COVID-19 vaccines are available in North Carolina to everyone ages 5 and older.

- The vaccine is free everywhere in North Carolina.
- No government ID or insurance is required.
- Depending on where you get your vaccine or booster, you may need to make an appointment.
- Everyone can be vaccinated and boosted, regardless of their immigration status. Getting vaccinated and boosted will not affect your immigration status.

To find a vaccine provider near you, visit MySpot.nc.gov.

IN THIS DOCUMENT

- Getting Your Vaccine and Booster
- Why You Should Get a COVID-19 Vaccine
- One-dose Versus Two-dose Vaccines
- Vaccine Safety
- After Your Vaccination
- Government Data and Privacy
- The Science Behind the Vaccines

GETTING YOUR VACCINE AND BOOSTER

Is identification required to get a vaccine or booster?

You do not need an ID card, like a driver's license, to get a vaccine or a booster. Vaccine providers can use other ways to make sure they are giving the vaccine to the right person. They may ask you to pre-register or fill out a form with your name, address and date of birth. Or you may be asked to show a utility bill or other document with your name and address on it. You may be asked for your health insurance, but it's OK if you don't have it, and vaccines and boosters are always free.

Can you get a vaccine or booster in a county you don't live in?

Yes. You can get a vaccine or booster for free anywhere, no matter where you live.

Can non-US Citizens get the vaccine and booster?

Yes. COVID-19 vaccines and booster are free to everyone, even if you don't have health insurance. Your immigration or residential status does not matter, and you should not be asked about it. Your information is secure and can't be given to ICE for immigration enforcement. Getting the vaccine and booster does not impact your immigration status. Learn more from the U.S. Department of Homeland Security.

How much do the vaccines and boosters cost?

Nothing. The COVID-19 vaccines and booster are free to everyone, even if you don't have health insurance. If you have health insurance, it will pay for 100% of the vaccine or booster. If you don't have health insurance, the government will pay. No vaccine provider can charge you for the vaccine.
Are children able to get the vaccine?

Yes. Children ages 5 and older can receive the age-appropriate COVID-19 vaccine. The vaccine is available for free even without insurance and regardless of immigration status. Vaccination can help keep children from getting seriously sick even if they do get COVID-19. Vaccinating children also can help protect family members, including siblings who are not eligible for vaccination and family members who may be at increased risk of getting very sick if they are infected. Data on COVID-19 vaccine in children has shown it is very effective and there are no safety concerns.

Children 12 to 15 Years: On May 10, 2021, the Pfizer vaccine was authorized by the FDA for children 12 to 15 years old with hundreds of thousands of children having received the vaccine.

Children 5 to 11 Years: On Oct. 29, 2021, a lower dose Pfizer COVID-19 vaccine was authorized by the FDA and recommended by the CDC on Nov. 2, 2021, for children 5 to 11 years of age based on clinical trials with more than 3,000 children ages 5 to 11 with volunteers from different races and ethnicities.

Children Under 5: Clinical trials are ongoing to continue to gather data for children as young as 6 months of age.

Why should I get my teenager vaccinated?

There is good news for helping our children get back to the fuller lives they had before the pandemic. The tested, safe and effective Pfizer COVID-19 vaccine is available for ages 12 and up, with a smaller dose available for ages 5 to 11. Getting vaccinated helps keep students and teachers in the classroom.

Young people are vulnerable to the virus, just like everyone else. Getting them vaccinated is the best way to protect them, prevent the spread of COVID-19, and protect others. In North Carolina, more than 462,000 children 0 to 17 years old have tested positive for COVID-19.

Everyone ages 5 and older, including teenagers, can receive a free Pfizer COVID-19 vaccine, even without insurance and regardless of immigration status. Everyone 12 and older should also get a booster five months after their second Pfizer shot. Millions of people have already received this vaccine. It is safe and effective in preventing serious illness, hospitalization and death.

The CDC also recommends that moderately or severely immunocompromised individuals over 5 years of age receive a third dose of the Pfizer vaccine 28 days after their second shot. And 12 to 17 year olds who are moderately or severely immunocompromised should receive a booster three months after the third dose for a total of four doses.

Video: https://www.youtube.com/watch?v=o_5ld6bEgpo

Is the vaccine safe for children and teenagers?

Yes, the Pfizer COVID-19 vaccine is safe and effective in children and adolescents. Millions of children and adolescents and tens of millions of adults in the United States have received COVID-19 vaccines under the most intense safety monitoring in U.S. history. Safety data from more than 298 million doses of Pfizer or Moderna COVID-19 vaccine administered in the first six months of the US vaccination program show that most reported adverse events were mild and short in duration.

Children and adolescents, like adults, may have some temporary reactions, such as a sore arm, feeling tired or achy for a day or two, headache or fever. These are normal and good signs that their body is building protection, and they should go away in a few days.

Parents/caregivers can enroll their child or adolescent in v-safe, a free, smartphone-based tool that uses text messaging and web surveys to provide personalized health check-ins. Through v-safe, you can report any side effects your child or teenager may have after vaccination.
There have been no safety data to suggest that the COVID-19 vaccines impact development or the ability to get pregnant in the future.

Children and teens can get other vaccines at the same time, or around the same time, as the COVID-19 vaccine.

The North Carolina Pediatric Society, along with The North Carolina Medical Society (NCMS) and the North Carolina Academy of Family Physicians, strongly encourage all families to ensure children 5 and older are vaccinated as soon as possible against COVID-19.

**Why should I get my younger child vaccinated?**

Like teenagers, vaccines can help our children get back to fuller lives with healthier and happier experiences both in and outside of the classroom. Children are vulnerable to the virus like everyone else, and COVID-19 cases in children can result in hospitalization, deaths, MIS-C (inflammatory syndromes) and long-term complications, such as “long COVID” where symptoms can last for months. With the Omicron variant, COVID-19 cases among children in the U.S. reached their highest ever reported since the start of the pandemic with significant increases in hospitalizations across the country. Fortunately, we now have a lower dose Pfizer COVID-19 vaccine available for children ages 5 to 11 that is safe and effective in protecting against COVID-19. The CDC also recommends that moderately or severely immunocompromised 5 to 11 year olds receive an additional primary dose of vaccine 28 days after their second shot. It is also free even if they don't have insurance and regardless of immigration status. Kids 5 to 11 can be vaccinated at any location that has the smaller dose of Pfizer available, so find a vaccination location for kids 5 to 11 near you.

**Where can I find more guidance about back-to-school safety?**

The updated StrongSchoolsNC: Public Health Toolkit reflects the expertise of the CDC, the American Academy of Pediatrics and our public health experts on how to keep our students in-person and safe in schools with layered prevention strategies. Currently the best tools we have to respond to the pandemic are vaccines and boosters, masking during times of widespread viral transmission, and testing. Guidance will continue to evolve based on emerging science and to focus on the most effective tools for where we are in the pandemic.

**Do kids under 18 need their parent or guardian’s permission to get a COVID-19 vaccine or booster?**

It depends. People who are 16 or 17 years old don't need permission to get the first two doses of the fully approved Pfizer or Moderna (Spikevax) COVID-19 vaccines. But they do need permission to get a booster or an additional dose (which may be important if their immune systems are compromised).

Anyone 15 or younger needs a parent or guardian’s permission to get any COVID-19 vaccines or boosters.

Permission to get a vaccine or booster must be given in writing by a parent or legal guardian of the minor. It can’t be given over the phone or through email.

**I am a teenager, where can I find more information for me, my friends and family about the COVID-19 vaccine?**

You can find helpful information, tools and resources needed to educate yourself, your friends and family about the benefits of COVID-19 vaccines at TeenVaxFacts.com.

**How can I get my entire family vaccinated at once?**

There are many ways to get your family vaccinated together.
Most vaccine providers allow you to sign up for vaccine appointments, and you can schedule appointments for all members of your family. More vaccine providers are also now offering walk-in vaccinations, so eligible people in a family can show up together for these walk-in clinics.

If you have children who are ages 12 to 17, they are currently only eligible to receive the Pfizer vaccine, so it is important to check that the vaccine provider has the Pfizer vaccine available for them. If you have children who are ages 5 to 11, it is important to check the provider has the smaller dose (pediatric) Pfizer vaccine available. Many locations in North Carolina offer COVID-19 vaccines specifically for children and their families. For more information about how vaccines work and where you can find a vaccination appointment nearby, visit MySpot.nc.gov. The North Carolina Vaccine Help Center at 888-675-4567 can also help you make an appointment. It is open 7 a.m. to 7 p.m. on weekdays and 8 a.m. to 4 p.m. on weekends.

**How can I avoid missing work to get my vaccine or booster?**

Many places have vaccination appointments available on the weekends or in the evenings as well as allow walk-ins.

Temporary reactions after getting vaccinated, like a sore arm, fatigue, fever, or feeling achy for a day or two, can be normal and show that the vaccine is working to give your body protection against COVID-19. NCDHHS is encouraging employers to provide paid time-off for employees to get a vaccine or for the temporary reactions after being vaccinated. For people without paid time-off or for whom it is difficult to miss work, we encourage getting vaccinated prior to a day off.

**Can I get a ride to my vaccine visit?**

Yes, there are several free transportation options to get vaccinated:

- Call your local transit authority for a free ride to your vaccine appointment. You may need to call in advance to schedule a ride.
- Ask your vaccine provider about transportation options.

**What if I need to be vaccinated or boosted at home because of limited mobility?**

People who have limited mobility can be vaccinated against COVID-19 in their home. To find a vaccine provider in your area who is providing vaccinations to individuals in their home, call the At-Home Vaccination Hotline at 1-866-303-0026, or fill out a registration form. More information on at-home vaccination.

**WHY YOU SHOULD GET A COVID-19 VACCINE**

**What can you do differently once you are up-to-date on your COVID vaccines?**

Well-fitting masks offer protection against all variants. Everyone should continue to wear a mask as North Carolina remains in the CDC red zone with high community transmission. However, once you are up-to-date on your COVID-19 vaccines you can participate in many of the activities that you did before the pandemic.

While vaccination provides the best protection against severe illness, hospitalization and death from COVID-19, people who are vaccinated may become infected and spread the virus to others. Everyone should make sure to stay up-to-date on their COVID-19 vaccines by getting a Pfizer or Moderna booster dose. Certain moderately to severely immunocompromised persons should get an additional primary series Pfizer or Moderna dose, followed by a Pfizer or Moderna booster three months later to make a total of four doses. Get information on COVID-19 boosters.

Even if you are vaccinated, get tested if you have any symptoms of COVID-19. People with COVID-19 should stay away from others (isolate) for at least five full days and wear a mask for an additional five days. People exposed to COVID-19 should stay from others (quarantine) for five days and wear a mask for an additional five days. However, people who are exposed to COVID-19 do not need to quarantine if they are vaccinated — including a booster for adults — against COVID-19.
Why do I need to get a vaccine if I can practice other things like social distancing to prevent the COVID-19 virus from spreading?

Vaccines work to prepare your body to fight the virus if you are exposed to it. Vaccines help protect you from serious illness, hospitalization, and death from COVID-19. Other steps, like the 3Ws—wear a mask, wait 6 feet apart and wash your hands—help reduce your chance of being exposed to the virus or spreading it to others. Getting the COVID-19 vaccine and following the 3Ws is everyone’s best protection from getting and spreading COVID-19.

Why should I get the COVID-19 vaccine if there are treatments for COVID-19?

Preventing COVID-19 is much better than treating it. Vaccines may protect you from getting infected and help keep you from getting very sick. Getting vaccinated can also help keep your loved ones safe. Don’t wait to vaccinate, and get a booster when eligible. Visit MySpot.nc.gov to find a location near you.

Treatments for COVID-19 are for people who have tested positive for COVID-19 and have symptoms. Treatments can help stop serious illness by helping your body fight the virus. They can also shorten the time that you are sick by slowing the growth of virus in your body. Treatments do not stop you from catching COVID-19 again later. Treatments do not stop you from spreading it to others.

If you test positive and have symptoms, don’t wait, treatment must be started within the first few days to be effective. Talk to your doctor about treatments or visit covid19.ncdhhs.gov/treatments to learn more and find locations.

If everyone else is getting the vaccine, do I need to?

Yes. It is incredibly important that everyone in North Carolina do their part to help get as many people vaccinated as possible, including boosters. The more people who are vaccinated, the faster we will end the pandemic and the more confident each one of us can be that we and our loved ones are protected as we get back to the people and places we love. To protect those who cannot be vaccinated due to age or medical conditions, we need everyone who can safely get vaccinated to do so. Prevention is the best treatment to protect against COVID-19 so get vaccinated, get boosted.

Do people who have had COVID-19 still need to be vaccinated?

Yes, you should get vaccinated if you already had COVID-19. People who have been infected with COVID-19 and recovered have some protection against the virus, called natural immunity. Current evidence suggests that reinfection is uncommon in the 90 days after initial infection. Experts do not know exactly how long this protection lasts or how it is impacted by different variants. The risk of severe illness and death from COVID-19 far outweighs any benefits of natural immunity.

In addition, an individual’s protection is not based on antibody levels. A study showed that among individuals infected with COVID-19, unvaccinated individuals were more likely to get reinfected than those who had received two doses of Pfizer or Moderna or one dose of Johnson and Johnson.

Vaccines provide strong protection from serious illness, hospitalization and death from COVID-19. Getting vaccinated against COVID-19 is the best way to protect yourself and those around you. If you were treated for COVID-19 symptoms with monoclonal antibodies or convalescent plasma, you do not need to wait for any period prior to COVID-19 vaccination. Talk to your doctor if you are unsure what treatments you received or if you have more questions about getting a COVID-19 vaccine.

Should I get vaccinated or boosted against COVID-19 if I am currently sick with COVID-19?

No. Wait until you feel better.

When you feel better, you should get vaccinated or boosted. It will give you more protection against getting sick
again. Your doctor, pharmacist or vaccine provider can tell you what to do, or call us at 888-675-4567. Learn more about what to do if you are sick.

Should children get vaccinated if they have had COVID-19?

Yes, your child should still get the vaccine even if they have had COVID-19 in the past. Multiple studies show that the currently available COVID-19 vaccines can be safely given to people with prior COVID-19. Evidence is emerging that people get better protection by being vaccinated, even if they've had COVID-19. It's possible that the immunity from natural infection decreases over time, especially for those with mild symptoms.

Anyone who is currently sick with COVID-19 should wait for their symptoms to improve and they are no longer on isolation before getting the vaccine. If symptoms are mild or the infection is asymptomatic (they never develop symptoms), wait 10 days after the first positive COVID-19 test. If they are treated with monoclonal antibodies or convalescent plasma, you do not need to wait for any period prior to COVID-19 vaccination.

Can individuals who are pregnant, breastfeeding or want to become pregnant be vaccinated?

Pregnant and postpartum individuals with COVID-19 infection are about 40% more likely to develop serious complications or die than their uninfected peers. Getting up-to-date with COVID-19 vaccination is recommended for people who are pregnant, breastfeeding, trying to get pregnant now, or might become pregnant in the future. On Sept. 29, 2021, CDC issued an urgent health advisory to increase COVID-19 vaccination for these people in order to prevent serious illness, deaths, and adverse pregnancy outcomes. More than 201,000 pregnant women have chosen to receive at least one dose of a COVID-19 vaccine in the United States. There is no need to wait or avoid getting pregnant if you are planning to get vaccinated. Those seeking fertility treatment can also get vaccinated. There is currently no evidence that any vaccines, including COVID-19 vaccines, cause fertility problems in women or men.

Recent reports have shown that breastfeeding women who have received COVID-19 mRNA vaccines have antibodies in their breastmilk, which could help protect their babies. The American College of Obstetrics and Gynecology has helpful videos on getting your vaccine during pregnancy. Growing evidence shows that COVID-19 vaccination during pregnancy is safe and effective and the benefits of getting a vaccine far outweigh the risks. A recent study showed that COVID-19 vaccination during pregnancy did not increase risk of preterm birth or low birth weight. The risks of COVID-19 virus are greater for pregnant women compared to people who are not pregnant. Pregnant women with COVID-19 have a higher risk of being hospitalized and needing care in the ICU. Pregnant women with COVID-19 are at increased risk for preterm birth (delivering the baby earlier than 37 weeks) and might be at increased risk for other poor outcomes related to pregnancy compared to pregnant people without COVID-19 such as pregnancy loss.

Vaccination for those who are pregnant or wanting to become pregnant is recommended by the American College of Obstetricians and Gynecologists (ACOG), the Society for Maternal-Fetal Medicine (SMFM), the American Society for Reproductive Medicine (ASRM), and the Society for Male Reproduction and Urology.

Additionally, infants of vaccinated women may also get some protection from vaccination because the antibodies from the vaccines can be transferred from mother to child. Research continues in this area, but a small study published in JAMA showed that infants born to COVID-vaccinated mothers had persistent antibodies at 6 months, compared with infants born to mothers with previous infection. This means that you and your baby may both be protected against COVID-19.

There are many options available to you to learn more about the vaccines and their safety for pregnant women and those who want to become pregnant. Along with your own physician, you can also consult MotherToBaby or call 1-866-626-6847.

CDC is inviting people who received COVID-19 vaccination around the time they became pregnant (one month before to three months after), or anytime during pregnancy, to participate in the v-safe COVID-19 Vaccine Pregnancy Registry. Pregnant people who would like to participate must be enrolled in v-safe. If people enrolled in...
v-safe report that they were pregnant at the time of vaccination or after vaccination, the registry staff* might contact them by phone to learn more. Even if you are no longer pregnant, you may still be eligible to enroll in the registry.

People who choose to enroll in the registry will be contacted by phone several times throughout their pregnancy for additional health check-ins. During these check-ins, they will be asked questions about their pregnancy and medical history. After delivery, participants might be contacted when their babies are about three months old. Participants will also be asked for permission to review their medical records to get a more comprehensive picture of their pregnancies. You can still enroll in the registry even if you don’t give the registry permission to review your medical records. Personal information and responses in v-safe are confidential and will be protected to the full extent allowed by law. Video: https://www.youtube.com/watch?v=cvU8fmfOvb0

I’d like to get pregnant soon, will the COVID-19 vaccine hurt my chances?

Vaccination is recommended for people who are trying to get pregnant now or might become pregnant in the future, as well as their partners. There is no evidence that COVID-19 vaccines cause fertility problems (problems trying to get pregnant) in women or men.

Many people have become pregnant after receiving a COVID-19 vaccine, and recent studies found no differences in pregnancy success rates between women who were vaccinated compared to unvaccinated. If you get sick with COVID-19 during pregnancy the risk of complications is higher for you and your growing baby.

Can I get the COVID-19 vaccine if I just got another vaccine for something else?

You can get the COVID-19 vaccine at the same time as other vaccines, including the flu vaccine, and regardless of the timing of those vaccines.

Who should NOT get a COVID-19 vaccine?

You should NOT get the vaccine if:

- You are very allergic to something in the vaccine itself. This is rare and should be checked with a doctor, pharmacist or allergist. (In most cases, getting COVID-19 is much more dangerous than an allergic reaction.)
- You have a history of thrombosis (blood clots), don’t get the Johnson & Johnson vaccine. The Pfizer and Moderna vaccines work differently and are recommended.
- You are under 5 years old, because the vaccine isn’t available for children under 5 yet.

Nearly everyone else should get the COVID-19 vaccine, whether they are young, old, healthy or sick.

If you think you have a medical reason for not getting the COVID-19 vaccine, talk with a doctor first. They can help you understand your options. If you should not get the vaccine, they can give you a written document that explains to others why you are not vaccinated.

**ONE-DOSE VERSUS TWO-DOSE VACCINES**

Will I be able to choose which vaccine I get?

Moderna and Pfizer COVID-19 vaccines are the preferred COVID-19 vaccine for both the initial series and booster dose, but all of the vaccines are very effective in preventing severe illness, hospitalization and death. However, receiving any vaccine, including the Johnson & Johnson vaccine, is better than being unvaccinated. The Pfizer vaccine is available for people ages 5 and older, while the Moderna and Johnson & Johnson vaccines are available for adults 18 and older. If you have a vaccine preference, check with your provider to see which they offer.

What are the differences between the one-dose and two-dose vaccines?

CDC recommends that people who are starting their vaccine series or getting a booster dose get either Pfizer or Moderna (mRNA COVID-19 vaccines); however, which vaccine you can get depends upon your age. Click on
vaccine differences for more information. The mRNA vaccines are preferred over Johnson & Johnson’s Janssen COVID-19 vaccine (a viral vector vaccine) except in some circumstances. Although mRNA vaccines are preferred, the Johnson & Johnson/Janssen COVID-19 vaccine may be considered in some situations.

The two-dose vaccines use mRNA to give your body temporary instructions to make a protein that teaches your body to make germ-fighting antibodies against the COVID-19 virus. Instead of mRNA, the one-dose vaccine (made by Johnson & Johnson/Janssen) uses DNA to give your body the same type of temporary instructions. The DNA is carried into the body on a harmless version of the virus called adenovirus. Your body naturally breaks down everything in the vaccine. There is no COVID-19 virus in the vaccine and none of the vaccines can change your DNA. Learn more about how the vaccines work.

The temporary reactions are similar among all vaccines, although people receiving the one-dose vaccine may only experience temporary reactions once. Temporary reactions may include a sore arm, headache, fever, or feeling tired and achy for a day or two after receiving the vaccine. None of the vaccines can give you COVID-19.

How long should I wait to get the second shot of the Pfizer or Moderna COVID-19 vaccine?

Anyone over the age of 12 who got their first dose of the Pfizer or Moderna COVID-19 vaccine should speak with a doctor to determine the best time to get their second dose. The Centers for Disease Control (CDC) suggest that waiting eight weeks between the first and second doses of the Pfizer or Moderna COVID-19 vaccines increases overall effectiveness from infection and hospitalization in people between the ages of 12 and 49. It may also reduce the small risk of myocarditis, especially for males.

The shorter interval (three weeks for Pfizer and four weeks for Moderna) is still recommended for people who are:
- Moderately or severely immunocompromised
- Ages 65 or older
- At high risk of severe COVID-19
- Children ages 5 to 11

What if I don’t get my second shot of a two-dose vaccine at the right time?

You should get your second shot as close to the recommended time as possible. However, if you get your second shot of COVID-19 vaccine any time after the recommended date, you do not have to restart your vaccine shots.

Who will continue to benefit from the FDA-approved or FDA-authorized three- or four-week intervals between first and second doses of Pfizer or Moderna COVID-19 vaccines?

Three weeks (Pfizer) or four weeks (Moderna) between first and second doses is best for patients who are at higher risk of having a reduced response to the first Pfizer or Moderna vaccine dose (i.e., moderately or severely immunocompromised), patients who are at higher risk for severe complications of COVID-19 (i.e., adults ages 65 years and older), and patients who need rapid protection, such as during high levels of community transmission. Ask your doctor about the best time for you to get the second dose.

Who might benefit from an eight-week time period between the first and second doses of Moderna or Pfizer COVID-19 vaccines?

Eight weeks between the first and second doses is recommended for patients ages 12 through 64 years - and particularly males ages 12 through 39 years - who are not moderately or severely immunocompromised, and for whom there is not increased concern for severe disease or need for more rapid protection. Talk with a health care provider about the best time to receive your second dose of the Pfizer or Moderna COVID-19 vaccine.
Do I need to go back to the same provider for my second dose of Pfizer or Moderna or my booster?

No. You do not have to get the second dose at the same place you received the first dose. If you go to a different provider for the second dose, make sure you go to a provider with the same brand of vaccine (e.g., Pfizer or Moderna) that you received for your first dose. Bring your vaccination card with you so the provider can confirm which vaccine you received and when. Eligible individuals can go to any available provider for their booster shot.

If two shots are necessary for some vaccines, how will people know when to get their second shot?

North Carolina uses a secure data system called the COVID-19 Vaccine Management System (CVMS) to make sure you get your second shot or booster at the right time. When a person gets the first shot, they are asked to make a second appointment. An individual does not have to go back to the same provider for other doses. People will also be given a vaccination card with information about which vaccine they got for their first dose and the date of that shot. Keep the card in a safe spot and take a picture of it just in case it gets misplaced. People may receive an email notification or text with a reminder for the second shot.

Individuals who choose to use v-safe, a CDC tool to provide personalized health check-ins after their shot, will also receive text reminders for their second dose. The provider who gave the first vaccine may also help with reminders for the second shot. State and federal privacy laws make sure none of your private information will be shared. The shot you take and when you need the second is confidential health information that is carefully managed to protect your privacy.

Do I need an additional dose?

An additional dose is different from a booster dose. The CDC recommends that individuals 5 years and older who are moderately to severely immunocompromised and received the Moderna or Pfizer vaccines receive an additional dose of the age appropriate product to better protect themselves from COVID-19. They should also get a Pfizer or Moderna booster dose three months later to make a total of four doses.

A full list of conditions can be found on the CDC’s website. According to the CDC, data suggest some people with moderately to severely compromised immune systems do not always build the same level of protection after vaccination compared to people who are not immunocompromised. In addition, in small studies, immunocompromised people who received two doses of Moderna or Pfizer or one dose of Johnson & Johnson have accounted for a large proportion of hospitalized post-vaccination cases. An additional Pfizer or Moderna dose is recommended for moderately to severely immunocompromised people at least 28 days after they’ve completed their initial two-dose series or 28 days after Johnson & Johnson one-dose vaccine to help increase the body’s immune response. The Moderna vaccine is available to those 18 and older, while the Pfizer vaccine is available to those 5 and older for the additional dose. At this time, an additional dose is authorized only for people with a weakened immune system because the immune response to the primary series is likely to be decreased in these individuals. Individuals who are immunocompromised should also get an mRNA booster dose three months later to make a total of four doses, or an mRNA booster two months after the additional dose if they initially received the Johnson & Johnson vaccine.

Do I need a booster dose?

A booster dose is an additional dose of vaccine when the initial immune response is likely to have weakened over time. (This is different from the additional dose recommended for immunocompromised people.

Boosters are recommended for everyone 12 years and older to strengthen protections against COVID-19. The risk of severe COVID-19 increases as the number of underlying medical conditions increases in a person. COVID-
vaccines and boosters are important, especially if you are older or have a lot of severe health conditions. You should get a booster if you are 12 years of age and older AND:

- You received your second/ final dose of the Pfizer or Moderna vaccine at least FIVE months ago, or
- You received your Johnson & Johnson vaccine at least TWO months ago.

12 to 17 years old can only receive the Pfizer booster. Adults 18 and older can get any brand, but the CDC recommends the Moderna and Pfizer COVID-19 vaccines as the best choice for most people. A booster dose is needed sooner if you are immunocompromised. You may find COVID-19 booster shots at your healthcare provider, pharmacies and other locations. There is no need for anyone to go back where they received their original vaccine. Also, the location does not need to have the same vaccine that you first received. Speak with a doctor, nurse or pharmacist if you have questions about what booster is right for you. Visit MySpot.nc.gov for booster availability.

**Which booster should I get if I got the Johnson and Johnson vaccine?**

While adults can receive any brand of COVID-19 vaccine for their booster shot, the CDC has recommended Moderna and Pfizer COVID-19 vaccines as the preferred choice for both initial series and boosters. Speak with a health care provider if you have questions about which booster is right for you.

**If an immunocompromised person already got an additional dose, will they need to get a booster dose as well?**

Moderately and severely immunocompromised individuals 12 years of age and older who received an additional dose of Pfizer or Moderna are eligible to receive a booster dose at least three months after the third additional dose. Booster doses are not yet available for children 5 to 11 years old who received an additional dose of Pfizer if immunocompromised. Those 18 years of age and older can receive any brand of vaccine for the booster dose (Pfizer, Moderna, or Johnson & Johnson), and those 12 to 17 years of age can only receive Pfizer. However, the CDC recommends Moderna or Pfizer over Johnson & Johnson.

**If I received a vaccine brand in another country that is not authorized in the United States, am I eligible for a booster of one of the three available brands?**

If you received a COVID-19 vaccine that was NOT FDA-authorized, FDA-approved, or among those listed for emergency use by WHO, these doses do not count toward vaccination in the U.S. You should restart the primary series with an FDA approved or authorized product at least 28 days after the last dose of vaccine. Five months after completing this new series, get a Pfizer or Moderna booster.

If you initially received a COVID-19 vaccine listed for emergency use by the WHO but not approved or authorized by the FDA, you should get a Pfizer or Moderna booster dose at least five months after last primary series dose. If you are moderately to severely immunocompromised, you may need an additional dose and a booster dose even earlier. [Learn more about boosters and additional doses](#).

Speak with a health care provider if you have questions.

**VACCINE SAFETY**

**Are there vaccines that are safe and work in preventing COVID-19?**

Yes. The currently recommended vaccines have proven to provide significant protection against COVID-19 and protect against virus-related hospitalization and death, with no serious safety concerns in the clinical trials. Safety data from more than 298 million doses of mRNA COVID-19 vaccine administered in the first 6 months of the US vaccination program show that most reported adverse events were mild and short in duration.
**Who makes sure the vaccines are safe and can prevent COVID-19?**

The U.S. Food and Drug Administration (FDA) makes sure all food and drugs are safe. The COVID-19 vaccines must pass clinical trials like other drugs and vaccines. The FDA checks the data and authorizes vaccines only if they are safe and effective. Because vaccines are given to millions of healthy people to prevent serious diseases, they’re held to very high safety standards.

The FDA can get vaccines to people faster through an Emergency Use Authorization (EUA). After the FDA has authorized a vaccine, the Centers for Disease Control and Prevention’s (CDC) independent advisory committee reviews the data before advising the CDC on recommending a vaccine for use among the general public. Like all vaccines, the FDA keeps checking safety through the Vaccine Adverse Events Reporting System (VAERS). Health care providers are required to report serious side effects, or if someone gets seriously ill with COVID-19. There is also a smartphone app called v-safe that uses text messaging and web surveys to do health check-ins after people receive a COVID-19 vaccination. People can report any problems they may have with a vaccine through v-safe. The CDC and FDA are continuously engaged in safety monitoring of COVID-19 vaccines with numerous vaccine safety monitoring systems.

**Which vaccines have received FDA approval?**

The U.S. Food and Drug Administration (FDA) approved the Pfizer COVID-19 vaccine, which Pfizer is calling Comirnaty, for the prevention of COVID-19 disease in individuals 16 years of age and older. It is the same vaccine with a new name. The Pfizer vaccine will continue to be available under emergency use authorization for children and teens ages 5 to 15, boosters for 12 to 17 year olds, and for the administration of a third dose in certain immunocompromised individuals 5 years of age and older. FDA approval for these populations will require additional time as the vaccine was not authorized for such use until more recently.

The FDA also approved the Moderna COVID-19 vaccine, which Moderna is calling Spikevax, for the primary series to prevent COVID-19 in individuals 18 years and older. It is the same vaccine with a new name. It has been available under emergency use authorization (EUA) since Dec. 18, 2020. Moderna remains available under EUA as a third primary series dose for those 18 years and older with certain kinds of immunocompromise and as a booster dose.

All available COVID-19 vaccines in the United States have been under an EUA. Rigorous clinical trials among thousands of people have proven that vaccines are safe and effective. Over 210 million people in the United States have been safely vaccinated against COVID-19.

**Are the vaccines a new technology?**

Scientists had a head start in developing all of the vaccines. They are built on decades of research. Both mRNA and viral-vector vaccines technology benefit from over 30 years of scientific work and development. With more recent developments in vaccine technology over the last decade and immense investment, these two technologies were able to be used to help us fight COVID-19 without skipping any steps in development, testing, or clinical trials.

**Can the vaccine give me COVID-19?**

No, the vaccine does not contain any virus that is living that could make you sick with COVID-19. Instead, vaccines imitate COVID-19 without giving it to you. After you get the vaccine, the vaccine gives your body instructions to make a protein that safely teaches your body to make germ-fighting antibodies to fight the real COVID-19. Your body naturally breaks down or destroys the instructions from the vaccine.

**Are there any side effects from the vaccines?**

No serious side effects were reported in clinical trials, and safety data from more than 298 million doses of mRNA COVID-19 vaccine administered in the first 6 months of the US vaccination program show that most reported adverse events were mild and short. Temporary reactions after receiving the vaccine may include a sore arm,
headache, feeling tired and achy for a day or two or a fever. These temporary reactions were more common after the second dose in a two-dose vaccine. Younger people are more likely to have reactions than older people.

In most cases, these temporary reactions are good signs that your body is building protection. You can take medicines like Tylenol or ibuprofen after receiving your shot to help with these temporary reactions. While extremely rare, there have been a few cases of severe allergic reaction to the Pfizer vaccine, and vaccine providers are prepared with medicines if they need to treat someone.

While it is extremely rare, there have been 54 cases (out of about 17 million doses) of thrombosis with thrombocytopenia (TTS), associated with the Johnson and Johnson vaccine. TTS is a condition defined by blood clots with low platelets. The Centers for Disease Control and Prevention recommends that the Pfizer or Moderna COVID-19 vaccine is the best choice for most people for preventing severe illness and hospitalization from COVID-19. However, receiving any vaccine, including the Johnson & Johnson vaccine, is better than being unvaccinated.

If you have been vaccinated with the Johnson & Johnson vaccine and develop:

- Shortness of breath, chest pain, leg swelling, persistent abdominal pain, severe or persistent headaches or blurred vision, easy bruising or tiny blood spots under the skin beyond the site of injection within three weeks of vaccination seek medical attention right away.

There are no safety concerns for people who were previously vaccinated and did not experience TTS.

The FDA reported that there have been very rare cases of Guillain-Barre Syndrome (GBS) after receiving the Johnson & Johnson COVID-19 vaccine with 100 preliminary cases out of more than 12.8 million (mostly in males, many aged 50 years and older). GBS is a neurological disorder usually triggered by a respiratory or gastrointestinal infection that most people fully recover from. The body’s immune system damages nerve cells, causing muscle weakness and sometimes paralysis in severe cases. With nearly all COVID-19 hospitalizations and deaths occurring in unvaccinated people, the risk of COVID-19 infection is greater than the extremely low risk of a severe adverse events after COVID-19 vaccination and everyone eligible should get vaccinated and receive a booster when it is time.

**What is the risk of an allergic reaction from the vaccine?**

Severe allergic reactions to the vaccines have been very rare and mostly occurred in people who have had previous severe allergic reactions. People who have had severe allergic reactions, also called anaphylaxis, to any ingredient in the Pfizer, Moderna or Johnson & Johnson vaccines should not receive that vaccine. People who have had this type of severe allergic reaction to any vaccine or treatment that is injected should talk with their health care provider about the risks and benefits of vaccination. People with allergies to foods, animals, environmental triggers (such as pollen), latex or medications taken by mouth or who have family members with past severe allergic reactions, can be vaccinated with any of the COVID-19 vaccines. You will be screened prior to receiving the vaccine to determine if you are at an increased risk for an allergic reaction. If you are, your health care provider may decide that you should not receive the vaccine. As most reactions occur within a few minutes to one hour after vaccination, you will be asked to stay at the place where you received your vaccine for a short time (15-30 minutes) for monitoring to ensure your safety. Additional information can be found here for the Pfizer, Moderna, and Johnson & Johnson vaccines.

If you had a severe or immediate allergic reaction (within four hours) after getting a dose of the mRNA COVID-19 vaccine (Moderna or Pfizer), you should NOT get a second dose of either of the mRNA COVID-19 vaccines. Talk to your provider about getting a different type of vaccine after an allergic reaction. More information for people with COVID-19 vaccine allergies can be found here.

**How do I report an adverse reaction caused by the COVID-19 vaccine?**

CDC and FDA encourage the public to report possible side effects (called adverse events) to the Vaccine Adverse Event Reporting System (VAERS). This national system collects data to look for adverse events that are unexpected, appear to happen more often than expected or have unusual patterns of occurrence. Reports to VAERS help the CDC monitor the safety of vaccines. Safety is a top priority.
The CDC also implemented a new smartphone-based tool called v-safe to check-in on people’s health after they receive a COVID-19 vaccine. When you receive your vaccine, you should also receive a v-safe information sheet telling you how to enroll in v-safe. If you enroll, you will receive regular text messages directing you to surveys where you can report any problems or adverse reactions you have after receiving a COVID-19 vaccine.

**What temporary reactions from the vaccine should be reported to a doctor?**

In most cases, temporary reactions are normal and good signs that your body is building protection. Safety data from more than 298 million doses of mRNA COVID-19 vaccine administered in the first 6 months of the US vaccination program show that most reported adverse events were mild and short in duration. Taking over-the-counter medicine, such as ibuprofen or Tylenol, drinking lots of fluids, or placing a cool washcloth on your forehead can help with these temporary reactions.

If you have a history of allergic reactions to any vaccine or treatment that is injected, you should talk with your health care provider about the risks and benefits of vaccination before getting the shot. Although very rare, if you experience a severe allergic reaction to the vaccine seek immediate medical care by calling 911. Signs of a severe allergic reaction can include difficulty breathing, swelling of your face and throat, a fast heartbeat, a bad rash all over your body and dizziness and weakness. An allergic reaction is considered severe when a person needs to be treated with epinephrine or EpiPen© or if the person must go to the hospital. This is also known as anaphylaxis.

Contact your doctor if any redness or tenderness where you got the shot increases after 24 hours, if your temporary reactions are worrying you, or if they do not seem to be going away after a few days. While it is extremely rare that you would have a serious adverse reaction, if you develop severe headache, backache, severe abdominal pain, new neurologic symptoms (like changes in vision, changed mental status or numbness), leg pain or swelling, shortness of breath, tiny red spots on your skin (called petechiae), or new or easy bruising within three weeks after vaccination, contact your health care provider or seek medical care.

**What do we know about the vaccine’s long-term safety?**

More than 548 million doses of COVID-19 vaccine had been given in the United States from Dec. 14, 2020, through Feb. 16, 2022. COVID-19 vaccines were evaluated in tens of thousands of participants in clinical trials. The vaccines met the Food and Drug Administration’s (FDA’s) rigorous scientific standards for safety, effectiveness and manufacturing quality needed to support emergency use authorization (EUA) and approval. The CDC continues to actively collect safety data via the Vaccine Adverse Event Reporting System, which has been tracking safety on all vaccines since 1990. Learn more about all the ways that vaccine safety is being monitored [here](#).

**Why is the CDC recommending the Moderna and Pfizer COVID-19 vaccines as the preferred vaccine?**

There is ample supply of both vaccines in North Carolina and across the country and there continues to be robust safety monitoring which showed additional cases of thrombosis with thrombocytopenia (TTS), a rare condition with blood clotting and low platelets, associated with the Johnson & Johnson COVID-19 vaccine. There have been 54 cases of TTS after getting the Johnson and Johnson vaccine reported in the U.S. with nine deaths and another two deaths suspected to be linked. The CDC emphasized that receiving any vaccine, including the Johnson & Johnson vaccine, is better than being unvaccinated. People who prefer to receive the Johnson & Johnson COVID-19 vaccine will continue to have access to it, as will people who cannot receive an mRNA vaccine. However, people with a history of thrombosis with thrombocytopenia, a condition defined as blood clotting with low platelets, should not receive the Johnson & Johnson vaccine. Read more information from the CDC about side effect concerns.

**Is myocarditis, or heart inflammation, a side effect of COVID-19 vaccines?**

There have been rare reports of myocarditis occurring after COVID-19 vaccination with Moderna or Pfizer vaccines in the United States and Europe. Myocarditis is the inflammation of the heart muscle and pericarditis is the inflammation of the lining outside the heart. In both cases, the body’s immune system is causing inflammation because of an infection or some other trigger. While myocarditis can be serious, these cases are frequently mild and get better without any treatment and seen more often in adolescents and young adults after the second dose of
either Pfizer or Moderna and within a week of vaccination. Symptoms can include abnormal heart rhythms, difficulty breathing, or chest pain. The risk for both myocarditis and pericarditis are much higher from becoming infected with COVID-19 than from the vaccines.

The Center for Disease Control (CDC) has been closely monitoring these reports in the systems set up to detect safety concerns with vaccines and will continue to evaluate reports of myocarditis and pericarditis that happen after COVID-19 vaccination. The CDC Advisory Committee on Immunization Practices has also reviewed the data. The CDC, American Academy of Pediatrics, and multiple medical and public health groups released a statement recommending COVID-19 vaccination, stating that this is an extremely rare side effect with mostly mild cases with individuals recovering often on their own or with minimal treatment compared to more risks with COVID-19 infection.

**What should I do if I received a vaccine in another country that is not currently authorized in the United States?**

If you received a COVID-19 vaccine that was NOT FDA-authorized, FDA-approved, or among those listed for emergency use by WHO, these doses do not count toward vaccination in the U.S. and you should restart the primary series with an FDA approved or authorized product at least 28 days after the last dose of vaccine. Five months after completing this series, get an mRNA booster dose. Please note that no data are available on the safety or effectiveness of getting a new series of COVID-19 vaccination after receiving a non-FDA-authorized or approved COVID-19 vaccine.

If your primary series was completed with a COVID-19 vaccine that is not authorized by FDA, but is on the WHO list for emergency use, you do not need to repeat the primary series, but should receive a Pfizer or Moderna booster dose at least five months after the last primary series dose.

Additional information about these recommendations can be found here and here is a list of vaccines and their authorizations.

**What other COVID-19 vaccines are being developed and considered?**

It is difficult to say when other vaccines will be available. As of March 2021, Phase 3 clinical trials (the last phase) are in progress, being planned or completed in the United States for the following COVID-19 vaccines:

- AstraZeneca’s COVID-19 vaccine
- Novavax’s COVID-19 vaccine

Ocugen, Inc. submitted an Emergency Use Authorization request to the US FDA for COVAXIN™ for Children Ages 2-18 Years.

You cannot get COVID-19 from any of these vaccines in development. All of the above vaccines teach your body to make germ-fighting antibodies against the COVID-19 virus. These germ-fighting antibodies are then ready to fight off the real COVID-19 if it ever tries to attack you.

**How can someone enroll in a clinical trial for a vaccine?**

Over 100 vaccines for COVID-19 are under development and many are in clinical trials that are recruiting participants. People interested in enrolling in a COVID-19 vaccine trial may visit the following website: https://www.coronaviruspreventionnetwork.org/understanding-clinical-studies/.

---

**AFTER YOUR VACCINATION**

NC Department of Health and Human Services
Will people be provided with documentation that they have had the vaccine?

Yes. You will receive a card that tells you what COVID-19 vaccine you got, when you got it and where you got it. Keep the card in a safe spot and take a picture of it in case it gets misplaced. Some people with access to email will also receive an email with proof of vaccination.

Many people can get their COVID-19 vaccine information in the North Carolina COVID-19 Vaccine Portal if they got the vaccine from:
- A North Carolina doctor’s office
- Hospital
- Pharmacy
- Grocery store
- Health department
- Community event

Please see more information on how to access the NC COVID-19 Vaccine Portal.

Your vaccine information will not be available if:
- You got the vaccine outside of North Carolina
- In a military setting
- At a tribal or urban Indian health facility

Contact your provider for vaccine information.

If you lose your vaccine card or need your record, contact your vaccine provider.

How to Find Your Vaccine Record

Can I stop wearing a mask after I’m vaccinated?

Well-fitting masks with multiple layers offer protection against all variants. Higher grade masks, like N95, KN95s, surgical or procedure masks offer even more protection.

You should still wear a mask indoors if:
- You are at high risk for severe illness.
- You are unvaccinated or not up-to-date on your vaccines.
- You have COVID-19 or were exposed to the virus.
- You want an added layer of protection.
- You are in a high-risk setting (i.e., hospitals, doctor’s offices, long-term care facilities, prisons, jails, homeless shelters).

When am I considered fully vaccinated against COVID-19?

The CDC uses the term fully vaccinated for people who have received:

- Two doses of the Pfizer or Moderna vaccine, or;
- One dose of the Johnson & Johnson vaccine, and;
- Received their final dose of either vaccine at least two weeks ago.

This includes people who:
- Received vaccines that are authorized and approved by the FDA (i.e., Pfizer/Comirnaty, Moderna, Johnson & Johnson).
- People who completed the COVID-19 series listed for emergency use by the World Health Organization, or;
- People who participated in a clinical trial in the United States and received the full series of an active COVID-19 vaccine that is listed for emergency use by WHO (e.g., AstraZeneca) or has been independently confirmed by a data and safety monitoring board (e.g., Novavax).

**The CDC and NCDHHS recommend that everyone be up-to-date on COVID-19 vaccinations, which includes:**

- Getting a booster when eligible.
- Certain immunocompromised people should receive an additional dose of mRNA vaccine, followed in three months by Pfizer or Moderna booster to make a total of four doses.

[Learn more about boosters.](#)

**How long will the vaccine protect me against COVID-19?**

Even with the spread of variants and more recent studies, the vaccine continues to be very effective against serious illness, hospitalization and death, although it has shown reduced protection against infection itself. To strengthen and extend protections against COVID-19, boosters are recommended for all North Carolinians 12 years and older. Many vaccines require multiple doses for immunity and booster doses for vaccines are common. For example, it is recommended that everyone 6 months and older get a flu shot each year and adults should get a tetanus booster every 10 years. Everyone should get their COVID-19 booster as soon as they are eligible, especially with the recent surge of infections caused by the highly contagious Omicron variant. You should get a booster if you are 12 years of age and older AND:

- You received your second/final dose of the Pfizer or Moderna vaccine at least FIVE months ago, or
- You received your Johnson & Johnson vaccine at least TWO months ago.

Some people may prefer the vaccine type that they originally received, and others may prefer to get a different booster. Those who are 12 to 17 years of age can only receive a Pfizer vaccine booster.

**Do I need a booster if I received an antibody test after getting the vaccine and antibodies were not detected?**

CDC **does not** recommend antibody testing before or after getting the COVID-19 vaccine to check if a person is protected. According to the FDA, currently authorized SARS-CoV-2 antibody tests are helpful in identifying individuals with previous infection with the virus, but these tests **have not** been used to decide if the vaccine worked. For more information, see the [FDA’s statement on antibody testing](#).

**Will the vaccine affect testing for possible COVID-19 infection?**

Getting a COVID-19 vaccine will not affect the most common tests used to test for the COVID-19 virus, which are called PCR or antigen tests. The vaccines do not affect these test results because there is no virus in the vaccines. However, vaccines can affect the results of some COVID-19 antibody tests because of the immune response to the vaccine. More details can be found from the CDC [here](#).

**What should I do if I am worried that I have COVID-19 after I am vaccinated?**

If you develop symptoms of COVID-19 after being vaccinated, you should get tested and stay away from other people. Your health care provider and local health department will report the test results to NCDHHS, including notification of a COVID infection after being vaccinated. Getting COVID-19 is more likely if you are not vaccinated, and vaccination provides strong protection from serious illness, hospitalization and death.

**If I do not get the COVID-19 vaccine, how long will I have to wear a mask?**
People who are not vaccinated should continue to wear a mask in all indoor public settings and in outdoor settings when they can’t maintain 6 feet of distance. Masks will still be required for everyone in childcare centers, schools and camps, as most children are not yet vaccinated or are not eligible to be vaccinated. Everyone, including people who are up-to-date on COVID-19 vaccination, should wear a mask when in indoor public spaces, in crowded outdoor settings, and for activities with close contact with others who are not up-to-date on COVID-19 vaccination. This is consistent with CDC guidance for people living in counties with high levels of transmission, which currently includes all counties in North Carolina.

NCDHHS recommends we continue to protect one another with masks to prevent spreading COVID-19.

GOVERNMENT DATA AND PRIVACY

Will I need to sign a consent form to get vaccinated?

Individuals 18 and older can provide verbal consent. Written consent is not generally required, but some providers may require or request written consent. For minor’s consent, see “Do kids under 18 need their parents’ permission to get a COVID-19 vaccine or booster? Does the state require or mandate vaccination?”

No. North Carolina has no plan to require people to be vaccinated against COVID-19. It is possible that some employers or schools will require vaccines for their employees or students. Employers may ask if you have been vaccinated but cannot require that you share any other personal medical information.

How will the state know who has been vaccinated?

North Carolina uses the COVID-19 Vaccine Management System (CVMS) and the NC Immunization Registry (NCIR). These systems help vaccine providers know who has been vaccinated and with which vaccine to make sure people get the second dose of the same vaccine at the right time or a booster dose at the right time. It also allows the state to manage vaccine supply. Many pharmacies, such as CVS, Walgreens, Walmart and other grocery pharmacies do not use CVMS to give and manage vaccines. These pharmacies use their own systems, but this information is shared with CVMS so that providers and those who receive the vaccine can make sure everyone gets the right dose at the right time.

What data is the state collecting and how will it be shared?

Information about your COVID-19 vaccination is carefully managed to protect your privacy. Your immunization information will not be shared except in accordance with state and federal law. NC CVMS is a system that enables the collection of immunization information for health and safety reasons. The immunization information collected for NC CVMS is similar to the information that is required when you go to the doctor’s office or a pharmacy for a vaccination, including your name, address, date of birth, location where vaccine was given, when the vaccine was given, person who administered the vaccine, information about the specific vaccine vial (expiration date, vaccine identifier number, etc.) and how the vaccine was given (e.g., in the muscle of the right arm). NC CVMS also collects information about race and ethnicity, which is necessary to support efforts for equitable vaccine distribution in NC. To meet federal requirements established by the U.S. Centers for Disease Control and Prevention (CDC) and in accordance with NC state law, NC does not submit any identifiable information to CDC. Instead, NC submits the following information to the CDC: the vaccine recipient’s year of birth (not date of birth), the first three digits of the vaccine recipient’s zip code of residence (if the underlying population in that zip code includes more than 20,000 people) and the date of submission of the vaccination record. More information about federal CDC data requirements is available at: https://www.cdc.gov/vaccines/covid-19/reporting/requirements/index.html.

What data about vaccinations will be available to the public?

North Carolina has an online public dashboard to share data on vaccinations. The data in the dashboard is updated Monday through Friday.
THE SCIENCE BEHIND THE VACCINES

How do the vaccines work?
You cannot get COVID-19 from the vaccines. All the currently authorized vaccines give your body temporary instructions to make a protein. The two-dose vaccines use mRNA technology, while the one-dose vaccine uses DNA technology to provide these instructions. This protein safely teaches your body to make germ-fighting antibodies against the COVID-19 virus. These germ-fighting antibodies are then ready to fight off the real COVID-19 virus if it ever tries to attack you. Your body naturally breaks down everything in the vaccine. There is no COVID-19 virus in the vaccine, and none of the vaccines can change your DNA.

What are the ingredients in the COVID-19 vaccines?
The COVID-19 vaccines give the cells in your body the instructions to make a protein that safely teaches your body how to make antibodies (germ-fighting cells) to fight the real COVID-19. Your body naturally destroys the instructions and gets rid of them. None of the vaccine ingredients remain in your system, nor do they alter any DNA in your body. The three COVID-19 vaccines currently available in the United States do not contain eggs, preservatives, fetal tissue, stem cells, mercury or latex. For a full list of ingredients, please see each vaccine’s Fact Sheet for Recipients and Caregivers:

- Pfizer COVID-19 vaccine
- Moderna COVID-19 vaccine
- Johnson & Johnson COVID-19 vaccine

Will the vaccines work against new variants of the COVID-19 virus?
All viruses change over time, and these changes (or variants) are expected. Scientists are working to learn more about new COVID-19 variants and their effects on vaccines. There continues to be good evidence that the authorized COVID-19 vaccines provide protection against severe illness, hospitalization and death from infection with currently circulating variants. Vaccination also reduces the spread of the virus and helps prevent new variants from emerging. A recent study showed that protection against hospitalization and death from COVID-19 vaccination remained high even with the more recent Omicron variant. However, breakthrough infections in people who are fully vaccinated are likely to occur. Booster doses increase how effective the vaccine is against Omicron, making it all the more important that people be up to date with all recommended doses of COVID-19 vaccine.

Evidence suggests that Omicron is two to three times as contagious the Delta variant, making it four to six times as contagious as the original COVID-19 virus. Data collected so far show more rapid waning of protection after the primary vaccination series than was seen with Delta or other variants, although vaccines are still effective at preventing severe disease. Protection against Omicron increases greatly after a booster dose. Vaccines and boosters are essential in protecting people from severe illness with this current Omicron surge. The elderly, people living in long-term care facilities and people with underlying medical conditions or who are immunosuppressed are at the greatest risk and should get vaccinated as soon as possible and get a COVID-19 booster as soon as they are eligible. More information can be found on the CDC website.

Why are two vaccine shots necessary for some vaccines at first?
The Pfizer and Moderna vaccines require two shots. You need two doses to build up strong immunity against COVID-19. The goal of the first vaccine dose is to “prime” the immune response, which means that it gets your body ready to have the best protection. The second dose “boosts” the immune response to be fully protected. It is important to get two doses of the same vaccine.

While other countries may take a different approach to vaccinations, the FDA and CDC continue to recommend that everyone complete the initial two doses with the Moderna or Pfizer vaccine. They should also stay up to date with all recommended COVID-19 vaccines, including additional doses for individuals who are moderately to severely
immunocompromised and booster doses for everyone who is eligible. Learn more about the different COVID-19 vaccines.

**Are there fetal cells or fetal tissues in the vaccine?**

None of the vaccines contain fetal cells or fetal tissues. Fetal cells were used in research to develop all three vaccines. Vaccines commonly use fetal cells in development. The Pfizer and Moderna vaccines do not require the use of any fetal cells to produce the vaccines. In order to produce the vaccine, the Johnson and Johnson vaccine uses fetal cells that were isolated over 30 years ago.

**Couldn’t find the answer you were looking for?**

Call the COVID-19 vaccine help line at 888-675-4567 Monday through Friday from 7 a.m. until 7 p.m., and on Saturday and Sunday from 8 a.m. until 4 p.m.