

Myths & Truths of the COVID-19 Vaccines

Excerpted from Allegheny County Health Department
Director Dr. Debra Bogen's weekly briefing on May 5

MYTH: The vaccines have microchips to gather your personal information.

TRUTH: There is no microchip or other electronic device in the world that's small enough to fit inside the needles used to inject vaccines. The vaccines' purpose is to protect you from a deadly virus. Period. They are NOT being used for tracking purposes.

MYTH: The vaccines contain meat products – in particular gelatin.

TRUTH: This is important because, if it were true, it would carry serious implications for vegan and vegetarians, and for people of certain religious faiths. However, I can verify that none of the approved vaccines—Pfizer, Moderna or Janssen —contain gelatin or any other animal products.

MYTH: There's no point in getting vaccinated because you still have to wear a mask.

TRUTH: Vaccines protect you from getting seriously ill. Masks are still needed in certain settings to protect you AND to protect those around you who have not been or cannot be vaccinated—and there are some people who cannot be vaccinated because of age, health conditions or other reasons.

MYTH: Vaccines cause infertility.

TRUTH: No evidence supports this. The truth is that COVID-19 vaccine do not affect the fertility of women who are seeking to become pregnant.

While I am on this topic – tens of thousands of pregnant women have been safely vaccinated – including some on our staff. The vaccine is far safer than getting covid while pregnant.

MYTH: The vaccine costs money.

TRUTH: The vaccine is free. Some vaccine providers may charge an administration fee, but they cannot charge for the vaccine itself. The Allegheny County Health Department does not charge an administration fee. Shots are 100% free at all our clinics.

MYTH: The vaccines don't work against variants.

TRUTH: Actually, research shows that the U.S. vaccines are highly effective against variants, which is very encouraging. There is ongoing surveillance tracking vaccination breakthrough cases and new variants to make sure that remains so.

MYTH: The vaccines contain aborted fetal cells.

TRUTH: None of the COVID-19 vaccines contain whole or partial human cells, or bits of tissue. It is true that some of the COVID-19 vaccines were produced through research that involved cells from tissue obtained legally after an elective abortion carried out many years ago. Those cells were turned into a "cell line" – a research tool that scientists can use to study how viruses cause infection.

MYTH: If you've had COVID-19, you don't need to get vaccinated.

TRUTH: Even if you've had COVID, getting the vaccine is beneficial by bolstering your immune response to the virus. The immune response from the vaccine is stronger and longer lasting than natural infection.

MYTH: The vaccine will change my DNA.

TRUTH: It does not change your DNA. The messenger RNA (mRNA) vaccines, Pfizer and Moderna, do not enter the nucleus of the cell where DNA is located. The mRNA trains your body to produce the necessary immune response by making antibodies. The mRNA lasts just a couple of days.

MYTH: Young people don't need to get vaccinated.

TRUTH: Everyone eligible should get vaccinated. It's true that young, healthy children and adults generally are not severely sickened by COVID-19, but they certainly contribute to the virus's spread. Also some young people do get very sick and have long term symptoms. Again, EVERYONE should get vaccinated. Not only for yourself, but for your parents and grandparents, and other young people with underlying conditions.

Finally, this is possibly the most important MYTH to dispel: The vaccines were rushed, and therefore were developed too quickly for anyone to be certain they are safe.

TRUTH: The science is solid. These vaccines are rooted in well-established technologies used to develop other vaccines. They underwent extensive testing in 10s of thousands of people, including the county executive and me. They have been now given to millions across the country. They are absolutely safe—and certainly safer than getting the COVID-19 virus – which I will remind you contributed to the death of nearly 2000 Allegheny County residents and just 75 people in our county in April alone.

Remember: The vaccines underwent rigorous testing and controls. I got vaccinated and I urged all of my loved ones to do the same. Because I **KNOW** they are safe.

So there you have it. There are many myths surrounding the vaccine, but none of them are true. The vaccine **IS** safe. The vaccine **WILL** protect you and your loved ones.

The vaccine—if enough of us get it—**WILL** allow us all to return to normalcy: To hugging our loved ones ... to dinner parties with friends ... to dining in restaurants without fear ... to once again enjoying large outdoor gatherings to celebrate the Fourth of July, Light Up Night, New Year's Eve ... and—who knows?—maybe another Stanley Cup Championship parade. I mean, we are good at parades.

But to get there, we must erase vaccine hesitancy and replace it with vaccine **CONFIDENCE**.

I am confident. I hope you are too.

If you or anyone you know have any lingering questions or concerns about the vaccine or the virus, please talk to your doctor, or visit alleghenycounty.us/coronavirus. There you will find all the resources you need.

And while you're there—go ahead and register for a vaccination. You can do so with vaccine confidence.

Thank you for your time. *Be safe and be kind.*

- Dr. Debra Bogen
Director, Allegheny County Health Department

