## **COVID-19 VACCINE MYTHS**

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Myth	Fact
COVID-19 vaccines are not safe because they were developed and tested quickly.	Many pharmaceutical companies have invested significant resources into developing COVID-19 vaccines quickly because of the worldwide effects of the pandemic. This emergency situation warranted an emergency response. That does not mean the companies bypassed safety protocols or performed inadequate testing.
I already had COVID-19 and I have recovered, so I don't need to get vaccinated for COVID-19.	There is not enough information currently available to say if or for how long after infection someone is protected from getting COVID-19 again. This is called natural immunity. Early evidence suggests natural immunity from COVID-19 may not last long, but more studies are needed to better understand this.
COVID-19 vaccines have severe side effects.	COVID-19 vaccines have been shown to have short-term mild or moderate vaccine reactions that resolve without complication or injury. Early-phase studies of the Pfizer/BioNTech vaccine show that it is safe. About 15% of people developed short-lived symptoms at the site of the injection. Half developed systemic reactions, primarily headache, chills, fatigue, muscle pain or fever lasting for a day or two. <i>Keep in mind that</i> <i>these side effects indicate that your immune system is responding to</i> <i>the vaccine.</i> These side effects are common with vaccinations.
I am allergic to eggs so I shouldn't get the COVID-19 vaccine	Neither the Pfizer/BioNTech vaccine nor the Moderna vaccine contain egg.
l won't need to wear a mask after I get vacinated for COVID-19.	It may take time for everyone who wants a COVID-19 vaccination to get one. Also, while the vaccine may prevent you from getting sick, it is unknown whether you can still carry and transmit the virus to others after vaccination. Until more is understood about how well the vaccine works, continuing with precautions, such as wearing a mask, practicing physical distancing, and washing hands frequently, will be important.
COVID-19 vaccines were developed using fetal tissue.	These messenger RNA COVID-19 vaccines were not created with and do not require the use of fetal cell cultures in the production process.



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More people will die as a result of a negative side effect to the COVID-19 vaccine than would die from the virus.	A claim circulating on social media is that the COVID-19 mortality rate is 1%–2% and that people should not be vaccinated against a virus with a high survival rate. However, a 1% mortality rate is 10 times more lethal than the seasonal flu. In addition, the mortality rate can vary widely based on age, sex and underlying health conditions. While no vaccine is 100% effective, getting vaccinated is far better than not getting vaccinated. The benefits outweigh the risks in healthy people.
COVID-19 vaccines were developed to control the population through microchip tracking or "nanotransducers" in the human brain.	There is no vaccine microchip, and the vaccine will not track people or gather personal information into a database. This myth started after comments made by Bill Gates from the Bill & Melinda Gates Foundation about a digital certificate of vaccine records. The technology he was referencing is not a microchip, has not been implemented in any manner and is not tied to the development, testing or distribution of COVID-19 vaccines.
COVID-19 vaccines must be stored at extremely low temperatures because of preservatives in the vaccines.	Pfizer/BioNTech and Moderna have reported that their vaccines contain no preservatives. Both of these vaccines use messenger RNA, or mRNA, to teach your cells how to make a protein that will trigger an immune response to COVID-19. However, messenger RNA is fragile and can break down easily. Storing messenger RNA vaccines, like these COVID- 19 vaccines, in an ultracold environment keeps them stable and safe. Vaccines are thawed before injection.
COVID-19 vaccines cause infertility or miscarriage.	No, COVID-19 vaccines have not been linked to infertility or miscarriage. A sophisticated disinformation campaign has been circulating online, claiming that antibodies to the spike protein of COVID-19 produced from these vaccines will bind to placental proteins and prevent pregnancy. This disinformation is thought to originate from internet postings by a former scientist known to hold anti-vaccine views. During natural infection, the immune system generates the same antibodies to the spike protein that COVID-19 vaccines would. Thus, if COVID-19 affected fertility, there already would be an increase in miscarriage rates in women infected with COVID-19. This has not happened.
COVID-19 vaccines will alter my DNA.	The first COVID-19 vaccines to reach the market are likely to be messenger RNA, or mRNA, vaccines. Messenger RNA vaccines work by instructing cells in the body how to make a protein that triggers an immune response, according to the CDC. Injecting messenger RNA into your body will not interact or do anything to the DNA of your cells. Human cells break down and get rid of the messenger RNA soon after they have finished using the instructions.