID disease. The clinical trials included subjects with stable chronic disease, and stable HIV, HBV and HCV, and showed similar rates of efficacy in these people.
- 4. What if I am immunocompromised or am on immunosuppressant medication?** Immunocompromised persons, including individuals receiving immunosuppressant therapy, were not included in the current trials and may have diminished immune response to the vaccine. Thus, safety and efficacy in this population is unknown. This being said, immunocompromised people may still receive the vaccine. Such people are at special risk should they become infected with the coronavirus, so it makes sense to get the vaccine to reduce this risk.
- 5. What if I have allergies to other medications? Or other allergies? Can the vaccine cause a severe allergic reaction?** It depends. Any vaccine or medication has the potential to cause a severe allergic reaction. The risk of a severe allergic reaction to this vaccine is low. Unless you have a history of severe allergic reaction (that is, anaphylaxis) to another vaccine or injectable therapy, you should be safe to get this vaccine. Severe allergies to other medications or substances are not a contraindication for getting this vaccine. You will be monitored after you get the vaccine to watch out for signs of a severe allergic reaction.

- 6. What if I'm pregnant or planning on becoming pregnant?** You can get vaccinated. There is no evidence so far indicating the vaccine could impact your fertility or the health of your baby. Additional studies will be done to get more information on the use of the vaccine in pregnant women in the future.
- 7. What if I've already recovered from COVID-19 infection?** You should get vaccinated. It is possible the vaccination will provide better immunity than the immunity you get from being infected.
- 8. What if I'm currently infected with COVID-19?** If you have a current Covid-19 infection, at a minimum you should defer vaccination until you have recovered from your illness and have met criteria to discontinue isolation.
- 9. How is the vaccine administered?** The vaccine is a 2-dose series administered into the shoulder muscle 21 days apart. It is important for you to get both doses to be fully protected.
- 10. What are the expected side effects of vaccination?** Mild-to-moderate pain at the injection site, fatigue and headache were the most commonly reported side effects of the vaccine. Other adverse reactions have been reports are muscle pain, chills, joint pain, fever, swelling and redness at the injection site, nausea, feeling unwell and swollen lymph nodes. Most adverse reactions resolve within 24-48 hours. Acetaminophen can be taken to relieve pain and fever. Development of these side effects is evidence your immune system is building a strong response, which will protect you from coronavirus infection in the future.
- 11. How does the vaccine work?** The messenger RNA (mRNA, a genetic material) in the vaccine is formulated in lipid particles, which enable delivery of the RNA into host cells. Once in the cell, mRNA causes production of the coronavirus spike protein. The presence of spike protein elicits an immune response which protects against COVID-19 infection. The mRNA from the vaccine never enters the nucleus of the cell and therefore cannot alter your DNA.
- 12. How effective is the vaccine? If the vaccine is not 100% effective, can I still get COVID19?** Current data suggests the Pfizer vaccine is 95% effective at preventing COVID-19, but it does not offer 100% protection (no vaccine is 100% effective). Vaccine efficacy has shown to be similar among study participants irrespective of age, gender, ethnicity, obesity or presence of comorbidities. So even when you've been vaccinated, there is still a small chance you could get COVID-19.
- 13. How long does it take to get the full benefit of the vaccine?** The Pfizer vaccine requires two doses, spaced 21 days apart. You need to have both doses to achieve the highest level of protection. Vaccine effectiveness is 52% approximately 12 days after the first dose, 91% in the first 7 days after your second dose, and 95% more than 7 days after your second dose. This means it's possible you could be infected with the coronavirus just before or just after vaccination. Continue to social distance, wear masks and wash your hands.

- 14. How long am I protected against COVID-19 once I receive the vaccine?** We don't yet know. We know that protection has lasted for at least three months in clinical trials, but we don't yet know if it's going to last for several years or just a few months. A reasonable guess is you should be protected for at least a year.
- 15. Can I get COVID-19 from the vaccine?** No. The vaccine uses non-infectious genetic material which cannot cause a COVID-19 infection.
- 16. Will the Pfizer vaccine cure coronavirus in those already infected?** No. As with most vaccines, a COVID-19 vaccine will only help prevent symptom development in people who are exposed to the virus.
- 17. Where is the vaccine manufactured?** The Pfizer vaccine is manufactured in Michigan, Massachusetts, Wisconsin and an overseas plant in Belgium.
- 18. What are the ingredients in the vaccine?** This is a preservative-free, non-adjuvanted vaccine. There is no thimerosal, or any other preservative, in the vaccine. The ingredients of the vaccine include:
- a. mRNA encoding the coronavirus spike protein
  - b. lipid nanoparticles that protect the mRNA:
    - (4-hydroxybutyl)azanediyl)bis(hexane-6,1-diyl)bis (ALC-3015)
    - (2-hexyldecanoate),2-[(polyethylene glycol)-2000]-N,N-ditetradecylacetamide (ALC-0159)
    - 1,2-distearoyl-sn-glycero-3-phosphocholine (DPSC)
    - Cholesterol
  - c. Salts, a very common ingredient in injectable medications and vaccines that keeps the pH, or acidity, of the vaccine close to that of a person's body:
    - potassium chloride
    - monobasic potassium phosphate
    - sodium chloride
    - basic sodium phosphate dehydrate
  - d. Sucrose: (aka sugar) safeguards the nanoparticles when they're frozen and stops them from sticking together.
- 19. Why does the vaccine have to be stored at ultra-low freezer temperatures?** The ultra-low storage temperatures keep the active ingredient in the vaccine (mRNA) from degrading and becoming ineffective.
- 20. Now that a vaccine is available, do we still need to wear masks and socially distance?** Yes! These measures are still necessary to slow the spread of COVID-19. You are not fully protected until at least a week after your second dose, and even then there is a small chance you could still get infected. It's unknown whether vaccinated individuals could still get an asymptomatic coronavirus infection or pass infection on to others. It will take months before the vaccine is widely available and we will need to take extra precautions until everyone can get vaccinated.
- 21. Where can I get more reliable information about the vaccine?** The CDC is a great resource for more information about the vaccine. Check out their website here: <https://www.cdc.gov/coronavirus/2019-ncov/vaccines/index.html>. The original New England Journal of Medicine study regarding the phase 3 trial of the Pfizer vaccine is a great read and can be accessed here: <https://www.nejm.org/doi/10.1056/NEJMoa2034577>.