COVID-19 VACCINES
FREQUENTLY ASKED QUESTIONS

CUPE has been receiving many questions from members concerning COVID-19 vaccines. This document addresses some of the most frequently asked questions.

People are trying to keep themselves and their loved ones safe during the pandemic. It can be hard to know what information can be trusted. Members who have questions or concerns about taking the vaccine should consult with their health care professional.

1. What is a vaccine?

A vaccine is like "on-the-job" training for your immune system. It gets your immune system ready to respond to an infection by a pathogen. A pathogen is something that can be transmitted and that can cause disease, like bacteria or viruses. Vaccines prevent pathogens from causing diseases by preparing your body to fight specific infections in advance.

Usually, a vaccine has two main parts – the outside (the "packaging") and the inside (the "training module"). The packaging brings the training module to your immune system. The training module part of the vaccine helps your immune system create a specific, targeted cell and antibody response to the disease that you're being vaccinated against.

2. How will COVID-19 vaccines help protect me?

SARS-CoV-2, the virus that causes COVID-19, is new. When you are infected with a new virus, it can take your immune system up to a week to catch up and defend you. This lag means that the virus will have more time to establish an infection and you may get sick.

COVID-19 vaccines work to develop specific, neutralizing antibodies that help fight off SARS-CoV2 infections. The vaccines help you develop these **antibodies** before you are exposed to the virus.

When you have been vaccinated against COVID-19, your immune system has already been trained to recognize the SARS-CoV-2 virus as fast as possible and to fight against it. In other words, if you are vaccinated, the virus won't have enough time to establish an infection.

3. Once I'm vaccinated, am I immune to COVID-19?

No, you are not immune. The vaccine allows your immune system to react sooner, faster and stronger than it would without vaccination. If you are exposed to SARS-CoV-2 after vaccination, the virus won't have time to infect many cells and create a lot of damage before your immune system responds. This means you will be protected against death, and your risk of severe COVID-19 disease and hospitalization will be greatly reduced.

4. I'm in good health. Do I still need the vaccine?

A vaccine is a great tool for individual and community safety. Getting the vaccine reduces your chances of catching the virus and spreading it to others, especially to people at greater risk of severe illness or death. To date, almost a million Canadians have contracted COVID-19, and almost 23,000 have died. While it is rare that younger people die, some have. Even those in good health who contracted COVID-19 have continued to experience negative symptoms for months after being infected (i.e., "COVID long haulers").

5. How long does the vaccine take to work?

It usually takes a few weeks for someone's immune system to build immune defenses (anti-COVID-19 cells and antibodies) after getting a COVID-19 vaccine. If the vaccine requires two doses, then *full* benefits will not be seen until after the second dose. As noted above, no one is considered completely "immune," even after being fully vaccinated against COVID-19 (both doses, as applicable). It is still possible to contract COVID-19 after vaccination. However, it will be much less problematic.

6. How will COVID-19 vaccines help end public restrictions?

Vaccines will help end pandemic restrictions by decreasing the overall severity and duration of the illness. Shorter and less severe illness means overall less virus produced with fewer opportunities for spread in an increasingly resilient population.

7. If I already had COVID-19, should I get the vaccine?

COVID-19 is a new disease, and we don't know how strong the initial immune responses were, if they were protective or how long immunity might last for those who previously had the disease. CUPE's Health and Safety Branch recommends that CUPE members consult their health care provider as soon as possible to discuss the benefits of vaccination and whether a vaccine is a good option for their health status.

8. Did vaccine makers skip clinical trial stages to get the vaccine out faster?

No. They did not skip steps.

Once a medical treatment drug is considered for use in human treatments, there are four stages of testing that must happen.

Stages 1-3 test the safety and efficacy of the treatment. Stage 4 continues to collect information after the treatment is first used in the general population.

All these stages were followed in the development of the COVID-19 vaccines.

Many of the components of the vaccines had already been through clinical trials and had been approved for use in people before the COVID-19 pandemic. Using these components is like using baby aspirin to treat heart conditions (i.e., using a known, safe medicine in a different application).

Some practices were adjusted to speed development time. These did not affect health and safety protocols or reduce the number of clinical trial stages. For example, in some cases, the vaccine trial stages occurred at the same time (rather than one after the other).

Vaccine manufacturers still had to demonstrate the safety and efficacy of their new products.

The vaccine trials were thorough. For example, Moderna tested their COVID-19 formulation in over 30,000 people during their trials.

Evaluations of all vaccines are ongoing to evaluate efficacy for the general population and for groups not included during the initial trials (including children and pregnant or breastfeeding women). This is standard practice (Stage 4 of drug testing protocols).

9. Can the vaccine make you sick with COVID-19 or make you test positive for the virus?

You cannot get COVID-19 from any of the vaccines. None of the vaccines available in Canada contain the entire SARS-CoV-2 virus. This means you cannot be infected.

Once inside the body, the vaccines instruct your cells to replicate an essential part of the COVID-19 virus so that your body can respond with virus-fighting antibodies. Your body learns to be on the lookout for that part of the virus and to be prepared to act if it is recognized.

If you get vaccinated, you will not test positive on PCR tests for COVID-19 because there is no SARS-CoV-2 virus present in the vaccine. However, because your body reacts to the vaccine by developing antibodies to the virus, **you may test positive** on some antibody tests. This does not mean that you have or have had COVID-19. It only means you have developed antibodies. If you are vaccinated, this is a great result to get – it shows that you are better protected!

10. What are the side effects or adverse reactions to the COVID-19 vaccine?

It is common to have symptoms of immune activation after a vaccine – this means that it's working.

Mild reactions to vaccines are common. The reactions are signs that the body is mounting an immune response. Symptoms can include inflammation or pain, redness or swelling where the shot was given, fever, fatigue, headache, muscle pain, chills, joint pain, nausea and vomiting, feeling unwell or swollen lymph nodes. In most cases, these symptoms do not last more than two or three days.

Talk to your medical provider or contact a medical practitioner through provincial health care lines about available remedies that are right for you (for example, pain medication) to deal with any symptoms, and follow public health guidance on when you need to seek medical attention.

More serious adverse symptoms are associated with allergic reactions. This is the reason that medical injection sites ask you to stay for 15 minutes after your shot – to monitor you and assist if you have a severe reaction.

The Public Health Agency of Canada (PHAC) reports all adverse reactions on their **website**.

11. What about severe adverse reactions? I've read that people have died after vaccination.

There have been many reports in the media about severe reactions to COVID-19 vaccines.

However, these reports must be put into context.

In clinical trials, **all** post-vaccination symptoms are reported through public health networks. Once they have been reported, any symptoms that are unusual are evaluated by an expert team so that they can determine if a symptom can be linked to an underlying medical condition (whether diagnosed or not) or if it is due to vaccination. If a link is to a vaccine found, then appropriate guidance is issued on how the vaccine may be most effectively used.

During the COVID-19 pandemic, unusual symptom reporting is now hitting the news in real time, before the expert evaluation can occur.

This is what is happening with the AstraZeneca vaccine. Experts are examining adverse events that were reported through public health networks to determine whether there is a cause for concern. Once the experts make their determination, guidance will be updated so that your healthcare provider can evaluate risks to your health and make recommendations.

Although severe reactions are not common, they happen. You should report any negative reaction following a vaccination to your medical practitioner or a practitioner reached through a provincial health care line right away. This may indicate a **potential allergy**, and additional considerations may be needed before you receive your second dose, if applicable.

At this time, no deaths have been definitively linked with COVID-19 vaccination. As of March 19, 2021, there have been a total of **twenty-four deaths reported** after COVID-19 vaccination in Canada. Of these, thirteen have already been cleared (i.e., the deaths were shown to have no link to the vaccine) and eleven are still under investigation.

12. Why have we seen governments delay the administration of second doses?

This is due to unpredictable vaccine deliveries and delays. Canada ordered millions of doses of vaccines. However, we do not have the ability to produce the vaccines here in Canada. As such, we are dependent on manufacturing capacity in other countries. To provide initial vaccinations to as much of the adult population as possible within a short time, some governments have chosen to delay the second dose to stretch supplies.

13. Is it a problem that there's a delay between the vaccination dosages? Does that mean that the vaccine won't work?

Vaccines work by training the immune system to recognize SARS-CoV-2, the virus that causes COVID-19. The second dose acts like refresher training for your immune system – your response is stronger because you are building on what you already have as opposed to starting from nothing.

During vaccine trials, it was discovered that all the COVID-19 vaccines protected against serious COVID-19 illness to varying levels. That effective immune response **stayed at high levels** of protection after two months. This is being confirmed by real world data that tells us there is significant protection even after the first dose.

The National Advisory Committee on Immunization (NACI) has **strongly recommended** that the delay between COVID-19 vaccination doses should not be more than sixteen weeks.

14. Will I have to continue to wear masks or personal protective equipment (PPE) at work once I've been vaccinated?

Yes, you still need to follow all public health guidance and occupational health and safety measures and procedures until they are lifted. Vaccination is not a guarantee that you will not be infected – it's a guarantee that **if** you are infected, it won't be that bad. Masks act as source control, and PPE protects people from infection. Not everyone will be vaccinated at the same time. The vaccine can help us to return to normal, but it will not be effective on its own until we have managed to control community transmission and prevent new outbreaks. Even then, there will be occupations that may have to continue to take greater precautions than those seen in the general population recommendations.

15. Will these vaccines protect me from variants?

A variant strain develops when a virus makes a sloppy copy of itself during infection. Some variant strains are more infectious and potentially more harmful than the initial virus. Others are not. Data suggests available vaccines do protect against current variants. However, depending on the variant or vaccine, the protection provided might not be as effective. Variants will probably continue to develop, which is why it is important to remain vigilant and continue following public health protections described above.

16. Which vaccine should I get? Should I wait to get the better vaccine?

No COVID-19 vaccine is 100% effective, but all provide protection from death and severe disease.

The reported "effectiveness" of a vaccine depends on a lot of factors. These include, but are not limited to, how efficacy was defined during a given clinical trial, how much community transmission was going on during the trial, who was studied, where they were studied and what variants were circulating at the time. This means that "reported effectiveness" is not the whole picture.

Remember, a vaccine isn't "better" if you catch the virus waiting for it. What is important to know is that all COVID-19 vaccines currently approved in Canada are proven effective for preventing moderate to severe illness.

The benefits of vaccines clearly outweigh any adverse event risks. CUPE's Health and Safety Branch strongly recommends vaccination to our members in consultation with their own medical providers or a practitioner reached through a provincial health care line. We will continue to do so until such time as the World Health Organization (WHO), the Center for Disease Control (CDC) or the Public Health Agency of Canada (PHAC) changes their vaccine guidance.

CUPE's Health and Safety Branch has previously released **vaccine guidance** related to the balancing of CUPE members' individual rights, health and safety, the recognition of public health information and the interest of the community.

More vaccine information can be found at the **Public Health Agency of Canada**.

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