COVID-19 Variants and Vaccination Frequently Asked Questions

Updated September 2, 2021

COVID-19 VARIANTS

Q: What COVID-19 variants have been discovered?

A: As the virus spreads, it has new opportunities to change and may become more difficult to stop. These changes can be monitored by comparing differences in physical traits (such as resistance to treatment) or changes in genetic code (mutations) from one variant to another. https://www.cdc.gov/coronavirus/2019-ncov/variants/variant.html

Current Variants of Concern in the U.S. (all have been identified in Nebraska):

Alpha - B.1.1.7
First identified: United Kingdom

Spread: Spreads much faster than other variants

Severe illness and death: May potentially cause more people to get sicker and to die

Vaccine: Currently authorized vaccines do work against this variant. Some breakthrough infections in fully vaccinated people are expected but remain rare. All vaccines are particularly effective against severe illness, hospitalization, and death.

Treatments: Treatments are effective against this variant

Beta - B.1.351
First identified: South Africa

Spread: May spread faster than other variants

Severe illness and death: Current data do not indicate more severe illness or death than other variants

Vaccine: Currently authorized vaccines do work against this variant. Some breakthrough infections are expected, but remain rare. All vaccines are particularly effective against severe illness, hospitalization and death.

Treatments: Certain monoclonal antibody treatments are less effective against this variant

Gamma - P.1
First identified: Japan/Brazil

Spread: Spreads faster than other variants

Severe illness and death: Current data do not indicate more severe illness or death than other variants
Vaccine: Currently authorized vaccines do work against this variant. Some breakthrough infections are expected, but remain rare. All vaccines are particularly effective against severe illness, hospitalization and death.

Treatments: Certain monoclonal antibody treatments are less effective against this variant

Delta - B.1.617.2
First identified: India

Spread: The Delta variant is highly contagious, nearly twice as contagious as previous variants. Fully vaccinated people with Delta variant breakthrough infections can spread the virus to others. However, vaccinated people appear to be infectious for a shorter period

Severe illness and death: May cause more severe cases than the other variants

Vaccine: Infections happen in only a small proportion of people who are fully vaccinated, even with the Delta variant. Previous variants typically produced less virus in the body of infected fully vaccinated people (breakthrough infections) than in unvaccinated people. In contrast, the Delta variant seems to produce the same high amount of virus in both unvaccinated and fully vaccinated people. Learn more here. All vaccines are particularly effective against severe illness, hospitalization and death.

Treatments: Certain monoclonal antibody treatments are less effective against this variant

According to the CDC, the Alpha and Delta variants may cause more people to get sicker and die.

VACCINATIONS

Q: I've heard that certain vaccines can cause serious illnesses such as myocarditis and thrombosis. Is that true?

A: More than 177 million people have received at least one dose of COVID-19 vaccine in the United States, and CDC continues to monitor the safety of COVID-19 vaccines for any health problems that happen after vaccination. The known and potential benefits of COVID-19 vaccination outweigh the known and potential risks, including the possible risk of myocarditis or pericarditis. Also, most patients with myocarditis and pericarditis who received care responded well to treatment and rest and quickly felt better.

- Since April 2021, there have been more than a thousand reports to the Vaccine Adverse Event Reporting System (VAERS) of cases of inflammation of the heart—called myocarditis and pericarditis—happening after mRNA COVID-19 vaccination (i.e., Pfizer-BioNTech, Moderna) in the United States.
- These reports are rare, given the hundreds of millions of vaccine doses administered, and have been reported after mRNA COVID-19 vaccination, particularly in adolescents and young adults. View the latest information.
- CDC and its partners are actively monitoring these reports, by reviewing data and medical records, to learn more about what happened and to understand any relationship to COVID-19 vaccination.

- **Anaphylaxis after COVID-19 vaccination is rare** and has occurred in approximately 2 to 5 people per million vaccinated in the United States. Severe allergic reactions, including anaphylaxis, can occur after any vaccination. If this occurs, vaccination providers can effectively and immediately treat the reaction. Learn more about COVID-19 vaccines and allergic reactions, including anaphylaxis.

- **Thrombosis with thrombocytopenia syndrome (TTS) after Johnson & Johnson's Janssen (J&J/Janssen) COVID-19 vaccination is rare.** As of July 26, 2021, more than 13 million doses of the J&J/Janssen COVID-19 Vaccine have been given in the United States. CDC and FDA identified 39 confirmed reports of people who got the J&J/Janssen COVID-19 Vaccine and later developed TTS. Women younger than 50 years old especially should be aware of the rare but increased risk of this adverse event. There are other COVID-19 vaccine options available for which this risk has not been seen. Learn more about J&J/Janssen COVID-19 Vaccine and TTS.
  - To date, two confirmed cases of TTS following mRNA COVID-19 vaccination (Moderna) have been reported to VAERS after more than 328 million doses of mRNA COVID-19 vaccines administered in the United States. Based on available data, there is not an increased risk for TTS after mRNA COVID-19 vaccination.
- **CDC and FDA are monitoring reports of Guillain-Barré Syndrome (GBS)** in people who have received the J&J/Janssen COVID-19 vaccine. GBS is a rare disorder where the body's immune system damages nerve cells, causing muscle weakness and sometimes paralysis. Most people fully recover from GBS, but some have permanent nerve damage. After more than 13 million J&J/Janssen COVID-19 Vaccine doses administered, there have been around 143 preliminary reports of GBS identified in the Vaccine Adverse Event Reporting System (VAERS) as of July 30. These cases have largely been reported about 2 weeks after vaccination and mostly in men, many 50 years and older. CDC will continue to monitor for and evaluate reports of GBS occurring after COVID-19 vaccination and will share more information as it becomes available.
- **Myocarditis and pericarditis after COVID-19 vaccination are rare.** As of July 30, 2021, VAERS has received 1,249 reports of myocarditis (inflammation of the heart muscle) or pericarditis (inflammation of the outer lining of the heart) among people ages 30 and younger who received COVID-19 vaccine. Most cases have been reported after mRNA COVID-19 vaccination (Pfizer-BioNTech or Moderna), particularly in male adolescents and young adults. Through follow-up, including medical record reviews, CDC and FDA have confirmed 716 reports of myocarditis or pericarditis. CDC and its partners are investigating these reports to assess whether there is a relationship to COVID-19 vaccination. Learn more about COVID-19 vaccines and myocarditis.
- **Reports of death after COVID-19 vaccination are rare.** More than 346 million doses of COVID-19 vaccines were administered in the United States from December 14, 2020, through August 2, 2021. During this time, VAERS received 6,490 reports of death (0.0019%) among people who received a COVID-19 vaccine. 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.** A review of available clinical information, including death certificates, autopsy, and medical records, has not established a causal link to COVID-19 vaccines. However, recent reports indicate a plausible causal relationship between the J&J/Janssen COVID-19 Vaccine and TTS, a rare and serious adverse event—blood clots with low platelets—which has caused deaths.

Q: Do I need to wear a mask and avoid close contact with others if I am fully vaccinated?

A: According to CDC, wearing a mask is one way to reduce the spread of Alpha, Delta, and other variants.

- Wearing a mask over your nose and mouth is required on planes, buses, trains, and other forms of public transportation traveling into, within, or out of the United States, and while indoors at U.S. transportation hubs, such as airports and stations, even for those people who have been fully vaccinated.
- Vaccines are playing a crucial role in limiting spread of the virus and minimizing severe disease. Although vaccines are highly effective, they are not perfect and there will be vaccine breakthrough infections. Millions of Americans are vaccinated, and that number is growing. This means that even though the risk of breakthrough infections is low, there will be thousands of fully vaccinated people who become infected and able to infect others, especially with the surging spread of the Delta variant. Low vaccination coverage in many communities is driving the current rapid and large surge in cases associated with the Delta variant, which also increases the chances that even more concerning variants could emerge.

- Wearing a mask may be helpful if you have a weakened immune system or if, because of your age or an underlying medical condition, you are at increased risk for severe disease, or if someone in your household has a weakened immune system, is at increased risk for severe disease, or is unvaccinated. If this applies to you or your household, you might choose to wear a mask regardless of the level of transmission in your area.
- If you have a condition or are taking medications that weaken your immune system, you may not be fully protected even if you are fully vaccinated. You should continue to take all precautions recommended for unvaccinated people until advised otherwise by your healthcare provider.
- People who are NOT vaccinated should continue to take steps to protect themselves.
- **Children younger than two should not wear masks.**

Q: Where can I go to get vaccinated?

A: **Visit Vaccines.gov** to find vaccination providers near you. In some states, information may be limited while more U. S. vaccination providers and pharmacies are being added. Learn more about COVID-19 Vaccination Locations on Vaccines.gov.

Community pharmacies, such as those at CVS, Walgreens, HyVee and Walmart, are offering the vaccines to any member of the public who wishes to receive the vaccine. Doctor's offices may also provide vaccines.

Q: Is it safe for my child to get a COVID-19 vaccine?

A: Yes. Studies show that COVID-19 vaccines are safe and effective. Like adults, children may have some side effects after COVID-19 vaccination. These side effects may affect their ability to do daily activities, but they should go away in a few days. Children 12 years and older are now eligible to get vaccinated against COVID-19. COVID-19 vaccines have been used under the most intensive safety monitoring in U.S. history, including studies in children 12 years and older. Your child cannot get COVID-19 from any COVID-19 vaccine.

Q: I already had COVID-19. Do I still need the vaccine?

A: Yes, you should be vaccinated regardless of whether you already had COVID-19. That's because experts do not yet know how long you are protected from getting sick again after recovering from COVID-19. Even if you have already recovered from COVID-19, it is possible—although rare—that you could be infected with the virus that causes COVID-19 again. Studies have shown that vaccination provides a strong boost in protection in people who have recovered from COVID-19. Learn more about why getting vaccinated is a safer way to build protection than getting infected.

If you were treated for COVID-19 with monoclonal antibodies or convalescent plasma, you should wait 90 days before getting a COVID-19 vaccine. Talk to your doctor if you are unsure what treatments you received or if you have more questions about getting a COVID-19 vaccine.

If you or your child has a history of multisystem inflammatory syndrome in adults or children (MIS-A or MIS-C), consider delaying vaccination until you or your child have recovered from being sick and for 90 days after the date of diagnosis of MIS-A or MIS-C. Learn more about the clinical considerations people with a history of multisystem MIS-C or MIS-A.

Experts are still learning more about how long vaccines protect against COVID-19. CDC will keep the public informed as new evidence becomes available.

Q: I lost my vaccination card. What should I do?

A: **If you have lost your vaccination card or don't have a copy**, contact your vaccination provider site where you received your vaccine to access your vaccination record. Learn more about how you can locate your vaccination provider.

Q: How soon after receiving the vaccine am I safe?

A: Clinical studies show that some protection develops in the weeks after your first dose of either the Pfizer or Moderna vaccine, but the greatest chance for protection against COVID-19 is developed about two weeks after receiving a second dose (or after a single dose of the J&J/Janssen Pharmaceuticals vaccine.) That is when you are considered fully vaccinated.

Q: What is a breakthrough COVID-19 case?

A: COVID-19 vaccines are effective. However, a small percentage of people who are fully vaccinated will still get COVID-19 if they are exposed to the virus that causes it. These are called vaccine breakthrough cases. This means that while people who have been vaccinated are much less likely to get sick, it will still happen in some cases. It's also possible that some fully vaccinated people might have infections, but not have symptoms (asymptomatic infections). Experts continue to study how common these cases are.

Large-scale clinical studies found that COVID-19 vaccination prevented most people from getting COVID-19. Research also provides growing evidence that mRNA COVID-19 vaccines (Pfizer-BioNTech, Moderna) offer similar protection in real-world conditions. While these vaccines are effective, no vaccine prevents illness 100% of the time. For any vaccine, there are breakthrough cases.

Q: What are the side effects for COVID-19 vaccines?

A: Mild side effects like a sore arm and fatigue are some of the most commonly-reported symptoms associated with COVID-19 vaccines. While many people will have no symptoms, for others there can be some pain or swelling on the arm where the dose was given, headaches, chills, or a fever.

These side effects are normal and a sign that your body is building protection, and you should be feeling better within a few days.

Some people have experienced reactions such as hives, swelling and wheezing in the hours after vaccination. The Centers for Disease Control and Prevention (CDC) encourages anyone experiencing more serious side effects to report them to their health care provider, or via the CDC's V-Safe app.

V-Safe is a health checker app that gives vaccine recipients a way to report side effects or reactions, and allows for follow-up with those experiencing a serious reaction.

People should be aware that a risk of a rare condition called thrombosis with thrombocytopenia syndrome (TTS) has been reported following vaccination with the J&J/Janssen COVID-19 Vaccine. TTS is a serious condition that involves blood clots with low platelet counts. This problem is rare, and most reports were in women between 18 and 49 years old. For women 50 years and older and men of any age, this problem is even more rare. There are other COVID-19 vaccine options available for which this risk has not been seen (Pfizer-BioNTech, Moderna).

Q: Can I get vaccinated against COVID-19 if I am currently sick with COVID-19?

A: No. People with COVID-19 who have symptoms should wait to be vaccinated until they have recovered from their illness and have met the criteria for discontinuing isolation; those without symptoms should also wait until they meet the criteria before getting vaccinated. This guidance also applies to people who get COVID-19 before getting their second dose of vaccine.

Q: I have allergies. Should I get the vaccine?

A: Those who have had an allergic reaction to ingredients in the Pfizer, Moderna, and Johnson & Johnson/Janssen Pharmaceuticals vaccines, or to another vaccine, should consult with their doctor before getting any of the available vaccines.

The CDC advises that those with food, pet, latex, environmental, or oral medication allergies may be vaccinated.

Severe allergic reactions, such as anaphylaxis, have occurred but are very rare, and the CDC offers additional guidance for those with a history of severe allergic reactions.

Q: I started vaccination but then tested positive for COVID-19. Do I still have to isolate?

A: **Yes.** Anyone testing positive for COVID-19 should isolate for at least 10 days, starting on the day their symptoms begin, or the date of their test if there are no symptoms.

After the 10 day period, isolation can end when both of these conditions have been met:

- You're fever-free without the use of fever reducing medicine for 24 hours, and
- While some symptoms may linger, COVID-19 symptoms are improving overall.

The Pfizer and Moderna vaccines require two doses given several weeks apart, followed by additional time needed to reach full effectiveness, so anyone testing positive for COVID-19 should still isolate to avoid spreading the virus to others.

Q: Do I need to get both vaccine doses to be protected?

A: **Yes.** Both the Pfizer and Moderna vaccines authorized for emergency use in the U.S. require two doses given at least 21 or 28 days apart to reach their full effectiveness against COVID-19. In addition, the same brand of vaccine must be administered for both doses. The Pfizer vaccine was 95% effective and the Moderna vaccine 94% effective in phase three clinical trials, compared to flu vaccines which are generally 40 to 60% effective. The body will develop some protection in the weeks following the first dose, but research shows the best protection against symptoms and potential complications of COVID-19 comes from receiving both doses. You are considered fully vaccinated two weeks after the second shot for the Pfizer and Moderna vaccines, and two weeks after the J&J/Janssen Pharmaceuticals shot.

Q: Do I need a third dose?

A: On August 12, the U.S. Food and Drug Administration amended the emergency use authorizations for both the Pfizer and Moderna vaccines to allow for an additional dose in certain immunocompromised individuals, specifically solid organ transplant recipients and certain moderately to severely immunocompromised individuals, including cancer patients. The CDC's Advisory Committee on Immunization Practices (ACIP) met on August 13 and unanimously voted to implement that recommendation. The CDC estimates that about 9 million Americans are

immunocompromised, either because of diseases such as cancer or because of medications they take. Your doctor will work with you to determine if you are eligible for a third shot.

Q: What medications are immunosuppressants?

A: They are medications prescribed for those with organ transplants, autoimmune disorders, and other medical conditions. They include corticosteroids such as prednisone, budesonide and prednisolone; Janus kinase inhibitors like Xeljanz; calcineurin inhibitors such as cyclosporine and tacrolimus; mTOR inhibitors such as sirolimus (Rapamune) and everolimus (Afinitor, Zortress); IMDH inhibitors such as azathioprine (Azasan, Imuran), leflunomide (Arava), and mycophenolate (CellCept, Myfortic); Biologics such as abatacept (Orencia),adalimumab (Humira), anakinra (Kineret), certolizumab (Cimzia), etanercept (Enbrel), golimumab (Simponi), infliximab (Remicade), ixekizumab (Taltz), natalizumab (Tysabri), rituximab (Rituxan), secukinumab (Cosentyx),tocilizumab (Actemra), ustekinumab (Stelara), and vedolizumab (Entyvio).

Q: What's the vaccine approval process and where do COVID-19 vaccines fit in?

A. Vaccines are tested using multiple clinical trials. The first phase of a clinical trial tests different doses and identifies any side effects, and the second tests the effectiveness of the vaccine among a small group.

If a vaccine passes the second phase, a third phase tests any vaccine in a much larger, more diverse group, where it is compared against a placebo. If a vaccine passes safety checks and appears to work well, data from all three clinical trials can be submitted to the FDA. The FDA conducts a thorough review of all data, and vaccines meeting safety and effectiveness standards are granted an Emergency Use Authorization (EUA).

On August 23, the U.S. Food and Drug Administration (FDA) approved the first COVID-19 vaccine. The vaccine has been known as the Pfizer-BioNTech COVID-19 Vaccine, and will now be marketed for the prevention of COVID-19 disease in individuals 16 years of age and older. The vaccine also continues to be available under emergency use authorization (EUA), including for individuals 12 through 15 years of age and for the administration of a third dose in certain immunocompromised individuals.

Pfizer enrolled more than 43,000 people in its phase 3 clinical trial and found its COVID-19 vaccine to be 95% effective. Moderna enrolled 30,000 people in its phase 3 clinical trial and found its vaccine to be 94% effective. In December, the FDA approved both vaccines for emergency use.

All available vaccines have been determined to be safe and effective in protecting against COVID-19 symptoms, and more studies are being done to determine their long-term effectiveness.

TESTING

Q: How do I get tested if I think I have contracted COVID-19?

A: COVID-19 testing will continue to be available after Test Nebraska closed on July 31st. Nebraskans requiring assistance in accessing testing, or in need of in-home testing, should contact their local health department. Persons may also contact their primary care physician or medical provider. *Medicaid clients may be eligible for non-emergency medical transportation. Refer to your Medicaid card for contact information.* If you are unsuccessful in these attempts, contact the DHHS Division of Developmental Disabilities' central office for help identifying community testing resources, (877) 667-6266.

Nebraskans with concern for COVID-19, are still highly encouraged to get tested, as DHHS continues monitoring and tracking associations between variants of concern, reinfections, vaccine breakthroughs, and outcomes.

Q: Is there a cost for testing or to receive the vaccine?

A: If you currently have health insurance, testing and/or vaccinations will be billed to your insurance provider. While vaccinations will continue to be available free of charge, providers may charge the cost of administering the vaccine. Nebraskans who do not have insurance and who are not able to pay should check with their provider if the administration fee may be waived. To determine your personal cost for testing or vaccination, please contact your insurance provider. Refer to your insurance card for contact information.

PREGNANCY

Q: I'm pregnant. Should I get the vaccine?

A: The Centers for Disease Control and Prevention (CDC) announced on August 11 that COVID-19 is recommended for all people aged 12 years and older, including people who are pregnant, breastfeeding, trying to get pregnant now, or might become pregnant in the future. Pregnant and recently pregnant people are more likely to get severely ill with COVID-19, as compared with non-pregnant women. The increased circulation of the highly contagious Delta variant, the low vaccine rate among pregnant people and the increased risk of severe illness and pregnancy complications related to COVID-19 infection among pregnant people make vaccination for this population more urgent than ever. https://www.cdc.gov/coronavirus/2019-ncov/vaccines/recommendations/pregnancy.html

If you have concerns, talking with your health care provider may be helpful in making an informed decision. The CDC and the Food and Drug Administration (FDA) has a number of safety monitoring systems in place to capture immunization during pregnancy. https://www.cdc.gov/coronavirus/2019-ncov/vaccines/safety/monitoring-pregnant-people.html

Q: I'm currently breastfeeding, should I get the vaccine?

A: Yes. Current evidence suggests that breast milk is not likely to spread the virus to babies. If you have concerns, talking with your health care provider may be helpful in making an informed decision.

REPORTING

Q: Why did the State retire the COVID-19 vaccine dashboard? Where can I find recent COVID-19 data?

A: DHHS legal and data teams have been working diligently on determining what COVID-related information can be shared under both HIPAA and Section 71-503.01. The Department started to report such data today and will provide updates every Wednesday: https://dhhswebsiteauthoring2019/Pages/COVID-19-Weekly-Update.aspx. The main reason for sharing COVID data was to ensure accurate reporting for Nebraskans. Although a number of organizations outside of the state have access to Nebraska's data and share it on their websites, they collect and report data differently from DHHS and may differ among themselves in how metrics are calculated or defined. To ensure that Nebraskans have access to accurate counts, the State has decided to share de-identified data on its website. Due to lower case counts and hospitalization rates, reporting weekly, rather than daily, helps ensure that potentially identifiable information is protected.

Q: Why isn't county-level data reported?

A: The provisions within HIPAA allow DHHS to use and disclose information that neither identifies, nor provides a reasonable basis to identify an individual. DHHS will evaluate all COVID-19 data weekly to determine whether the data contain potentially identifiable protected health information under HIPAA. In instances where the information is not determined to be sufficiently de-identified, such as county-level data, DHHS will not be able to share that information with the public.

Q: How does the state report COVID-related deaths?

A: DHHS considers a death as confirmed COVID-related death only when the following criteria are met: 1) COVID is listed as the underlying cause of death on the death certificate and 2) the polymerase chain reaction (PCR) COVID-19 test is positive. Only when both of these criteria are met, DHHS reports it as a COVID death. Sometimes, local health departments (LHDs) reported deaths that are not included in the weekly COVID-19 update because the LHDs frequently receive death certificates before the DHHS does.

Q: Where can I find more information?

A: You may find additional information online at: https://dhhs.ne.gov/Pages/Coronavirus.aspx

You may also call the DHHS Division of Developmental Disabilities' central office for help identifying community resources at (877) 667-6266.