

14 common myths about COVID-19 vaccines, **busted**



Many myths about COVID-19 vaccines that arose from the pandemic still persist today. These myths can be concerning and worrying to hear or read – but **they are misinformation** and therefore false. This factsheet debunks some of the most common COVID-19 vaccine myths to help you be more informed and feel more confident when it comes to getting vaccinated.

Misinformation vs. disinformation: What is the difference?

Misinformation is information that is inaccurate/false but is spread innocently and without the intention to cause harm. For example, people may read of or talk about a vaccine myth, not knowing that the information is incorrect. This would be considered misinformation.

Disinformation, on the other hand, is information fabricated by a person or group to deliberately confuse, manipulate or cause harm to others.

Myth: Influenza (flu) vaccines also protect against COVID-19.

Fact: False. Influenza vaccines (flu shots) protect **only** against influenza. COVID-19 vaccines protect **only** against COVID-19. If you want to get a vaccine that protects against COVID-19, you would need to receive a COVID-19 vaccine.



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Myth: It is better to catch COVID-19 than to get the COVID-19 vaccine.

Fact: False. COVID-19 can be **very serious** and can lead to pneumonia, organ failure, blood clots, and hospitalization, among other potential outcomes. In fact, as of November 11, 2023, **55,275 people** in Canada have died due to COVID-19. Some people who catch COVID-19 will have symptoms that last for weeks to years. **Getting immunized against COVID-19 is the best way to protect against it.**

Myth: The COVID-19 vaccine can cause fertility problems and will affect my ability to have a baby.

Fact: There is **no evidence** that the COVID-19 vaccine affects fertility in anyone who receives it. The COVID-19 vaccine is **safe** to receive if you are planning a pregnancy, trying to become pregnant, pregnant, or breastfeeding.

Myth: The COVID-19 vaccines can cause COVID-19.

Fact: The COVID-19 vaccine **does not** contain a live version of the virus, meaning you **cannot** get COVID-19 from the vaccine.

Myth: There is a 2-in-1 vaccine that protects against both influenza (flu) and COVID-19.

Fact: False. There is **no vaccine** that protects against both influenza and COVID-19. However, you can receive your COVID-19 vaccine and your influenza vaccine at the same visit, one in each arm.

Myth: COVID-19 vaccines can change your DNA.

Fact: False. There is **no evidence** that COVID-19 vaccines can change your DNA. The mRNA (messenger RNA) vaccines introduce COVID-19 mRNA (genetic material) into the cells of your body to help teach your immune system how to recognize COVID-19 and protect you against it. But this mRNA **never interacts with or changes your DNA**, as it **never enters the nucleus of the cell** – the place where your DNA is located. Also, the COVID-19 mRNA vaccines only instruct your cells on how to recognize **a small piece of the COVID-19 virus**. The vaccines **do not use the whole virus**. This means that the COVID-19 vaccines **cannot cause you to become sick with COVID-19**. The mRNA is also broken down quickly in your cells, so it is not in your body for long.

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Myth: The COVID-19 vaccines contain microchips used to track us.

Fact: False. There are **no microchips** in the COVID-19 vaccines. This myth originated from a **misinterpreted statement** made by Bill Gates in 2020. Various statements made by Bill and Melinda Gates over the years have been used to create fake videos and sound bites used to further spread this disinformation. **There is no factual basis for the claim.** For more information, please see these articles: [BBC](#), [Reuters](#).

Myth: COVID-19 vaccines can cause cancer.

Fact: False. There is **no evidence** that COVID-19 vaccines can cause cancer. In fact, there is **no evidence** that vaccines can cause cancer in general. However, there are vaccines that can **protect against certain types of cancer**, such as the HPV (human papillomavirus) vaccine and the hepatitis B vaccine.



Myth: The COVID-19 vaccines were developed too quickly. They're not safe.

Fact: Vaccines are some of the most **rigorously tested** and **strictly regulated** medical products in the world. In Canada and internationally, vaccines must prove that they meet **strict standards of safety and effectiveness (how well they work)** before they are approved for use, and the COVID-19 vaccines have been no exception. Due to the pressing health threats the COVID-19 pandemic posed, **scientists came together from all over the world** and collaborated to create the COVID-19 vaccines. Because of this amazing show of collaboration, we were able to have COVID-19 vaccines developed and approved in record time, without sacrificing vaccine safety.

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Myth: The COVID-19 vaccine doesn't work; vaccinated people are still catching COVID-19.

Fact: It is important to remember that **no vaccine is 100% effective**. For this reason, it was expected that some people who were vaccinated against COVID-19 would catch it (these are called **breakthrough infections**). But catching COVID-19 after getting vaccinated against it doesn't mean the vaccines don't work. In fact, they are **very effective** at protecting you against hospitalization and severe disease caused by COVID-19. They also make it less likely that you will experience long-term COVID-19 symptoms. As the COVID-19 virus **continues to mutate** and as **new variants pop up**, staying up to date with your COVID-19 vaccines gives you the **best protection possible** against the disease and its symptoms.



Myth: The mRNA technology used to make some of the COVID-19 vaccines is too new. It's not safe.

Fact: mRNA (messenger RNA) technology is not as new as you might think! Scientists have known about and have studied mRNA since the **1960s**, and research into mRNA vaccine technology actually began in the **1990s**. So, the COVID-19 mRNA vaccines may be the first approved mRNA vaccines in the world, but the technology is not new. We owe the creation and success of these vaccines to **decades of research**.

Myth: COVID-19 vaccines can connect you to the Internet/5G networks.

Fact: False. There is **no evidence** that COVID-19 vaccines can connect you to the Internet or 5G networks. **Neither the COVID-19 virus, nor viruses in general, nor the cells in our bodies** have the ability to connect to the Internet or 5G networks. For more information on where this myth came from, please see this article in [The Conversation](#) by Dr. Archa Fox.

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Myth: COVID-19 vaccines can make you magnetic.

Fact: False. There is **no evidence** that COVID-19 vaccines make you magnetic. They do not contain any materials that could cause you to become magnetic.



Myth: The COVID-19 vaccine can cause heart problems. It's not safe.

Fact: While it is true that the COVID-19 vaccine can lead to myocarditis (inflammation of the heart muscle) and pericarditis (inflammation of the lining of the heart), these side effects are **rare** and typically clear up quickly. You are **much more likely** to experience heart problems if you **catch COVID-19**. In fact, COVID-19 can lead to myocarditis, pericarditis, blood clots, stroke, arrhythmias, and heart attacks – complications the COVID-19 vaccine **protects you against** if you catch COVID-19 from someone after being immunized.

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