

## Myth #12

**Virginia has already reached 70% vaccination, and North Carolina has reached 59%. I don't need a vaccine because I'm protected by others who already got it.**

**FACT:** Virginia and North Carolina's vaccination rates as a whole do not reflect the true vaccination rate of specific communities. Those numbers are not the same for children who are too young to receive the vaccine, many communities of color, or specific regions. In Black and Hispanic communities in Virginia and North Carolina, the vaccination rate is drastically lower. Black and Hispanic communities and other underrepresented communities are impacted disproportionately by COVID-19, so we need the vaccination rate in these communities to go up to ensure everyone is protected. By getting the vaccine, you are helping protect your

community, as well as others who cannot receive the vaccine for medical reasons or because it has not yet been approved for them (for example, children under 12). You also help stop the spread and appearance of new variants that are more contagious and cause more severe symptoms, including in younger people.

## Myth: #13

**I don't have anyone to talk to who can answer my questions/concerns about the vaccine.**

**FACT:** According to a national online survey, doctors or healthcare providers are the No. 1 trusted source when it comes to information about the vaccine. If you have any questions, please contact your doctor to talk about your own medical history and if the vaccine is right for you. If you do not have a doctor, feel free to reach out to Sentara Healthcare on Instagram with your questions/concerns (@SentaraHealth).

## FAST Facts

- **Vegans and vegetarians can safely receive the COVID-19 vaccine** while still observing their preferred animal guidelines. The vaccines are PETA-approved and do not contain any animal products.

- **The vaccines do not contain any trace of a microchip.** This myth is based on a fake video that was circulating on the internet. The COVID-19 vaccines do not contain microchips or tracking information. The active ingredient in the current COVID-19 vaccines is mRNA. The vaccines also contain a few other ingredients like fats, sugar, and salts, which are used to make and transport the vaccine. These ingredients have been used safely for a long time in other treatments and vaccines.
- **The COVID-19 vaccine will NOT cause you to be magnetic.** There are no ingredients that can produce any kind of electromagnetic field at the site of your injection. All COVID-19 vaccines are free from metal.

- **You need to receive BOTH doses of a two-dose vaccine series in order to receive full immunity protection.**
- **The COVID-19 vaccine will not alter your DNA.** The mRNA in the COVID-19 vaccines does not interact with your DNA. In fact, the mRNA

never even enters the part of the cell where your DNA is located. Messenger RNA is also broken down in your cell after it is used. It does not stay in your cells or become a permanent part of your body in any way.

- **COVID-19 vaccines were tested (and proven effective) in diverse groups of people across all age, gender, racial and ethnic backgrounds.** About 30% of U.S. participants were Hispanic, Black, Asian, or Native American, and about half were older adults. There were no significant safety concerns identified in these or any other groups.

Trust the Facts #VaxUp

*These facts were compiled and reviewed by Sentara Healthcare clinical experts using trusted medical sources including New England Journal of Medicine, Society of Maternal Fetal Medicine, National Center for Biotechnology Information, CDC, and others. 09/03/21*



# COVID-19 Vaccine

## Myths, Facts & FAQs

Trust the Facts #VaxUp

## Myth #1

**The COVID-19 vaccines are not effective because thousands of people who've been vaccinated have still tested positive for the virus.**

**FACT:** When you hear of "breakthrough" COVID-19 cases, don't be scared into thinking the vaccines are not working as expected when, in truth, they're proving to work almost exactly as the trials predicted they would.

No one—including the drug manufacturers or the FDA—has said the vaccines were 100% effective. Do not have the expectation that being vaccinated eliminates the risk of getting COVID-19. It does not.

What is important to know is that of the roughly 10,000 breakthrough cases reported to CDC (out of more than 154 million people vaccinated), very few people (<9%) have been hospitalized and even fewer (<1%) have died from COVID-19. This means about as many vaccinated people are getting mild to moderate cases of COVID-19 as we'd expect based on the clinical trials. We are learning that some people who are immunocompromised from medications or existing conditions are not developing full antibodies from the vaccines, but that also makes rational, scientific sense.

It is important to understand this to know that even with the vaccine as a proven safety tool, it is just one tool in our toolkit. We still must practice additional safety measures like masking and social distancing in certain settings, and during times when there is large community spread.

## Myth #2

**I don't need the vaccine. I'm healthy/young/have a strong immune system, or I have already had COVID-19 and was asymptomatic or only had mild symptoms.**

**FACT:** You still need the vaccine to protect yourself and others from severe illness. Experiences with COVID-19 vary from person to person and recent variants especially have the potential to severely impact young or otherwise healthy individuals. The CDC recommends that individuals who have had COVID-19 still receive the vaccine, and there is growing evidence that the vaccines provide lasting protection, especially for those who have had COVID-19 AND have received the vaccine. If you are not vaccinated

but everyone else around you is, you are now the one with the weaker immune system.

It is possible to be re-exposed to COVID-19 and there is no guarantee that a second exposure would progress in the exact same manner as the first. Getting the vaccine also helps protect the people around you, particularly those at increased risk for severe COVID-19 illness.

## Myth #3

**The COVID-19 Vaccine will cause infertility or could harm my baby. I shouldn't get the vaccine if I am pregnant, breastfeeding, or want to become pregnant.**

**FACT:** The COVID-19 vaccine has no negative effect on fertility. It actually can help your baby even more by offering immunity protection to your child if you are pregnant or breastfeeding.

Pregnant people are at higher risk for getting severely ill with COVID-19 and delivering a baby prematurely. A COVID-19 vaccine can help protect you and your child.

There is no evidence that COVID-19 vaccine causes any problems with pregnancy, including the development of the placenta or fetus, and there is no evidence that fertility issues are a side effect of COVID-19 vaccines.

Thousands of pregnant people have received the COVID-19 vaccines so far and have delivered healthy babies.

## Myth #4

**I shouldn't get the vaccine because of ethical or religious concerns about stem cells in the vaccines.**

**FACT:** None of the COVID-19 vaccines contain stem cells.

The Johnson & Johnson vaccine does contain cells from a fetal cell line, which is not the same thing as a stem cell. Cells from fetal cell lines can divide indefinitely over time in a lab setting. The cells used in the J&J are from a fetal cell line that is decades old. J&J has confirmed that there is no fetal tissue in the J&J COVID-19 vaccine.

The Pope has been given the vaccine and the Vatican has deemed it "morally acceptable" for Catholics to receive any of the COVID-19 vaccines. The Pope has said that he believes that receiving the vaccine is an ethical responsibility.

## Myth #5

**I don't trust the COVID-19 vaccine because of past racism in healthcare, like the Tuskegee research study.**

**FACT:** Some community members have historically-rooted reasons for not trusting in healthcare and/or government. For example, the Tuskegee research study (1932-1972), where hundreds of Black men were studied on the long-term progression of syphilis. The men were lied to and never given adequate health care. This may bring up concerns about mistrust or medical racism in healthcare.

The COVID-19 vaccine is not related to a larger medical study in any way, and the vaccine is a safe vaccine for all races and ethnicities. In fact, a black female scientist named Dr. Kizzmekia Corbett led the COVID-19 mRNA vaccine for Moderna and is committed to sharing information on vaccine safety and its effectiveness in communities of color.

Some of the descendants of Tuskegee study participants have even joined together in video PSA ads to encourage Black people to get the COVID-19 vaccine, seek out factual information to address their questions, and to make an informed decision for their own health.

## Myth #6

**Vaccine development was rushed. Therefore, it is not safe.**

**FACT:** These vaccines were developed faster than any other vaccine in history thanks to a new and faster way to create vaccines – messenger RNA (mRNA) – all without cutting corners or compromising safety. Previous vaccines relied on isolating virus samples, rendering them inert, delivering the virus into the bloodstream, and training the body to respond. This is a time-consuming process. mRNA vaccines are, by their nature, faster to produce (and are some of the most efficacious vaccines in history).

Vaccine manufacturers across the globe helped speed up the time it takes to create a vaccine and conduct clinical trials by all focusing solely on the COVID-19 vaccine and working together (instead of as competitors). Typically, there are hundreds of clinical trials all happening at once. But, during the COVID-19 pandemic, ALL clinical trials stopped that did not relate to COVID-19 treatment therapies or vaccine development.

This allowed efficiencies to be created in the clinical trials without cutting any corners and still surpassing the FDA's meticulous review and safety protocols by overlapping trial phases. This reduced the time of the clinical trials greatly. Additionally, because there was such a high interest in volunteers for these clinical trials, there were no issues in getting thousands of participants

signed up quickly in just a matter of weeks. This step alone typically takes several months.

So, due to these reasons and many others, it allowed for quick development of these vaccines, not because researchers skipped any steps or cut any corners. There was a concerted effort to cut through the typical bureaucracy/red tape. Scientists and agencies came together to make sure we did everything possible to avoid delaying the rollout of a life-saving vaccine during a global pandemic.

## Myth #7

**The vaccines are not proven safe unless they have full FDA approval.**

**FACT:** All three vaccines in use today in the United States have been proven safe by the Food and Drug Administration (FDA). The FDA granted full approval for the Pfizer vaccine on August 23, 2021 for persons aged 16 and older. Additional COVID-19 vaccines have submitted for full approval and are awaiting response from the FDA. It is expected that all of the vaccines will receive full approval once all administrative and regulatory reviews have been completed. All three vaccines in use today in the United States have been proven to be safe and effective by the Food and Drug Administration (FDA), which is why they were initially granted Emergency Use Authorization (EUA).

Just as we discussed previously, the United States does not have the luxury of time during this pandemic, which is exactly what the EUA is used for! The EUA has been around for years for this exact purpose (it was used after the 9/11 attacks, during Swine Flu pandemic, and has been used on a number of different food and drug products, not just vaccines). An EUA can only be granted if clinical trials on tens of thousands of study participants have been completed to generate at least two months of sufficient scientific data needed for the FDA to determine a vaccine's safety and efficacy. To receive EUA, the Food and Drug Administration (FDA) must receive and review sufficient safety data and other information from all clinical trial phases and declare that the known and potential benefits of the vaccines outweigh the known and potential risks in an emergency situation (such as a pandemic). Just because a vaccine isn't fully approved by the FDA, does not mean it has not closely reviewed the safety and efficacy of the vaccines and believe they are.

Typically, it takes years for the FDA to fully approve a product. To be fully approved, the companies who

produce the vaccines must submit an application for formal approval and need to show at least six months of data. Based on the timing of this criteria, there is no way to speed up the FDA approval process faster than it is working now.

## Myth #8

**The vaccine will give me COVID-19.**

**FACT:** Nobody is getting infected from the COVID-19 vaccine. None of the authorized and recommended COVID-19 vaccines contain the live virus that causes COVID-19. This means that a COVID-19 vaccine cannot make you sick with COVID-19.

The mRNA vaccine teaches the immune system to find and destroy the virus (spike protein) that causes COVID-19. The vaccine delivers these "instructions" (genetic material) to our cells in order to start building protection/immunity from the virus. Sometimes this process can cause symptoms, such as fever. These symptoms are normal and are signs that the body is building protection against the virus that causes COVID-19.

It typically takes a few weeks for the body to build immunity (protection against the virus that causes COVID-19) after vaccination. That means it's possible a person could be infected with the virus that causes COVID-19 just before or just after vaccination and still get sick. This is because the vaccine has not had enough time to provide protection.

## Myth #9

**The COVID-19 vaccines don't work on the variants, so I don't have to bother getting one.**

**FACT:** The COVID-19 vaccines are proving to offer great protection against variant strains of COVID-19. The Delta variant now makes up more than half of new COVID-19 cases (spreading in unvaccinated people) – and the current COVID-19 vaccines will protect you from that!

Scientists in the UK studied the relative effectiveness of the Pfizer and Moderna two-shot vaccines against the Alpha and Delta variants. They found the vaccines to be 80% effective in stopping symptomatic disease from the Delta variant – that's compared to 88% effectiveness of the vaccines against the Alpha variant. Vaccines stopped hospitalization for both Alpha and Delta variants more than 90% of the time. Even individuals who only receive one dose of a 2-dose vaccine gain some protections

against COVID-19. Researchers did find that receiving the second shot was especially critical for the best protection against the Delta variant, however.

Variants are created when older strains are no longer able to survive due to a lack of suitable hosts. The virus mutates to increase its chances of finding new hosts. That is why variants are usually more contagious than previous strains and can cause new and more severe symptoms. Getting a COVID-19 vaccine helps prevent new variants from forming.

## Myth #10

**My child doesn't need a vaccine because children don't get severely ill from COVID-19.**

**FACT:** The newest variant (Delta variant) is having larger impact on children and young adults with increased hospitalizations in that age group. Getting children/young people vaccinated is more and more important. We also do not yet know what impact a past COVID-19 infection will have on children as they mature. And, even though it is less common, many young children have developed severe illness from COVID-19 resulting in hospitalization and even death. Don't risk your child's health when multiple vaccines that have proven to be safe are available for you and your children.

## Myth #11

**I will have a bad reaction or experience severe side effects as a result of the vaccine.**

**FACT:** Serious side effects that could cause a long-term health problem are extremely unlikely following any vaccination, including COVID-19 vaccination.

Immediate side effects following a COVID-19 vaccination are typically mild symptoms including muscle pain at the injection site, fever, headache, fatigue. These symptoms usually go away within 1-2 days and are a sign that your immune system is working.

There is a remote chance the vaccine could cause severe allergic reaction if you have a history of severe allergic reaction or anaphylactic reaction to medication, food, or bee stings in the past. If this is something you've experienced before, you should talk with your doctor about your personal medical history and vaccination.

As far as long term side effects, vaccine monitoring has historically shown that side effects generally happen within six weeks of receiving a vaccine dose. For this reason, the FDA required each of the authorized COVID-19 vaccines to be studied for at least two months (eight weeks) after the final dose. Millions of people have received COVID-19 vaccines and no long-term side effects have been detected.

