

Common Myths Circulating About COVID-19 Vaccinations

Myth #1: COVID-19 Vaccines alter your DNA

Fact: COVID-19 Vaccines DO NOT alter your DNA. They produce immunity by providing your body with a blueprint (mRNA) to manufacture its own protein. This protein is like one found on the virus that causes COVID-19. Once this protein is produced, your body is able to identify it as “foreign” and produces antibodies to fight it. Those antibodies are what fight against the SARS-CoV2 virus if you are ever exposed to it. The mRNA contained in the vaccine is quickly broken down by your body and “disappears” once its job is done. It has no capacity to enter the nucleus of the cell where your DNA is kept and protected.

Myth #2: COVID-19 Vaccines have been associated with infertility

FACT: Our infectious disease and immunology experts have been monitoring ALL adverse outcomes since mass vaccinations began in December 2020. There has been NO identified link between vaccination against COVID-19 and infertility. The Society of Obstetricians and Gynecologists of Canada has issued the following statement: “There is absolutely no evidence, and no theoretic reason, to suspect that the COVID-19 vaccine could impair male or female fertility. These rumors are unfounded and harmful.” Specifically, there has been no documented immune response against the syncytin-1 protein of the placenta as claimed by many online sources.

Myth #3: My chances of getting COVID are low

FACT: Our top scientists are estimating that in Ontario 80-90% of those who are unvaccinated will contract COVID-19 in the next 6-12 months due to the high infection rate and easy transmission of the delta variant. Furthermore, we now know that the Delta strain is 2-3 times more likely to result in hospital or ICU admission.

Myth #4: Vaccination does not prevent transmission of the virus

FACT: We know that transmission of the virus from those who are vaccinated is still possible, but it is significantly lower than if you are not vaccinated. The virus needs to make enough copies of itself to be passed to another person and that number is much lower in vaccinated people.

Myth #5: The mRNA vaccines were developed too quickly, and we don’t know all the long-term side effects of them

FACT: mRNA technology has been used in other areas of medicine (like cancer treatments) for over 10 years. These vaccines were produced faster than previous vaccines not because of

skipped steps, but because of unprecedented levels of collaboration and funding from around the world. To date, over 50 million doses of COVID-19 vaccines have been administered in Canada and over 5 billion globally. When you consider that adverse events to vaccination are most likely to happen within 6 weeks of vaccination, that's A LOT of data on side effects!

Myth #6: mRNA vaccines have not been shown to be safe in pregnancy or breastfeeding

FACT: Although pregnant and breast-feeding women were not included in the Phase III trials of either the

Moderna or Pfizer vaccines, real-world safety data for hundreds of thousands of pregnant individuals that have received COVID-19 vaccines is now available and has not revealed any safety concerns. Recent data has confirmed that mRNA from the vaccines does not cross into breast milk, but the antibodies that are produced from vaccination do. This is a good thing because it means that a breastfeeding infant gets some protection against COVID-19 from mom.

Myth #7: These vaccines were produced using embryonic cells. As such, as a person of faith, I cannot receive one without violating beliefs around abortion or the use of certain animal tissues.

FACT: Neither the Pfizer nor the Moderna vaccine were developed using cells from aborted fetuses. The Catholic Church acknowledges that in some of their final testing processes "unethically derived cell lines" were used, but that either vaccine "can be morally acceptable for Catholics to receive since the connection to abortion is extremely remote".

<https://www.cccb.ca/wp-content/uploads/2021/03/CLARIFICATION-CCCB-Statement-on-COVID-19-Vaccine-Choice-9-March-2021-EN.pdf> The vaccines also do not contain any pork products. Other religious organizations that have encouraged vaccination against COVID-19 include The Muslim American Society, the Canadian Muslim COVID-19 Task Force, the World Jewish Congress and World Council of Churches, and the Orthodox Union and Rabbinical Council of America.

Myth #8: Kids don't need to be vaccinated as COVID-19 is not that harmful to them.

FACT: With the spread of the Delta variant, children are at increased risk of contracting COVID-19. As of right now, it does not appear that Delta makes kids sicker than any other strain of the virus. However, being vaccinated against COVID-19 does help prevent children from spreading the virus to other family members who may be more vulnerable to this disease. Furthermore, according to current guidelines in most public health jurisdictions, any vaccinated child who is identified as a high-risk contact for COVID-19 will not need to self-isolate and will be allowed to



remain in school if they do not have symptoms of COVID-19. For reliable information on COVID-19 Vaccination in children please see <https://kidshealthfirst.ca> .

Myth #9: My risk of negative outcomes from COVID-19 is so low it is not worth getting vaccinated.

FACT: While mortality from COVID-19 may be low, we are continuing to learn about other long-term effects from the virus, known as “long COVID”, which can affect people of all ages that experience COVID-19, and can develop even following only mild illness. The symptoms of “long COVID” can include extreme tiredness, difficulty with memory and concentration, shortness of breath, chest pain and joint pain. These symptoms can last several months and may significantly impair your ability to function or work.

Myth #10: It is better to get natural immunity to COVID-19 through catching the disease than through a vaccine.

FACT: Though having COVID-19 and recovering from it will confer immunity, it comes with a potential big cost: the risk of death or severe disease from the virus and potential long-term effects of “long COVID”. The immunity from the m-RNA vaccines has been shown to consistently protect against severe disease, hospitalization, and death from the COVID-19 virus even with the new Delta variant. We also know that immunity, whether through vaccination or natural infection, slowly wanes over time and that it is very possible to get COVID-19 more than once. As such, booster doses for immunization may be recommended in the future.