

# **Why YOUR Covid-19 Vaccination Is So Important!**

Essentially everyone should receive the Covid-19 vaccine, but many people still remain hesitant based on a variety of reasons and misinformation. My intent is that the information contained here will help to ease fears and to answer questions. This document only is meant as an overview, and additional in-depth information is readily available. My hope though is that these facts will provide some much needed clarity about the Covid-19 vaccines and their development. My sources of information about the vaccine are from numerous trusted medical site webinars, documents, and websites. As a recently retired primary care Internist (non surgical medical care of adults), I have leaned heavily on my national group, American College of Physicians, for my information. [CDC.gov](https://www.cdc.gov) is another trusted website that I have used.

Other trusted websites provide legitimate information about the vaccine as well, but caution is needed when straying too far away from mainstream medical sites. One needs to be very careful with Covid-19 vaccine information and misinformation, especially when obtained via social media. So please allow me to help to answer common Covid-19 questions and to share what I know as a physician to be true about the Covid-19 vaccines and their development.

## ***WHY DO WE NEED TO GET VACCINATED NOW AS OPPOSED TO WAITING?***

The main reason that people need to get vaccinated now is that we are in a race against time because of the way this particular virus mutates. The bottom-line is very simple. The more of us that get vaccinated, the less likely there will be transmission of Covid-19.

If Covid-19 is not transmitted from one person to another (regardless of the severity of disease), then it cannot mutate and progress to new variants of the virus. Unfortunately, any new

variants of the Covid-19 virus may eventually escape current vaccine protection. That means that trying to stop these new versions of the Covid-19 virus will take longer and more people will get sick or even die. It also means that additional vaccines likely would have to be developed to stop these new variants. As of April 13, 2021, there have been 559,172 Covid-19 related deaths.

***SOME PEOPLE QUESTION HOW THE COVID-19 VACCINES WERE DEVELOPED SO QUICKLY AND IF THAT MEANS THAT THE VACCINES MIGHT NOT BE SAFE?***

The answer to how the Covid-19 vaccines were developed so quickly is dualistic. Part of the answer lies in understanding that the developers recognized the great global need for a quick development of the Covid-19 vaccines and put lots of effort into developing the vaccines as quickly as possible. The other part of the answer is that most of the companies were helped by the fact that they were not starting from scratch.

Technology for the messenger RNA vaccines (mRNA) has been around for decades. The mRNA vaccines are Moderna and Pfizer BioNTech. mRNA technology allows for faster vaccine development than traditional methods. That technology has been present since the 1970's . Research and development, employing similar methods that were used to develop the Covid-19 vaccines, continues in attempting to develop vaccines for other viruses such as Ebola, Zika, HIV, and influenza.

Once researchers identified the Covid-19 viral sequencing, a spike protein from the outer surface was used to create the vaccine. The infectious part of the virus was not used. That is why others CANNOT catch Covid-19 from someone who just has gotten vaccinated.

These Covid-19 vaccines cause the body of the person being vaccinated to create/develop an immune response. This immune response creates immunity to Covid-19, without the person typically either getting sick or getting as sick as they would if they had not been vaccinated. Please note that the J&J vaccine is different from mRNA vaccines. It uses a viral vector. What is a viral vector? It is a different process that is more technical than can be discussed in this document. So for the answers to that and other such technical questions about the J&J vaccine (or any vaccine), I suggest that you go to [CDC.gov](https://www.cdc.gov) website and search “vaccines.”

One other thing needs to be mentioned for clarity about the development and manufacturing of the vaccines. Because our government wanted to have the vaccine ready for public administration as soon as possible, manufacture of the vaccines was subsidized from the beginning. Our government assumed the financial risk in case the vaccines were not found to be either safe or effective. This means initially that the government financially was responsible for the creation of the vaccines, which also speeded up their availability.

### ***BUT ARE THE COVID-19 VACCINES REALLY SAFE AND EFFECTIVE?***

Extensive testing took place before the vaccines were distributed to the public. Prior to the first Covid-19 vaccine being approved, safety data was accumulated for 60 days. Each Covid-19 vaccine trial enrolled at least fifteen thousand individuals in both the active vaccine group and the control (placebo) group.

The efficacy of the vaccines was shown to be greater than 90% and the side effects were very minimal. If a vaccine is going to have any adverse effect, such events usually occur within 15-45 days. Efficacy was shown by decreasing severe illness, hospitalizations, and deaths versus

the control group. Because so many deaths had already occurred, and no end was in sight, the Emergency Use Authorization (EUA) was granted.

Trial groups for the Covid-19 vaccine were intentionally set up to be as diversely representative as possible. Overall, the Covid-19 vaccine trial groups were comprised of 8-12% of individuals being African-Americans, 20-21% Hispanic, and the rest Caucasian. Overall, no difference seemed apparent in any racial group regarding either side effects or efficacy. Trial participants will be followed one-to-two years after vaccination as researchers monitor for any problems that might develop.

Data of all trials is transparent and available to the public often online or in medical journals. Also, the information can be found on [cdc.gov](https://www.cdc.gov). Individuals now being vaccinated can provide further follow-up information by signing in to V-safe After Vaccination Health Checker program, and sharing their post vaccination experience.

Side effects from the various Covid-19 vaccines available in the U.S. do vary from person to person. They can include injection site soreness, fatigue, and fever. These symptoms will most likely go away in about a day. If an individual has had a severe allergic response to any prior vaccine, they should check with their doctor prior to receiving a Covid-19 vaccine. As always, individuals should contact their doctor with any questions about the Covid-19 vaccines, especially if they already are under a physician's care for health issues, or for any individual health concern.

As of April 13, vaccinations with the Johnson & Johnson Janssen Covid-19 vaccination have been paused. According to the CDC website, both the "CDC and FDA have recommended a pause in the use of the Janssen (Johnson & Johnson) COVID-19 Vaccine in the United States

out of an abundance of caution”. To date 6.8 million doses of the J&J vaccine have been administered in the US and only 6 cases of an unusual blood clotting situation have occurred. Information will be monitored and studied in attempt to determine if the vaccine is causative or if the clotting reports are simply what would be expected in six individuals per 6.8 million individuals. We should all note and appreciate that the CDC and the FDA as well as other medical groups are constantly monitoring all the vaccines for any safety related issues.

***SOME PEOPLE EVEN FEAR THAT THESE VACCINES MIGHT BE SIMILAR TO THE TUSKEGEE EXPERIMENTS CONDUCTED ROUGHLY 70 YEARS AGO, BUT THAT IS NOT TRUE.***

Unlike the Tuskegee experiments, everything about the COVID-19 trials was transparent. Other than desiring to gain knowledge via a diverse population of VOLUNTEERS, the Covid-19 research had nothing to do with race and participation was not forced upon any civilian by our federal government. Individuals receiving the vaccines are NOT being experimented upon. The Tuskegee issue of the 1930's was terrible but safeguards are in place to make sure something like that never happens again.

Ethical restraints have been established for decades covering ANY new medically related medication, vaccine, or treatment. Independent review processes that are in place have nothing to do with the government. Institutional Review Boards (IRB) are in place. These independent ethics committees are intentionally represented by all demographic groups. Once a study is started,

it also is monitored by an independent Data and Safety Monitoring Board. If any problem becomes apparent, the study is stopped immediately.

For the Covid-19 vaccines to be approved, each vaccine had to go before non-political, non-government advisory boards made up of independent doctors, statisticians, and scientists. With successful and productive results being shown and no significant adverse events, then a positive recommendation was made to the FDA and with their approval was sent to the CDC. Also, the ACIP-Advisory Committee on Immunization was involved. The end result was a very careful scrutiny of the trials and an evaluation of a lot of data that was not politically or federal government driven.

## **WHAT ARE SOME OF THE MOST COMMONLY HEARD QUESTIONS OR ISSUES ABOUT THE COVID-19 VACCINE?**

*I just want to wait and see how others do with their vaccinations before I agree to being vaccinated.* ... There is no need to wait any longer. As of April 13, 2021, 189,692,045 doses of Covid-19 vaccine have been administered.

*I'm concerned about the mRNA vaccine changing my genetic makeup.* ... None of the vaccines enter into the nucleus of our cells. There is no way genetics may be altered.

*I've heard a chip will be instilled with the vaccine to track me.* ... No. The only tracking that is done is a record of the vaccine administration itself, similar to record keeping your doctor/clinic does with any vaccine administration.

*I'm not going to have this Covid-19 vaccination because no cure for cancer or HIV/AIDS has been found. Why should I think Covid-19 is miraculously taken care of?* ... (I actually was

told this while standing outside a Greenville business trying to convince individuals to have a Covid-19 vaccine.) The HIV retrovirus and cancer are totally different from the Covid-19 Coronavirus. Significant differences exist between being able to use existing protocols and research information already established and developed for dealing with certain viruses – like the flu and other coronaviruses – and other medical conditions. Applying those same or similar medical techniques to creating effective vaccines for cancer or HIV simply have not worked so far.

***I don't have health insurance. I can't afford the vaccine.*** ... This is not true. The vaccine is free.

***Which vaccine is the best?*** ... The best vaccine is the first one that is available for you to get because the sooner you get vaccinated, the safer you and others will be! Plan to get vaccinated as soon as possible.

***I can't get to a vaccination site. I don't even have a computer to sign up.*** ... This is where our regional medical team thinks we can make a difference. Your regional church is planning for vaccination sites in underserved areas as much as possible. This hopefully will include some Eastern NC locations in partnership with Brody School of Medicine. Perhaps other opportunities will present themselves for church related vaccination sites. Hopefully soon, the vaccine will be more readily available for administration at local pharmacies. Churches, no matter the size, could take on the mission of encouraging church members and community members to sign up and go somewhere close by for their vaccinations.

***After personal reflection and if you still have questions regarding the Covid-19 vaccination, please contact your primary care physician!***

## **WILL YOU CHOOSE TO MAKE A DIFFERENCE?**

According to the CDC website, as of April 4, 2021, over 552,829 Covid-19 related deaths have been reported. Only by working together can we make sure that those numbers continue to decrease until, one day, no one dies from this horrible virus. So please help to protect yourself, your family, and others by getting the Covid-19 vaccination as soon as possible, unless advised against it by your doctor.

By protecting yourself and being vaccinated, you truly are showing love to your neighbor!

Sincerely,

Doug Barrow, MD

April 13, 2021