# **COVID-19 Vaccine FAQs**



This FAQ is meant for Trinity Health colleagues and clinicians. Please direct patients and community members to view the vaccine information and FAQs on Trinity-Health.org and Health Ministry websites as well as CDC.gov.

#### 1. What is a vaccine and how does it work?

Think of a vaccine as a way for your immune system to practice for a virus. Vaccines give the body a preview of one or more key features of a virus before you get the actual virus. Due to the vaccine, the immune system develops a "memory" of how to react and stop the virus once you are exposed to it. The vaccine allows the immune system to produce antibodies that latch onto the spike protein that makes coronaviruses unique. (Coronaviruses got their name because the viruses have protein spikes that look like a crown.). This allows the immune system to quickly recognize the actual coronaviruses and interfere with its ability to multiply. The idea is to stop SARS-CoV-2, the virus that causes COVID-19, from getting into cells, replicating itself and making us sick.

# 2. What are the benefits of receiving the COVID-19 vaccine?

COVID-19 vaccination will help to keep you, the patients you care for, your family and your fellow colleagues protected against COVID-19 infection. Trinity Health's Mission and Core Values and proven scientific evidence all support COVID-19 vaccination. Vaccination has been shown to reduce the risk of severe COVID illness, hospitalization, and death.

## 3. How are COVID-19 vaccines tested for safety?

Approved COVID-19 vaccines were tested in large clinical trials to assess their safety. No vaccine will receive approval to be used outside of a clinical trial unless at least two months have gone by after the final shot in order to monitor for safety concerns. Safety monitoring will continue even after it is approved for use, as is done for all vaccines. The Centers for Disease Control and Prevention (CDC) and the U.S. Food and Drug Administration (FDA) each have independent groups of experts who review all the safety data as it comes in and provide regular safety updates. If a safety issue is detected, immediate action will take place to determine if the issue is related to the COVID-19 vaccine and determine the best course of action.

Learn more about testing on the CDC website.

Learn more about the Pfizer-BioNTech vaccine clinical trials on their website.

Learn more about the Moderna vaccine clinical trials on their website.

Learn more about the Novavax vaccine clinical trials on their website.

#### 4. How do vaccine trials work in the United States?

There are several stages to vaccine development, such as the exploratory, pre-clinical, clinical, review and approval, manufacturing and quality control stages. In the clinical development stage, there are three phases where humans participate in the trials:

- Phase One Small groups of people are given the vaccine to test for safety, early effects and dosage.
- **Phase Two** Hundreds of people with different characteristics (such as age and health status) are given the vaccine to further test for safety, effects and dosage.
- Phase Three Thousands of people are given the vaccine to test if it's safe and effective against
  the virus. During this time an independent Data Safety Monitoring Board reviews any reported
  safety concerns.

Once all three phases are complete, the FDA reviews the trial results and conducts other important safety inspections before approving a vaccine for use. Once approved, the FDA continues to oversee production and monitor activity to ensure safety.

## 5. How can the COVID-19 vaccine be fast-tracked when other vaccines take years?

Under normal circumstances, from pre-clinical testing to distribution, a vaccine takes roughly 72 months, or six years, to develop. Under the federal government's Operation Warp Speed (OWS), the timeline to develop a COVID-19 vaccine was reduced to only 14 months.

According to the CDC, OWS provided the resources and funding needed from the federal government to create highly coordinated efforts, which accelerate development while maintaining standards for safety

## 6. Currently, what are the types of COVID-19 vaccines available?

There are two main types of COVID-19 vaccines that are available. Below is a description of how each type of vaccine triggers our immune systems to recognize and protects us from the virus that causes COVID-19. None of these vaccines can give you COVID-19, as they do not contain a live COVID-19 virus.

- mRNA vaccines contain material from the virus that causes COVID-19. This material gives our cells instructions for how to make a harmless protein that is unique to the virus. After our cells make copies of the protein, our bodies recognize that the protein should not be there and trigger an immune response that will remember how to fight the virus that causes COVID-19 if we are infected in the future. The Pfizer-BioNTech and Moderna vaccines are both mRNA vaccines.
- Protein subunit vaccines include harmless pieces (proteins) of the COVID-19 virus rather than
  the entire germ. Once vaccinated, our immune system recognizes that the proteins don't belong in
  the body and begins making antibodies. If we are ever infected in the future, memory cells from
  our immune system will recognize and fight the virus. The Novavax vaccine is a protein subunit
  vaccine.

#### 7. How do we know the COVID-19 vaccine is safe?

Vaccines undergo a three-phase testing process involving thousands of subjects. They receive approval from the FDA only after they demonstrate safety and meet at least the minimum standard of effectiveness. Monitoring continues after they hit the market; effectiveness and any rare side effects or safety issues become more apparent after millions of doses are given. The U.S. vaccine safety system ensures that all vaccines are as safe as possible. Learn how federal partners are working together to ensure the safety of COVID-19 vaccines.

8. What level of immunity is obtained by either catching COVID-19 or receiving the vaccine? The protection someone gains from having an infection (called natural immunity) varies depending on the disease, and it varies from person to person. Since this virus is new, it's not yet known how long natural immunity might last. Some early evidence—based on some people— seems to suggest that natural immunity may last at least 6-8 months.

Regarding vaccination, it's also not known how long immunity will last and it won't be known until more data is available. Both natural immunity and vaccine-induced immunity are important aspects of COVID-19 that experts are trying to learn more about. It is currently recommended that those who have recovered from acute COVID-19 illness be vaccinated, especially if more than 90 days have passed since diagnosis.

#### 9. How long does the vaccine protect for? Is a booster shot be needed?

According to the CDC, those who are fully vaccinated will continue to be protected against serious illness and hospitalization. However, some study data suggests that immunity may decrease over time for those who were fully vaccinated.

For the latest on staying up to date on COVID-19 vaccines, please visit https://www.cdc.gov/coronavirus/2019-ncov/vaccines/stay-up-to-date.html.

#### 10. What does it mean to be up to date with vaccines?

To be up to date with COVID vaccines, people must have received any booster doses recommended for them. What is required to be considered up to date varies by age and health circumstances. Detailed information about staying up to date <u>is available here</u>.

#### 11. If you already had COVID-19, do you get a bad reaction to the vaccine?

No, there is no connection between "bad reactions" and those who've had the virus. The <u>common side</u> <u>effects</u> are usually very mild.

# 12. Will the vaccine help the long-term effects of someone who has had COVID but is not vaccinated?

The vaccine will help to protect the person who recovered from COVID from getting sick again. There is data to suggest that vaccination lessens the risk of "long-haul" COVID symptoms.

#### 13. Is it possible for the COVID-19 vaccine to give me the COVID-19 disease?

Because none of the COVID-19 vaccines currently in development in the United States use the live virus that causes COVID-19, the vaccine cannot give you COVID-19. It typically takes a few weeks for the body to build immunity after vaccination. That means it's possible a person could be infected with the virus that causes COVID-19 just before or just after vaccination and get sick. This is because the vaccine has not had enough time to provide protection.

**14.** What about natural immunity? Does it provide more robust immunity than the vaccine does? According to the CDC, vaccination offers higher protection than previous COVID-19 infection and provides a lesser risk of CVOID long haul symptoms compared to those who get COVID but were not vaccinated.

# 15. I've already had a flu shot. Will it also protect me from getting COVID-19?

No. A flu vaccine will not protect you from getting COVID-19, but it can prevent you from getting influenza (flu) at the same time as COVID-19. This can keep you from having a more severe illness. While it's not possible to say with certainty what will happen during flu season, the CDC believes it's likely that flu viruses and the virus that causes COVID-19 will both be spreading during that time. That means that getting a flu vaccine is more important than ever.

16. Does a person who has previously been sick with COVID-19 still need to be vaccinated?

Due to the severe health risks associated with COVID-19 and the fact that re-infection with COVID-19 is possible, people may be advised to get a COVID-19 vaccine even if they have been sick with COVID-19 before. At this time, experts do not know how long someone is protected from getting sick again after recovering from COVID-19. The immunity someone gains from having an infection, called natural immunity, varies from person to person. Some early evidence suggests natural immunity may not last very long. Experts won't know how long immunity produced by vaccination lasts until more data is available on how well it works.

17. Can a woman who is pregnant or breastfeeding or trying to get pregnant receive the vaccine? Yes, the vaccination is recommended for all people 6 months and older, including people who are trying to get pregnant, are pregnant, are breastfeeding, or may become pregnant in the future. Data from thousands of people who are pregnant, breast-feeding and those who became pregnant after vaccination confirms that the COVID-19 vaccine is safe and effective before, during and after pregnancy.

See the CDC's COVID-19 Vaccines While Pregnant or Breastfeeding info page.

**18.** I have a condition that makes me immunocompromised. Should I receive the vaccine? Yes. People who are immunocompromised are more likely to be hospitalized and get seriously ill from infection with COVID-19. It is highly recommended that those who are immunocompromised get vaccinated.

For additional information on vaccines for immunocompromised individuals, including recommendations for younger age groups, <u>visit this site.</u> If you are immunocompromised, discuss your medical condition and the vaccine with your doctor for a personalized recommendation.

- **19.** I have a history of allergic reactions to vaccines like the flu vaccine. Should I get the vaccine? If you have a history of severe allergic reactions (anaphylaxis) to vaccines, talk with your doctor before receiving the vaccine.
- 20. Are the Pfizer, Moderna, Johnson and Johnson, and Novavax vaccines safe for people with egg or tree nut/peanut allergies?

The Pfizer, Moderna, Johnson and Johnson, and Novavax vaccines do not contain egg or nut products so people with a history of egg or nut allergies should not be concerned about having a reaction.

## 21. What are the Pfizer vaccine ingredients?

Inactive ingredients in the Pfizer-BioNTech vaccine are listed here:

Ingredient Name	Strength
lipid ALC-0159 (UNII: PJH39UMU6H)	
lipid ALC-0315 (UNII: AVX8DX713V)	
POTASSIUM CHLORIDE (UNIE 660 YQ98110)	
MONOBASIC POTASSIUM PHOSPHATE (UNII: 4J9FJ0HL51)	
SODIUM CHLORIDE (UNII: 451W47IQ8X)	
SO DIUM PHO SPHATE, DIBASIC, UNSPECIFIED FORM (UNII: GR686LBA74)	
SUCROSE (UNII: C151H8M554)	

A person with a history of anaphylactic reaction to any of these components should not receive the Pfizer COVID-19 vaccine.

## 22. What are the Moderna vaccine ingredients?

The Moderna COVID-19 vaccine contains the following ingredients: messenger ribonucleic acid (mRNA), lipids (SM-102, polyethylene glycol [PEG] 2000 dimyristoyl glycerol [DMG], cholesterol, and 1,2-distearoyl-sn-glycero-3-phosphocholine [DSPC]), tromethamine, tromethamine hydrochloride, acetic acid, sodium acetate, and sucrose. A person with a history of anaphylactic reaction to any of these components should not receive the Moderna COVID-19 vaccine.

## 23. What are the Novavax vaccine ingredients?

The Novavax vaccine contains the following: SARS-CoV-2 recombinant spike protein, cholesterol, phosphatidylcholine, Fraction-A and Fraction-C of Quillaja saponaria Molina extract, disodium hydrogen phosphate heptahydrate, disodium hydrogen phosphate dihydrate, polysorbate-80, potassium chloride (common food salt), potassium dihydrogen phosphate (common food salt), sodium chloride (basic table salt), sodium dihydrogen phosphate monohydrate, sodium hydroxide or hydrochloric acid, water.

A person with a history of anaphylactic reaction to any of these components should not receive the Novavax COVID-19 vaccine.

## 24. Do the Pfizer, Moderna, or Novavax vaccines have preservatives?

No, all are preservative free.

# 25. What are the possible underlying ailments that may cause a negative interaction with the vaccine?

Please read the FDA fact sheets for the latest information.

#### 26. Do COVID-19 vaccines have side effects?

The most common side effects are pain/redness at the injection site, headache, fatigue, muscle/joint aches and low-grade fever. The side effects respond well to Tylenol and non-steroidal anti-inflammatory medications like ibuprofen. Most side effects last less than 24 hours and older adults reported fewer side effects.

#### 27. How many vaccine doses will be needed to be fully vaccinated?

One dose of the bivalent Pfizer or Moderna vaccines or two doses of the Novavax vaccines are needed to provide protection.

#### 28. Can I get the vaccine if I am not feeling well?

If you are not feeling well, it is recommended that you wait until you are feeling better to get the vaccine.

#### 29. Should someone with a current SARS-CoV-2 infection be vaccinated?

Vaccination of persons with known current SARS-CoV-2 infection should be deferred until the person has recovered from the acute illness (if the person had symptoms) and criteria have been met for them to discontinue isolation. This recommendation applies to persons who develop SARS-CoV-2 infection before receiving any vaccine doses as well as those who develop SARS-CoV-2 infection after the first dose but before receipt of the second dose. While there is otherwise no recommended minimum interval between infection and vaccination, current evidence suggests that reinfection is uncommon in the 90 days after initial infection. Persons with documented acute SARS-CoV-2 infection in the preceding 90 days may delay vaccination until near the end of this period, if desired.

# 30. Are mRNA vaccines toxic to organs, specifically reproductive organs, considering the spike protein itself is a toxin? Do the vaccines affect fertility?

COVID-19 vaccines, approved for emergency use authorization or granted permanent biologic license approval, are safe. There is no evidence that reproductive organs are affected in any way and there are no known effects on fertility.

# 31. Should people with a history of Guillain-Barre syndrome or Bell's palsy receive the Pfizer and Moderna COVID-19 vaccines, which are mRNA vaccines?

Yes, persons with a history of Guillain-Barre syndrome or Bell's palsy may receive an mRNA vaccine, unless they have a contraindication (allergic reaction to the first dose of COVID-19 vaccine or known allergy to any of the vaccine components).

## 32. Should people with the Epstein-Barr Virus (EBV) get vaccinated?

Yes, people who have EBV (the virus that causes mononucleosis or "mono" as it's commonly known) may get vaccinated, unless they have a contraindication (allergic reaction to the first dose of COVID-19 vaccine or known allergy to any of the vaccine components).

# 33. Do the vaccines protect against the new COVID-19 variants?

The vaccines authorized are highly effective at preventing severe disease, death., The vaccines are not 100% effective and some fully vaccinated people may experience illness. It's important that as many people as possible get vaccinated to slow the spread of variants. It is also important that you stay home if you have a cough, fever, runny nose, or other symptoms of a respiratory infection, even if you test negative for COVID.

34. If someone is prone to blood clots, should they get the vaccine?

Persons with a history of blood clots should discuss the vaccine with their physician.

- 35. How many people have died after being vaccinated? What is the source for this data? Adverse events, including death, are reported to the Vaccine Adverse Event Reporting System (VAERS). From the CDC: "Reports of death after COVID-19 vaccination are rare. FDA requires healthcare providers to report any death after COVID-19 vaccination to VAERS, even if it's unclear whether the vaccine was the cause. Reports of adverse events to VAERS following vaccination, including deaths, do not necessarily mean that a vaccine caused a health problem. More than 601 million doses of COVID-19 vaccines were administered in the United States from December 14, 2020, through July 20, 2022. During this time, VAERS received 15,605 preliminary reports of death (0.0026%) among people who received a COVID-19 vaccine. CDC and FDA clinicians review reports of death to VAERS including death certificates, autopsy, and medical records." Source: Selected Adverse Events Reported after COVID-19 Vaccination | CDC
- **36.** What is the risk of myocarditis (heart inflammation) after vaccination? How about in children? Mostly occurring in male adolescents age 16 and older, there have been very rare occurrences of myocarditis (inflammation of the heart) and pericarditis (inflammation of the lining surrounding the heart) following mRNA vaccination. Of the more than 320 million doses of COVID-19 vaccinations that have been administered in the U.S., the risk is felt to be 12 cases per million vaccine recipients. It is seen mostly in adolescent males after the second dose and has been primarily treated as an outpatient.
- 37. Are there more reported vaccine injuries with the COVID-19 vaccine in comparison to other vaccines?

No, there is no noteworthy number of COVID-19 vaccine injuries reported compared to other vaccines. The COVID-19 vaccines are safe, and adverse reactions are very rare. The vaccines are highly effective at preventing severe illness, hospitalization, and death.

# 38. If I have had an allergic reaction to a non-COVID-19 vaccine, is it a contraindication to a COVID-19 vaccine?

No. CDC considers a history of an immediate allergic reaction to any other vaccine or injectable therapy (i.e., intramuscular, intravenous, or subcutaneous vaccines or therapies [excluding subcutaneous immunotherapy for allergies, i.e., "allergy shots"]) as a precaution but not a contraindication to vaccination. People with a history of an immediate allergic reaction to a vaccine or injectable therapy that contains multiple components, one or more of which is a component of a COVID-19 vaccine, have a precaution to vaccination with that COVID-19 vaccine, even if it is unknown which component elicited the allergic reaction.

**39.** Can I get other vaccines such as the flu shot at the same time I get the COVID-19 vaccine? Yes. The COVID-19 vaccine can be administered with other non-live vaccines.

# 40. We have seen meds approved by the FDA just to have them come out a year or two later with potential for serious side effects. How do we know that isn't going to happen with the COVID vaccine?

The COVID-19 vaccines have undergone the most scrutiny for safety of any vaccines in US history. Side effects related to vaccines have shown up within 6-8 weeks after vaccination historically.

# 41. What if I develop an acute COVID-19 infection after I receive the first dose but before I receive the second dose?

A person who has developed a COVID-19 infection after receiving their first dose of vaccine (most likely exposed to someone with infection prior to their appointment for the first dose) should wait until they have recovered from infection AND meet criteria to discontinue isolation. If this person does not want to wait for 90 days after the infection, they can contact the vaccine clinic where they received their first dose and schedule an appointment to receive their second dose once the criteria is met. There is no need to restart the vaccine series.

# 42. What is the recommended timing for the annual flu shot if you are also planning on receiving a COVID-19 booster?

You can get the flu vaccine on the same day you receive other non-live vaccines, including the COVID-19 vaccine.

## 43. Will Trinity Health continue to provide vaccines to colleagues?

Yes, Trinity Health colleagues can receive the vaccination at any Health Ministry vaccine location. Follow local communications for details.

#### 44. Which vaccine brand is better?

The CDC recommends the Moderna, Pfizer, and Novavax vaccines,. For booster doses, the CDC currently recommends the Moderna and Pfizer bivalent vaccines; the Novavax booster is also an available option. All COVID-19 vaccines are effective in preventing severe illness and death from COVID-19. The most important thing is to get vaccinated. Vaccination is the most effective way to end the COVID-19 pandemic and protect yourself and those around you.

#### 45. Am I able to choose the vaccine brand I receive?

Yes, you can choose which vaccine brand you want to receive, as there are ample supplies available now.

#### Sources

https://www.uchealth.org/today/coronavirus-vaccines-101-what-you-need-to-know/

https://khn.org/news/5-things-to-know-about-a-covid-vaccine-it-wont-be-a-magic-wand/

https://www.hackensackmeridianhealth.org/HealthU/2020/10/08/covid-19-vaccine-trials-9-things-you-should-know/

https://www.mayoclinic.org/diseases-conditions/coronavirus/in-depth/herd-immunity-and-coronavirus/art-20486808

https://www.cdc.gov/vaccines/hcp/conversations/understanding-vacc-work.html

https://www.cdc.gov/coronavirus/2019-ncov/vaccines/faq.html

https://www.cdc.gov/coronavirus/2019-ncov/vaccines/about-vaccines/how-they-work.html

https://www.cdc.gov/vaccines/covid-19/info-by-product/clinical-considerations.html

https://biontech.de/covid-19

https://media.defense.gov/2020/Aug/13/2002476369/-1/-1/0/200813-D-ZZ999-100.JPG

https://www.pfizer.com/news/press-release/press-release-detail/pfizer-and-biontech-celebrate-historic-first-authorization

https://www.pfizer.com/science/coronavirus/vaccine

https://www.modernatx.com/covid19vaccine-eua/

https://www.novavax.com/science-technology/coronavirus-disease-2019-covid-19#news