



# MYTH Vs. FACTS: Covid Vaccines, Covid-19, & Delta Variant

*From Dr. Bilal Ahmed*

**With so much wrong information readily available, Dr. Bilal Ahmed, Chief Medical Officer at St. James and Associate Medical Director at Highland, sets the record straight about some commonly shared myths with some up-to-date facts.**

**MYTH:** The COVID vaccines were not rigorously tested, which is why they have only emergency authorization approval and not full Food and Drug Administration approval.

**FACT:** Vaccine developers didn't skip any testing steps, but conducted some of the steps on an overlapping schedule to gather data faster. There is a perception that things moved very fast, but we want to underscore that the technology being used now was being studied for a decade. The main difference between emergency use versus full FDA approval is that you need two months of monitoring rather than six months. When you look at the history of vaccines, if patients were to develop side effects, these occurred within two months. We have not seen anything that would make us believe that the risks outweigh the benefits. And vaccines have saved so many lives.

**MYTH:** The technology used to create the COVID vaccines is too new to be safe.

**FACT:** The technology used, called messenger RNA, or mRNA, is not new. Research on it actually began in the early 1990s, and two diseases that are very close to COVID SARS (severe acute respiratory syndrome) in 2003, and MERS (Middle East respiratory syndrome) helped bring the mRNA vaccine development to present day use.

The reason this is called SARS COV 2 is that there was a SARS 1, the original one, and scientists were working on this vaccine. So when this pandemic arrived they had already developed a lot of the science.

A decade of work was actually going on. That's one issue I like to emphasize when people think it was rushed.

These vaccines went through all the regulatory steps like any other vaccines. None of this was rushed. The FDA reviewed all the data. When one says "Emergency use," people think it was rushed, but the way to think about it is that the benefits outweigh the risks.

**MYTH:** Breakthrough cases prove that even if I get the vaccine, I might still get COVID. So why bother?

**FACT:** As of August 9, the CDC said there had been 8,054 vaccinated people who were hospitalized or died who had also tested positive for coronavirus – out of more than 166 million fully vaccinated Americans. That's roughly .005 percent. Additionally, CDC director Rochelle Walensky has said that 99.5 percent of all deaths from

COVID-19 are in the unvaccinated.

COVID vaccines have been shown to be very powerful in preventing more severe disease and the need for hospitalization. Breakthroughs occur at a much, much lower rate than in people who are unvaccinated. They account for much less than 1 percent. There are so many zeros before the one 99 percent of people dying now of COVID are unvaccinated. And 97 percent of those hospitalized are unvaccinated. The breakthroughs have been occurring more frequently with the Delta variant because of the high level of infectiousness (or transmissibility) of the Delta variant and lower protection of current vaccines against this variant. People having breakthroughs have much more mild infection, more like an upper respiratory infection. The vaccines prevent severe disease and complications and allow people to return to a more normal state.

**MYTH:** The COVID vaccines can affect a woman's fertility.

**FACT:** This rumor started after a report claimed inaccurately that the SPIKE protein on this coronavirus was the same as another protein called Syncytin-1 which is involved in the growth and attachment of the placenta during pregnancy. The report's claim that the vaccine blocks this protein was quickly debunked by the scientific community. Although it is false, once the information gets out there, the correct information doesn't always come through. Vaccines simply don't impact fertility.

**MYTH:** COVID-19 vaccines are not safe for pregnant women.

**FACT:** While the first COVID-19 vaccine trials did not include pregnant women, available data shows vaccinations during pregnancy have been safe and effective among the more than 139,000 women who have received a COVID-19 vaccine in the U.S. These data have been collected from Pfizer-BioNTech, Moderna, and from the V-Safe COVID-19 vaccine pregnancy registry. Safety data show no concerns for vaccinated pregnant or breastfeeding women and their babies. These data support that COVID-19 vaccination is as safe and effective for pregnant and lactating women as it is for non-pregnant individuals.

**MYTH:** Breastfeeding women should wait to get a

COVID-19 vaccine.

**FACT:** Breastfeeding women can get a COVID-19 vaccine and still breastfeed if they have already been vaccinated. According to research about vaccination during pregnancy, protective antibodies stimulated by the vaccine can be passed through breastmilk and help protect a baby from harmful viruses.

**MYTH:** COVID-19 vaccines cause infertility.

**FACT:** There are no data to suggest that COVID-19 vaccines negatively affect fertility or a woman's ability to conceive after getting vaccinated. Some misinformation claims pregnant women who receive a COVID-19 vaccine reject a protein that is vital for the placenta, which can reportedly make a woman infertile. This has been disproven. According to published research, vaccines are not likely to pose a risk for people who are pregnant. To date, no vaccine is known to cause fertility issues.

**MYTH:** COVID-19 vaccines can change a woman's menstrual cycle.

**FACT:** There have been anecdotal reports that COVID-19 vaccines affect the menstrual cycle. Menstrual cycles can be affected by a variety of things, including stress, which many have experienced over the past year. It's not known at this time whether people are seeing changes in their menstrual cycles in relation to the vaccine or other factors such as COVID-19. At this point, no causal link between vaccination and irregular menses has been established.

**MYTH:** COVID-19 vaccination should be avoided in the first trimester.

**FACT:** COVID-19 vaccination is safe any time during pregnancy.

**MYTH:** Women should wait to get a COVID-19 vaccine if they want to get pregnant.

**FACT:** COVID-19 vaccination dramatically decreases the chance of infection and reduces risk of severe illness, ultimately protecting both mothers and their babies. On the other hand, getting COVID-19 can be a significant risk to a pregnant woman's health. Pregnant people are at increased risk of severe illness compared to non-pregnant people. They are more likely to be hospitalized, require intensive care, or die from COVID-19. If they become seriously ill, they are also at increased risk of preterm birth and pregnancy loss.

**MYTH:** I already had COVID, therefore I don't need the vaccine. I'm immune.

**FACT:** This is a very common myth. After people recover from infection with a virus, the immune system retains a memory of it, according to the National Institutes of Health. While that's good for the immune system, it also means that even after you recover from COVID, it's still inside your body and can resurface. Studies have been unclear how long immunity lasts after having COVID – most experts believe anywhere from

90 days to six months, though it could be longer. The information we have right now is that vaccines provide a more broad-based immune response that will protect you for a longer period of time. With the mRNA vaccines, you have two shots, one to prime and then another one to boost the immune system. You need the boost to protect you for a longer period of time.

**MYTH:** I'm vaccinated. So I can drop all my COVID precautions, right?

**FACT:** Studies have shown that a person infected with the Delta variant of COVID has roughly 1,000 times more copies of the virus in their respiratory tracts than a person infected with the original strain.

The challenge is that Delta is so transmissible. We are starting to advise people to wear masks again in supermarkets and stores and public places. But Delta is causing outbreaks mostly in unvaccinated people and only in some vaccinated people. Until we get to the point where transmission slows to a trickle, Delta is just more easily spread, and we are quickly learning that it can easily lead to vaccine breakthroughs and even be spread from one vaccinated person to another.

**MYTH:** Getting the COVID vaccine actually gives you COVID.

**FACT:** It is not medically possible. COVID vaccines are not made with live virus SARS-COV-2 virus cells. They are not giving individuals the virus itself so you can't get COVID from getting the vaccine.

**MYTH:** A microchip, with the backing of Bill Gates, is being implanted with the vaccine.

**FACT:** There is no microchip in the vaccine. This one started when Microsoft cofounder Gates said in an interview: "We will have some digital certificates" that could ultimately show who's been tested and who's been vaccinated." If you are worried about being monitored, just look at your phone. You're much more likely to have your activities tracked there. There is no microchip in the vaccine.

### **What about the Delta variant?**

IT SPREAD EASILY! The Delta, or B.1.617 variant, is highly transmissible. That means it is even better at finding unvaccinated individuals than previous strains. Delta is spreading 50-percent faster than the Alpha ( B1.1.7), which was 50-percent more contagious than the original strain of the virus. Viruses will continue to mutate if they continue to spread.

**The best way to protect yourself and your family and community from Delta and future variants is to get vaccinated and encourage your friends and family to as well.**