



## Introduction

From the start of the COVID-19 pandemic, an enormous amount of information has been communicated about the virus and how to keep ourselves and our workplaces safe. COVID-19 vaccines can stop the spread by helping you not get sick. Here are some answers to commonly asked questions about COVID-19 vaccines.

### What vaccines are currently available in Canada?

As of March 5, 2021, four vaccines are authorized for use in Canada. The Pfizer-BioNTech COVID-19 vaccine was authorized for use on December 9, 2020 for people aged 16 and older. On December 23, 2020 the Moderna COVID-19 vaccine was authorized for adults aged 18 and over. On February 26, 2021, a third vaccine, [AstraZeneca](#), was authorized for people aged 18 and older. At this time the National Advisory Committee on Immunization (NACI) does not recommend the AstraZeneca vaccine for adults aged 65 and older due to limited information for this group. On March 5, 2021, the Johnson and Johnson COVID-19 vaccine was authorized for people aged 18 and older. See the [NACI recommendations on the use of COVID-19 vaccines](#) for more information. Health Canada will only authorize vaccines that are safe and effective for use in Canada.

### Do these vaccines cause COVID-19?

No. It is impossible to get infected or sick with COVID-19 from the Pfizer-BioNTech, Moderna or AstraZeneca vaccines. They do not contain live SARS-CoV-2 virus.

### How do the vaccines work?

The Pfizer-BioNTech and Moderna COVID-19 vaccines are mRNA (messenger RNA) vaccines. They provide instructions to your cells to make a protein that is found on the COVID-19 virus.

The AstraZeneca COVID-19 vaccine and the Johnson and Johnson COVID-19 vaccines are [viral-vector based](#). They use a harmless virus (e.g., an adenovirus like one that causes the common cold) as a delivery system. The vector virus contained within this vaccine produces the SARS-CoV-2 spike protein. This protein is found on the surface of the virus that causes COVID-19. This protein will not make you sick. It does its job and goes away.

All four vaccines work in a similar way. Our immune system knows that the protein doesn't belong in our body and begins making immune responses, including antibodies. These immune responses will help fight the virus if you get exposed to COVID-19 in the future.

### Will the vaccines work on the new variants?

The Public Health Agency of Canada is closely monitoring emerging COVID-19 variants of concern. Vaccine manufacturers are investigating the impacts of these variants on their vaccines. More research is needed, and findings will be shared when available.

### Do the mRNA vaccines contain preservatives, adjuvants, or animal products?

No. Some vaccines can contain adjuvants (for example, aluminum salts) to help boost the body's response to the vaccine, antibiotics to help prevent contamination during the manufacturing process, and preservatives and stabilizers to keep the vaccine stable, effective and safe when it's being made, shipped and stored. The mRNA vaccines **do not** contain any of these products. There are no animal or human materials in the mRNA vaccines. They also do not contain any latex.

Learn more about the [Moderna vaccine](#), the [Pfizer-BioNTech vaccine](#), and the [AstraZeneca vaccine](#). Get more information on [authorized vaccines for COVID-19](#).



## What is polyethylene glycol (PEG)?

Both the Pfizer-BioNTech and Moderna vaccines contain polyethylene glycol (PEG). PEG is a potential allergen. It is also used in bowel preparation for colonoscopies, laxatives, cough syrup, cosmetics, contact lens solutions, skin care products and as an additive in some food and drinks.

The AstraZeneca vaccine does not contain PEG but does contain a potential allergen, polysorbate 80. It is used in cosmetics and in medical preparation (e.g., vitamin oils, tablets).

Consult with your health care provider or allergist to discuss whether vaccination is right for you.

## Can I still receive the vaccine if I have allergies?

You should not receive the vaccine if you have a severe allergy to any of the vaccine ingredients or any materials found in the vaccine's packaging (such as the aluminum vial cap or synthetic rubber stopper) or if you had a severe allergic reaction (e.g. anaphylaxis) to a previous dose of a COVID-19 vaccine. Consult your health care provider about any concerns prior to receiving a COVID-19 vaccination.

## Are there other medical conditions to consider before getting vaccinated?

Yes. COVID-19 vaccinations might be prioritized for those with underlying medical conditions who may be at risk for more severe disease or outcomes of COVID-19 (e.g., older adults and people who are living with obesity).

Anyone with questions or concerns, including those who are pregnant or breastfeeding, or those who are [immunocompromised](#) (e.g., a reduced ability to fight infections or other diseases) should consult with their health care provider about the risks and benefits of COVID-19 vaccination. The National Advisory Committee on Immunization has prepared [recommendations on the use of COVID-19 vaccines](#). The Public Health Agency of Canada has a [tool kit for health care providers](#).

## How many doses do I need?

The Pfizer-BioNTech, Moderna, and AstraZeneca vaccines each require two doses. The first dose provides instructions to your cells to create an immune system response against the virus that causes COVID-19. The second dose boosts and strengthens that immune response. The second dose should be received when recommended by your healthcare provider. The Johnson and Johnson vaccine requires one dose.

## Can I take a different vaccine for my second dose?

The current recommendation from the National Advisory Committee on Immunization (NACI) is to receive the same vaccine for the two doses. If the first product is not available, a similar type of COVID-19 vaccine (e.g., the mRNA vaccine) can be used. See the NACI [recommendations on the use of COVID-19 vaccines](#) for more information.

## What are the possible side effects from these vaccines?

Mild to moderate side effects are very common and last no more than a few days. Common side effects include pain at the injection site, tiredness, headache, muscle pain, joint pain, chills, and fever.

A serious adverse event following immunization such as a severe allergic reaction (e.g. anaphylaxis) is very rare. Some side effects, like fever, happen more often after the second dose.

Ask your health care provider what they recommend to help with any potential side effects.

## How soon can I get vaccinated?

COVID-19 vaccines will be available to everyone in Canada who is eligible to receive a COVID-19 vaccine. Beginning in December 2020, doses of the vaccines will be distributed in phases.

Priority populations have been identified for early immunization due to the limited and staggered arrival of vaccine supply.

# COVID-19 Vaccines



Initially, the vaccine will be given to persons living and working in congregate living centres that provide care for seniors (e.g., long-term care, assisted living, chronic care, and retirement homes); adults aged 70 years and older, beginning with those aged 80 years and older; health care workers and personal support workers providing direct patient care; and adults in Indigenous communities.

As vaccine becomes available it will be given to health care workers not included in the initial rollout, residents and staff of all other congregate settings (e.g., migrant workers, correctional facilities, homeless shelters), and essential workers (e.g., police, firefighters, food production). Vaccinations will continue to expand to all Canadians. Learn more about the [vaccine rollout](#).

## How long will I be protected once I receive the vaccine? Will I need one annually?

Experts do not know. It is too soon to know if additional vaccinations will be required. Long-term protection is still being evaluated. For that reason, you should continue to practice important [public health measures](#) such as physical distancing, wearing a mask and hand washing to [help reduce the spread of COVID-19](#).

## Can my employer make COVID-19 vaccination mandatory?

Employees of the federal government, federally regulated sectors, and crown corporations are required to be vaccinated as a condition of employment (unless they have a medical exemption).

For other workplaces, Canada is offering the COVID-19 vaccine on a voluntary basis to anyone in Canada who is eligible and would like to receive the vaccine. It is possible some employers may require proof of vaccination against COVID-19 (e.g., if required for international [travel](#)). As the vaccination rollout continues, some workplaces may have employees who are partially vaccinated, fully vaccinated or not yet vaccinated. Employers will need to consider how a partially vaccinated workforce impacts their organization. Your employer should work with your health and safety committee or representative to assess the risk factors for COVID-19 transmission and implement controls to help stop the spread. Speak with your employer, committee or representative, or your union if available, to discuss any concerns you might have about COVID-19 vaccination requirements in your workplace, including any need for [accommodation](#).

## I had COVID-19. Do I still need to get vaccinated?

It is not clear how long someone is protected from getting reinfected with SARS-CoV-2. Although rare, reinfection can occur. It is still recommended to get the vaccine even if you have already had COVID-19.

## How many people need to get the vaccine for herd immunity to work?

Community (herd) immunity occurs when enough people are immune to an infectious disease so that it's unlikely to spread and cause disease in those who are not immune. The number of people who need to have protection (either by vaccination and/or natural infection) to achieve herd immunity varies by disease. At this time, experts do not know how many people need to get vaccinated to achieve herd immunity against COVID-19. As new research emerges on COVID-19 immunity and vaccines are more widely distributed, experts will have a better understanding of how we can achieve herd immunity.

## I've been vaccinated. Do I still need to wear a mask?

Yes. Currently there isn't enough scientific evidence to say whether the spread of COVID-19 can be stopped by vaccination alone. Because of this, it is essential that everyone continues to follow public health measures to help stop the spread of COVID-19.

It's important to avoid crowds and crowded spaces, keep at least 2 metres away from people outside of your household, wear a [well-constructed and well-fitted](#) mask that covers your nose, mouth, and chin, and practice good hand and respiratory hygiene. Wash your hands often with soap and warm water for at least 20 seconds or use a [hand sanitizer](#) containing at least 60% alcohol.

Cough or sneeze into a tissue or the bend of your arm, not your hand. Dispose of any tissues you've used as soon as possible in a lined waste basket and wash your hands immediately afterwards. Avoid touching your eyes, nose, or mouth with unwashed hands.

## Should I get the flu vaccine this year?



The flu is an illness caused by the [influenza](#) virus. Influenza is highly contagious and can cause respiratory symptoms such as coughing and pneumonia. The flu is typically seasonal, with higher infection rates in fall, winter and early spring.

The COVID-19 pandemic has received a great deal of attention due to its high transmissibility and mortality rate, both of which are currently higher than the flu. However, influenza should not be ignored, having been in the top 10 leading causes of deaths in Canada for over a decade (estimated at 3500 annual deaths in Canada and over half a million worldwide). There have also been [flu pandemics](#) in the fairly recent past.

Though COVID-19 and influenza may have similar symptoms, they are separate viruses, and one vaccine does not provide protection from both illnesses. Therefore, it is advised that individuals receive both the COVID-19 and yearly influenza vaccines. Doing so can prevent severe complications from having both illnesses at the same time.

It is recommended that everyone [6 months and older](#) get a flu shot annually, since the influenza virus changes, and the protection from the previous years' vaccine will wear off over time. Not only does the annual flu vaccine protect people from becoming seriously sick, but it also reduces the likelihood of spreading the virus. More information about the flu shot can be obtained from [Health Canada](#).

Refer to your [local public health authority](#) or health care provider for information on how to receive the flu and COVID-19 vaccines. They can also advise if both shots may be taken together or separately with a waiting period in between.

**If you or someone you know is in crisis, please contact your local hospital, call 911 immediately, or contact a [Crisis Centre in your area](#).**



It is important that mental health resources and support are provided to all workers, including access to an employee assistance program, if available.

For further information on COVID-19, refer to the [Public Health Agency of Canada](#).

Note that this guidance is just some of the adjustments organizations can make during a pandemic. Adapt this list by adding your own good practices and policies to meet your organization's specific needs.

**Disclaimer:** As public and occupational health and safety information is changing rapidly, local public health authorities should be consulted for specific, regional guidance. This information is not intended to replace medical advice or legislated health and safety obligations. Although every effort is made to ensure the accuracy, currency and completeness of the information, CCOHS does not guarantee, warrant, represent or undertake that the information provided is correct, accurate or current. CCOHS is not liable for any loss, claim, or demand arising directly or indirectly from any use or reliance upon the information.