COVID-19 Vaccines: Separating fact from fiction

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An abundance of information is available about the COVID-19 vaccines and it can be hard to separate fact from fiction, especially when information may be shared from friends and family online. Myths about the vaccine have multiplied in the months since Americans began receiving vaccinations.

First, it's important to recognize that getting the vaccine is not just about survival from COVID-19; it's about decreasing spread of the virus to others and preventing infection that can lead to long-term negative health effects or even death. Studies continue to show the available vaccines are safe, effective and will reduce your risk of severe illness and death.

Let's set the record straight on some myths circulating about COVID-19 vaccines:

Myth: I don't need a vaccine because I had COVID-19 and recovered, so I'm safe. **Fact:** Repeat infections are common three to six months after a natural infection. Immunity from the vaccine is proven to last longer and provide better protection; therefore, those who've had COVID-19 should still get vaccinated.

Myth: Getting the vaccine could give me COVID-19.

Fact: The vaccines currently being administered in the U.S. cannot give someone COVID-19 – they do not use the live virus that causes COVID-19.

Myth: Vaccine side effects are severe and dangerous.

Fact: Some people develop short-term mild or moderate systemic reactions, such as headache, chills, fatigue, muscle pain or fever, but these side effects are indicators that your immune system is responding to the vaccine and are common when receiving vaccines.

Following a thorough safety review, the Centers for Disease Control and Prevention (CDC) recommends Johnson & Johnson's vaccine resume distribution. Women younger than 50 years old should be aware of the rare risk of blood clots with low platelets after vaccination. Other COVID-19 vaccines including Pfizer and Moderna are available without this risk.

Myth: Lots of people have had allergic reactions.

Fact: Anaphylaxis after COVID-19 vaccination is rare; over 230 million doses of COVID-19 vaccines were administered in the U.S. from December 2020 through late-April 2021. A review of medical records revealed that vaccination contributed to zero patient deaths. Post-vaccination, medical experts provide observation for 15-30 minutes to ensure you do not have a reaction, or provide treatment if needed.

Myth: The vaccines cause infertility or miscarriage.

Fact: There is currently no evidence that COVID-19 vaccination causes any problems with pregnancy, including the development of the placenta. In addition, there is no evidence that fertility problems are a side effect of any vaccine, including COVID-19 vaccines.

Myth: All vaccines use fetal tissue.

Fact: Neither the Pfizer nor Moderna vaccines contain fetal cell tissue nor were fetal cells used for the development or production of either vaccine.

Johnson & Johnson's vaccine used fetal cell cultures, grown in a laboratory thousands of generations removed from the original fetal tissue to produce and manufacture the vaccine.

Myth: Vaccines will alter my DNA.

Fact: COVID-19 vaccines do not change or interact with your DNA in any way. Both mRNA (Pfizer and Moderna) and viral vector (Johnson & Johnson) COVID-19 vaccines deliver instructions to our cells to start building protection against the virus. However, the vaccines cannot affect or interact with our DNA in any way.

Myth: The mRNA technology used to make the Pfizer and Moderna vaccines is new and can't be trusted.

Fact: The mRNA technology behind the coronavirus vaccines has been in development for almost two decades. Vaccine makers created the technology to help them respond quickly to a new pandemic illness, such as COVID-19.

And while the program name "Operation Warp Speed" implies quick development, the approval process for these vaccines followed all necessary safety steps. The standard research process was followed but at a faster pace due to increased federal funding and the ability to meet the required sample sizes since COVID-19 was so widespread throughout the country.

Dr. Rhonda Sneeringer is the Medical Director of Outpatient COVID-19 Care and the Director of Pediatrics at Barton Memorial Hospital. To learn more about the COVID-19 vaccine visit

bartonhealth.org/coronavirus. California residents are encouraged to sign up for California's MyTurn tool (**myturn.ca.gov**) to receive appointment availability notifications. Nevada residents can use Immunize Nevada's vaccine finder tool (**immunizenevada.org**) to search for nearby vaccination opportunities.