

Appendix B

IPHCC COVID-19 Vaccine – Common Beliefs Explored

Even if you understand the scientific process, trust medical experts, and know how important vaccines are for fighting infectious diseases, you might still have some questions or concerns about the new COVID-19 vaccines – especially with so many rumors floating around online.

It is normal and healthy to experience hesitation and is totally reasonable to be asking questions before making the decision to receive the vaccine or not.

That being said, it is also important to seek out trusted sources of information, as much of what is posted online, particularly on social media, is not from medical professionals nor based on scientific evidence. Below is evidence-based information to help set the record straight on some common questions, concerns and myths about the COVID-19 vaccines.

Common Belief 1: We can't trust COVID-19 vaccines because they were rushed.

The first vaccines for COVID-19 do involve new technology, and they were developed in record time. But it is not because there were shortcuts in the process.

Messenger RNA, or mRNA, is the basis for the Pfizer and Moderna vaccines. While this is the first time it's being widely used in a vaccine for the public, researchers have actually been working on this vaccine strategy for more than [three decades](#).

All vaccines are put through rigorous clinical trials involving tens of thousands of volunteers. In Canada, volunteers in the clinical trials will be followed for up to two years after receiving the vaccines to make sure they are safe and effective. Because of how prevalent COVID-19 is, it only took a few months for the clinical trials to collect enough data to make an initial evaluation. Through a thorough evaluation process, both Pfizer and Moderna vaccines have been found to be safe and effective for emergency use, this is in Canada and throughout the world.

Common Belief 2: The vaccine will give me COVID-19.

Vaccines cause your immune system to recognize and fight off the virus but does not actually cause the infection itself.

The basis for the Pfizer and Moderna COVID vaccines is mRNA. When the mRNA enters your cells, it instructs them to make a piece of the “spike” protein that's present on the coronavirus that causes COVID-19. Those protein pieces do not actually harm your body, but they do trigger your immune system to mount a response to fight them off.

You might have some fatigue, muscle aches, a headache or a fever after you get the vaccine. That's normal with any vaccine – it's a sign that your immune system is responding.

Common Belief 3: We don't know what's in these vaccines.

Both Pfizer and Moderna have published the ingredient lists for their vaccines. In addition to the star ingredient, the COVID-19 mRNA for the spike protein, both vaccines contain lipids (fats) that help deliver the mRNA into your cells and a few other common ingredients that help maintain the stability of the vaccine. Despite theories circulated on social media, they do not contain microchips or any form of tracking device.

Common Belief 4: These vaccines will alter my DNA.

The vaccines use mRNA to instruct our cells to make a piece of the coronavirus's hallmark spike protein in order to spark an immune system response. Once the mRNA does that, our cells break it down and get rid of it. While mRNA is something that is made from DNA, it is not designed to integrate with our own DNA. It does not permanently change our DNA make-up or who we are in any way.

Common Belief: I already had COVID-19, so I won't benefit from the vaccine.

We do not yet know how long natural immunity to COVID-19 lasts. Right now, it seems that getting COVID more than once is not common, but there are still many questions that remain unanswered. Experts say that, even if you've had COVID-19, it would still be appropriate for you to get the vaccine to make sure you are protected.

Common Belief 6: Since COVID-19's survival rate is so high, I don't need a vaccine.

It's true that most people who get COVID-19 are able to recover. But it's also true that some people develop severe complications. So far, more than 1.9 million people around the world have died from COVID-19 – and that does not account for people who survived but needed to be hospitalized. Because the disease can damage the lungs, heart and brain, it may also cause long-term health problems that experts are still working to understand.

There's another reason to consider getting the vaccine: It protects those around you. Even if COVID-19 does not make you very sick, you could pass it on to someone else who might be more severely affected. Widespread vaccination protects populations, including those who are most at risk and those who cannot be vaccinated. It will be important for ending the pandemic.

Common Belief 7: Once I get the vaccine, I won't have to wear a mask or worry about social distancing.

Even if you get the vaccine, you should continue to wear a mask around others, wash your hands and practice physical distancing. There are a few reasons for this.

- 1) Both Pfizer and Moderna require two doses be given three to four weeks apart to achieve the best possible immunity. When you get your first shot, you do not become immediately immune. It takes at least a week to 10 days from receiving the second dose to become immune from COVID-19.
- 2) The second is that these vaccines were developed and tested for their ability to prevent severe illness and death from COVID-19. It's not clear whether they also protect against asymptomatic infection and spread. There will be ongoing studies to evaluate this question, but it will be some time before we know. So, after you get the vaccine, you should still take steps to protect other people who have not been vaccinated yet.”

Common Belief 8: Now that we have vaccines, the pandemic will be over very soon.

It would be amazing to flip a switch and have everything go back to normal, but it's actually going to take a long time for us to be able to vaccinate an adequate number of people to where we'll start to see the cases really drop.

Common Belief 9: Indigenous Peoples were identified as a priority group and selected to be one of the first to receive the vaccine because they are the 'Guinea pigs' or 'test subjects'.

It's natural to question the motive as to reasons why Indigenous Peoples are identified as a priority. Indigenous Peoples, along with healthcare workers and residents of long-term care/retirement homes, have been identified as priority populations as evidence in illness severity and mortality rates have shown these groups to be at greatest risk of serious, life-threatening implications if they contract COVID-19. Moreover, chronic medical conditions such as respiratory disease, heart disease, diabetes, kidney and liver disease, have been found to be at greater risk of more severe outcomes from COVID-19. These are conditions in which prevalence is greater among Indigenous Peoples than the general population.

To achieve what is called herd immunity – the point at which the disease is no longer likely to spread – about 70% of the population will need to have been vaccinated or infected. But the companies that make the vaccines can only make so many at a time. Because of this, the vaccines are distributed in phases, with priority given to people with greatest need.

In [Canada](#), Indigenous communities have been identified as a priority group. However, for the general population, the vaccine will not be available until likely April, with most people not being vaccinated until September 2021. Timelines are based on vaccine availability and subject to change.

For now, we should all continue to do our part to help slow the spread of the virus, including wearing a mask, washing our hands and physical distancing.

If you have more questions about the vaccine, talk with your trusted healthcare provider or look to reliable sources like your local public health unit, [Health Canada](#), or the [World Health Organization](#).

Resource: <https://health.clevelandclinic.org/8-common-covid-19-vaccine-myths-explained/>