

# COVID-19 Vaccine

## MYTHS vs FACTS

During the first year of this pandemic, we all learned together in real-time, the impact of this virus. Our only option was to REACT in our efforts to prevent and manage COVID infections. The great news is that we now have tools available to prevent and eradicate this virus! It is unfortunate that there is hesitancy of many to receive the vaccine. We are now in a place where we can effectively eradicate this virus that kills 20% of our elders however, we are not using this tool to its fullest potential. This continues to leave our most vulnerable population at risk. We want to ensure that you have the **FACTS** vs the **MYTHS** regarding making your decision to receive the COVID-19 Vaccine.

**MYTH:** *Researchers rushed the development of the COVID-19 vaccine, so its effectiveness and safety cannot be trusted.*

**FACT:** Studies found that the two initial vaccines are both about 95% effective — and reported no serious or life-threatening side effects. The vaccine developers didn't skip any testing steps, but conducted some of the steps on an overlapping schedule to gather data faster. Vaccine projects had plenty of resources, as governments invested in research and/or paid for vaccines in advance.

- The COVID-19 vaccines from Pfizer/BioNTech and Moderna were created with a method that has been in development for years, so the companies could start the vaccine development process early in the pandemic. These vaccines were created using messenger RNA (mRNA), which allows a faster approach than the traditional way that vaccines are made.
- China isolated and shared genetic information about COVID-19 promptly, so scientists could start working on vaccines.

**MYTH:** *I got the flu shot and still got the flu so it doesn't really matter whether I get vaccinated or not.*

**FACT:** The annual flu shot is prepared based on scientists "best guess" of the types of viruses that will be in circulation during the upcoming flu season. There are times, when the scientists can accurately predict the viruses and other years, when the predictions do not adequately match the reality of virus circulation. With COVID, scientists know the precise virus strain that causes the COVID-19 infection and have effectively isolated it to create the vaccine.....with 95% effectiveness.

**MYTH:** *The messenger RNA technology used to make the COVID-19 vaccine is brand new.*

**FACT:** The mRNA technology behind the new 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. While the COVID vaccine is the first to utilize the mRNA technology, it is NOT

**MYTH:** *The COVID-19 vaccine was developed with or contains controversial substances.*

**FACT:** The first two COVID-19 vaccines to be authorized by the FDA contain mRNA and other, normal vaccine ingredients, such as fats (which protect the mRNA), salts, as well as a small amount of sugar. These COVID-19 vaccines were not developed using fetal tissue, and they do not contain any material, such as implants, microchips or tracking devices.

**MYTH:** *The COVID-19 vaccine enters your cells and changes your DNA.*

**FACT:** The COVID-19 vaccines are designed to help your body's immune system fight coronavirus. The messenger RNA from the Pfizer and Moderna vaccine does enter cells, but not the nucleus of the cells where DNA resides. The mRNA does its job to cause the cell to make protein to stimulate the immune system, and then it quickly breaks down — without affecting your DNA.

**MYTH:** *The side effects of the COVID-19 vaccine are dangerous.*

**FACT:** The Pfizer and Moderna COVID-19 vaccines can have side effects, but the vast majority are very short term and are NOT serious or dangerous. The vaccine developers report that some people experience pain at the site where they receive the injection, body aches, headaches or fever are the most frequently reported and typically last for a day or two. These are signs that the vaccine is working to stimulate your immune system.

A small number of women under the age of 50 developed blood clots following the Johnson and Johnson vaccine. While the risk of this adverse effect is very low, I would encourage women age 50 and younger to get vaccinated with either the Pfizer or Moderna vaccine.

**MYTH:** *The COVID-19 vaccine can affect women's fertility.*

**FACT:** The COVID-19 vaccine will not affect fertility. The truth is that the COVID-19 vaccine encourages the body to create copies of the spike protein found on the coronavirus's surface. This "teaches" the body's immune system to fight the virus that has that specific spike protein on it. In fact, during the Pfizer vaccine tests, 23 women volunteers involved in the study became pregnant, and the only one who suffered a pregnancy loss had not received the actual vaccine, but a placebo. Getting COVID-19, on the other hand, can have potentially serious impact on pregnancy and the mother's health.

**MYTH:** *If I've already had COVID-19, I don't need a vaccine.*

**FACT:** Because this is a novel, relatively new virus, there is not enough information currently available to say if or for how long people are protected from getting COVID-19 after they have had it (natural immunity). Early evidence suggests natural immunity from COVID-19 may not last very long and currently, the CDC suggests individuals infected with COVID have immunity for 90 days post-infection.