

DHCHD Staff COVID-19 Questions

Reponses by: Dr. Hobby, DHCHD Provider

1. When will our community get the COVID vaccine?

At this time, it is uncertain. We requested an allocation for healthcare workers, but Texas did not distribute any of the vaccine to rural health facilities in the initial rollout. We are working with other facilities in Amarillo as well as with governmental vaccination programs to get the vaccine as soon as possible.

2. If you are allergic to the flu shot and have a reaction each time, is it a good idea to get the Covid Vaccine?

The only absolute contraindication to the vaccine is a history of anaphylaxis to one of the components listed below. History of anaphylaxis to other vaccines or injectable medications is a precaution you should discuss with your health care provider as you may still choose to be vaccinated. History of hives to other vaccinations, mild allergic reactions (dermatitis) or even anaphylaxis to foods, pets, venoms, environmental allergens, oral medications (including oral equivalents of injectable medications) and latex are considered low risk and are not a contraindication or precaution to vaccination.

"The Pfizer-BioNTech COVID-19 Vaccine is supplied as a frozen suspension in multiple dose vials; each vial must be diluted with 1.8 mL of sterile 0.9% Sodium Chloride Injection, USP prior to use to form the vaccine. Each dose of the Pfizer-BioNTech COVID-19 Vaccine contains 30 mcg of a nucleoside-modified messenger RNA (modRNA) encoding the viral spike (S) glycoprotein of SARS-CoV-2. Each dose of the Pfizer-BioNTech COVID-19 Vaccine also includes the following ingredients: lipids (0.43 mg (4-hydroxybutyl)azanediyl)bis(hexane-6,1-diyl)bis(2-hexyldecanoate), 0.05 mg 2[(polyethylene glycol)-2000]- N,N-ditetradecylacetamide, 0.09 mg 1,2-distearoyl-sn-glycero-3-phosphocholine, and 0.2 mg cholesterol), 0.01 mg potassium chloride, 0.01 mg monobasic potassium phosphate, 0.36 mg sodium chloride, 0.07 mg dibasic sodium phosphate dihydrate, and 6 mg sucrose. The diluent (0.9% Sodium Chloride Injection, USP) contributes an additional 2.16 mg sodium chloride per dose. The Pfizer-BioNTech COVID-19 Vaccine does not contain preservative. The vial stoppers are not made with natural rubber latex."

3. If a person has had Covid 19 anytime over past 9 months, would they still need the vaccine? Is there a time restriction of a few months or a month since testing positive? Should they still go ahead and benefit from taking vaccine anyway?

Even if you have had COVID you should be vaccinated. We know re-infection is possible and we do not know how long natural immunity (the kind you get from being infected) lasts, as anecdotally it has varied a lot from person to person. People with previous infection were not excluded from the trial and they showed >92% efficacy of immunity, so we know there is proven benefit. It is not recommended to be tested for antibodies to determine if you should be vaccinated, as we do not know if the antibodies you make naturally are as effective as the vaccine. *The only caveat to this is that if you received convalescent plasma or a monoclonal antibody therapy as part of your treatment for COVID-19 infection, it is recommended that you wait at least 90 days to limit interference from that therapy on your immune system's vaccine response.

4. Will this affect fertility for females?

The vaccine has not been associated with infertility or modifications to recipient DNA. The concern originated from a rumor that autoimmunity could be induced to the placenta, but this has since been disproven. In the vaccine trial 23 women became pregnant and the only adverse pregnancy outcome documented was in a woman in the placebo group (she did not receive the vaccine).

5. Is the vaccine safe for nursing moms?

The vaccine trial did not include pregnant or lactating women; however, pregnancy and lactating are not an exclusion from receiving the vaccine, especially if you are in a recommended vaccination group (i.e. healthcare workers). Historically, live-virus vaccines (like the chickenpox or MMR vaccine) are contraindicated in pregnancy. The COVID vaccine is not a live virus vaccine and cannot cause the disease. The American College of Obstetricians and Gynecologists made a statement that pregnant or lactating women should be offered the vaccine if they met the criteria to receive it. I can truly understand the concern regarding receiving a newer vaccination during this unique time in your life, and would urge you to discuss receiving the vaccine with your provider. When I review the information on how it's made I don't find anything concerning regarding risk to a lactating mother or her newborn infant. This is a personal decision, and you should weigh your risk of exposure and infection accordingly.

6. Are the vaccines made from fetuses?

New mRNA vaccines, such as those being developed by Pfizer and Moderna, are synthetic vaccines, sequenced on a computer in a lab, and do not use fetal cell lines in their production.

7. If you are 16 years old, will you still be able to receive the vaccine?

Yes, the vaccine has been safely studied and is recommended for those aged 16 and up.

8. Is it a shot or other method to administer?

It is a 2 dose series administered by injection.

9. Does it affect the senses? Does it cause potential blindness, etc?

The short answer is no it does not affect the senses, as opposed to the infection, which can impair the sense of taste and smell. The effects are similar to those seen with routine flu shots and tend to be slightly more pronounced with the 2nd dose, however this is expected and is a sign that your immune system is responding to the vaccine and building your immunity. For the long answer see below.

"Among vaccine recipients, reactogenicity symptoms, defined as solicited local injection site or systemic reactions during the 7 days after vaccination, were frequent and mostly mild to moderate. Systemic adverse reactions were more commonly reported after the second dose than after the first dose and were generally more frequent and severe in persons aged 18–55 years than in those aged >55 years. Systemic adverse reactions had a median onset of 1–2 days after vaccine receipt and resolved in a median of 1 day. Severe local and systemic adverse reactions (grade ≥ 3 , defined as interfering with daily activity) occurred more commonly in vaccine recipients than in placebo recipients. Among vaccine recipients, 8.8% reported any grade ≥ 3 reaction; the most common symptoms were fatigue (4.2%), headache (2.4%), muscle pain (1.8%), chills (1.7%), and injection site pain (1.4%). Generally, grade ≥ 3 reactions were more commonly reported after the second dose than after the first dose and were less prevalent in older than in younger participants. Serious adverse events* were observed in a similar

proportion of vaccine (0.6%) and placebo (0.5%) recipients and encompassed medical events occurring at a frequency similar to that within the general population (6). No specific safety concerns were identified in subgroup analyses by age, race, ethnicity, underlying medical conditions, or previous SARS-CoV-2 infection. * Serious adverse events are defined as any untoward medical occurrence that results in death, is life-threatening, requires inpatient hospitalization or prolongation of existing hospitalization, or results in persistent disability/incapacity."

10. Does it affect preexisting conditions? Heart issues or arthritis?

The vaccine was shown to be equally safe and effective across age, sex, race, ethnicity, and among people with underlying medical conditions as long as there is no other contraindication to receive the vaccination.

*These answers are specific to the Pfizer vaccine, but Dr. Hobdy anticipates information being similar for the Moderna vaccine as they are both mRNA vaccines.