The Pennsylvania Medical Society (PAMED) has put together these FACTS to dispel some of the MYTHS related to the COVID-19 vaccine.

**MYTH:** The COVID-19 vaccine will make me sick.

**FACT:** None of the authorized COVID-19 vaccines contain the live virus that causes COVID-19. This means that the COVID-19 vaccine cannot make you sick with COVID-19.

**MYTH:** After getting the COVID-19 vaccine, I’ll test positive for COVID-19.

**FACT:** None of the authorized COVID-19 vaccines can cause you to test positive on viral tests, which are used to see if you have a current infection.

**MYTH:** I already had COVID-19, so I don’t need the vaccine.

**FACT:** COVID-19 is associated with severe health risks and re-infection is possible. At this time, experts do not know how long someone is protected by their natural immunity after recovering from COVID-19, but early evidence suggests it may not last very long. In addition, the duration of natural immunity varies from person to person. For all these reasons, everyone should be vaccinated for COVID-19 when they are eligible to do so.

**MYTH:** The Pfizer and Moderna COVID-19 vaccines will alter my DNA.

**FACT:** The COVID-19 Pfizer and Moderna vaccines are Messenger RNA (mRNA) vaccines, and they do not change or interact with your DNA in any way. mRNA vaccines teach our cells how to make a protein that triggers an immune response. The vaccine doesn’t enter the nucleus of a cell, which is where our DNA is housed, so the two never have the opportunity to interact with one another. The Johnson and Johnson COVID-19 vaccine is not an mRNA vaccine.

**MYTH:** The COVID-19 vaccine will make me sterile or unable to have a baby.

**FACT:** Based on current knowledge, experts believe that COVID-19 vaccines are unlikely to pose a risk to a person trying to become pregnant in the short or long term. Scientists study every vaccine carefully for side effects immediately and for years afterward. The COVID-19 vaccines are being studied carefully now and will continue to be studied for many years, similar to other vaccines. There is currently no evidence that antibodies formed from COVID-19 vaccination cause any problems with pregnancy, including the development of the placenta.
**MYTH:** The COVID-19 vaccines aren’t safe because they use new technology and were developed too quickly.

**FACT:** Many pharmaceutical companies invested significant resources into quickly developing a vaccine for COVID-19 because of the worldwide impact of the pandemic. The emergency situation warranted an emergency response, but that does not mean that safety protocols were bypassed or adequate testing wasn’t performed.

In addition, the vaccines that have been authorized went through rigorous clinical trials involving tens of thousands of volunteers. Because of the prevalence of COVID-19, it only took a few months for the clinical trials to collect enough data to make an initial evaluation. In an emergency, like a pandemic, the Food and Drug Administration (FDA) can authorize a vaccine without having as much evidence as they would usually have before approving a vaccine. This is referred to as Emergency Use Authorization (EUA). EUA is not the same as FDA approval, which requires evidence to fully establish effectiveness and safety. EUA can be obtained much more quickly during an emergency than full FDA approval. For the COVID-19 vaccines, the FDA determined there was sufficient evidence to demonstrate individuals would benefit from the vaccines, and the benefits outweighed any identified risk. EUA was issued, which is why the COVID-19 vaccines were available so quickly.

**MYTH:** There are severe side effects of the COVID-19 vaccine.

**FACT:** Some people experience short-term side effects including soreness at the injection site, headache, chills, fatigue, muscle pain, or fever lasting for a day or two. Keep in mind that these side effects are indicators that your immune system is responding to the vaccine and are common when receiving vaccines.

**MYTH:** I won’t need to wear a mask after I get vaccinated for COVID-19.

**FACT:** It may take time for everyone who wants a COVID-19 vaccine to get one. Also, while the vaccine may prevent you from getting sick, you can still carry and transmit the virus to others. Until more is understood about how well the vaccine works, continuing with precautions such as mask-wearing and physical distancing will be important.

**MYTH:** The COVID-19 vaccine was developed to track the general population through a microchip.

**FACT:** 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 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.
**MYTH:** More people will die as a result of a negative side effect to the COVID-19 vaccines than would actually die from the virus.

**FACT:** At this time, the Centers for Disease Control and Prevention has said that there have been no deaths linked to the COVID-19 vaccine. There is a claim circulating on social media that COVID-19’s mortality rate is 1-2 percent and that people should not be vaccinated against a virus with such a high survival rate. However, a 1 percent mortality rate is 10 times more lethal than the seasonal flu. In addition, mortality rates can vary widely and are influenced by age, gender, and underlying health conditions. While some people that receive the vaccine may develop symptoms as their immune system responds, remember that this is a common reaction when receiving any vaccine and these symptoms are not considered serious or life-threatening. You cannot get COVID-19 from the COVID-19 vaccines; they are inactivated vaccines, not live vaccines.

It’s important to recognize that getting vaccinated for COVID-19 is not just about survival from COVID-19. It’s also about helping to prevent the spread of the virus to others and preventing infection that can lead to long-term negative health effects.

While no vaccine is 100 percent effective, it is far better than not getting vaccinated. The benefits outweigh the risks in healthy people.

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