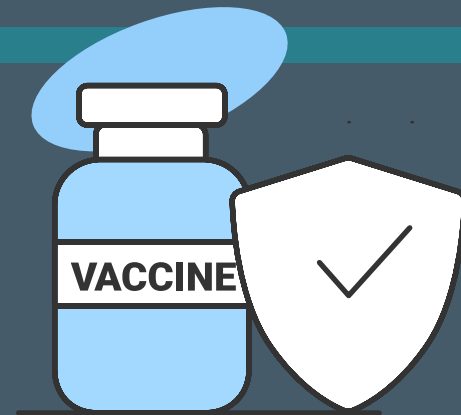# COVID-19 VACCINATION

Education Module

Lambton
Public Health

This COVID-19 Vaccination Education Module was adapted from Public Health Sudbury & District by Lambton Public Health for the purpose of assisting business owners and employers in educating their workplace about vaccinations.
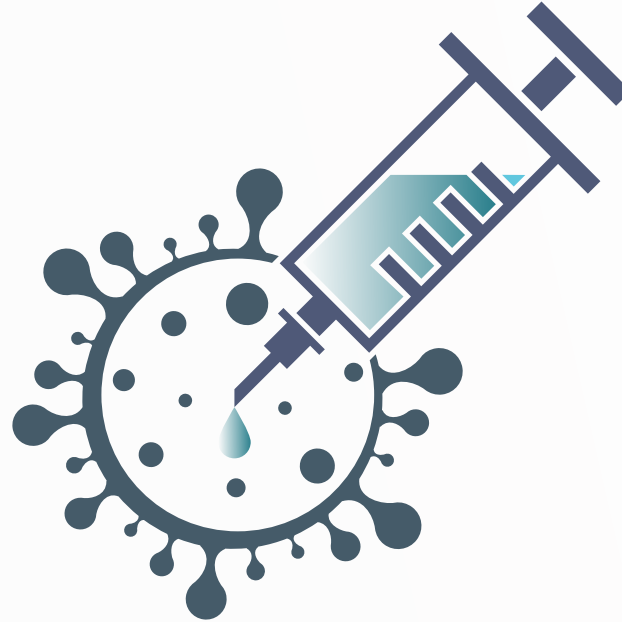
We encourage workplaces to adopt this resource for use within a workplace vaccination policy or for educational purposes. This may include incorporating a knowledge test and/or declaration of completion.

Overview

1. COVID-19 vaccine: How the vaccine works
2. Development and safety of the COVID-19 vaccine
3. Risks associated with COVID-19 infection
4. Benefits of vaccination against COVID-19
5. Possible side-effects of COVID-19 vaccination
6. Common questions and misconceptions
7. Vaccination opportunities

Section 1: The COVID-19 Vaccine

The Importance of Vaccines

Infectious diseases now represent less than 5% of all deaths in Canada, thanks to vaccines.

Vaccines have effectively eliminated and lowered infection rates for many disease such as:
- Smallpox
- Polio
- Measles
- Rubella

Approved COVID-19 Vaccines in Canada

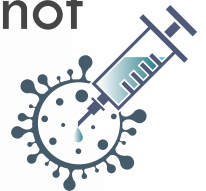There are four vaccines [currently approved for use in Canada](#) based on well-proven scientific approaches.

Vaccine	Type	Status
Pfizer-BioNTech Comirnaty	mRNA (2 dose series)	Available in Canada
Moderna Spikevax	mRNA (2 dose series)	Available in Canada
AstraZeneca Vaxzevria	Viral vector-based (2 dose series)	No longer being offered for first doses in Canada
Janssen (Johnson & Johnson)	Viral vector-based (1 dose series)	Not yet arrived in Canada for use

How does the COVID-19 mRNA vaccine work?

The Vaccine will help your body fight COVID-19 and its variants

- The mRNA tells your body how to make a spike protein found on the surface of COVID-19. This triggers an immune response. Your body then makes antibodies to fight COVID-19.
- This 'training' of your immune system to protect against COVID-19 means your body knows what to do if/when it encounters COVID-19.
- There is no live virus in the COVID-19 vaccines so you cannot be infected by a vaccination.

Section 1 Resources

- [How COVID-19 Vaccines Work](#)
  - 1 minute "Ask an Expert" video from Health Canada

- [Learn more about mRNA vaccines (Pfizer & Moderna)](#)
  - 2 minute "Ask an Expert" video from Health Canada

- [Learn more about COVID-19 mRNA vaccines here](#)

Section 2: Development and safety of the COVID-19 vaccine

COVID-19 Vaccine Development & Approval

Health Canada is responsible for the approval of all vaccines and pharmaceuticals based on a thorough review process.

The COVID-19 vaccine went through an expedited review process. This was possible thanks to:

- Advances in science and technology,
- Global collaboration and dedicated funding,
- A surge in volunteers for vaccine trials, and
- Prioritizing the vaccine review.

No steps were skipped in the development of COVID-19 vaccines or in the review process by Health Canada to approve COVID-19 vaccines.

Section 2 Resources

COVID-19 vaccines approved by Health Canada are found to be safe and effective.

- How Vaccines are Developed
  - 3 minute video from Health Canada

- Learn more about how COVID-19 vaccines were tested
  - 1 minute "Ask an Expert" video from Health Canada

- How do we know the vaccines are safe?
  - 1 minute "Ask an Expert video from Health Canada

- How were the vaccines developed so quickly?
  - 1 minute "Ask an Expert video from Health Canada

Section 3: Risks Associated with COVID-19 Infection

Section 3: Risks Associated with COVID-19 Infection

- COVID-19 can be a serious illness for many people, including young and healthy people.
- For some people, symptoms can last for months with possible long-term effects.
- The virus can damage the heart, brain, lungs and increase the risk of long-term health problems.
- Asymptomatic carriers can spread the disease to others.
- There is greater risk of death among older adults living in Long-Term Care.
- There are also societal risks. For example, our healthcare system can be overburdened if too many people need to be hospitalized for COVID-19. This can lead to devastating consequences and compromised care for anyone who needs critical care services.

COVID-19 infection: Long-term effects

- Most people who have COVID-19 recover within a few weeks, but some people continue to experience symptoms after their initial recovery. This can be called post-COVID-19 syndrome or long COVID-19.
- Long COVID-19 includes symptoms that linger over time, such as fatigue, shortness of breath or difficulty breathing, chest pain, concentration or sleep problems, muscle pain or headache, loss of smell or taste, among others.
- The virus can also cause organ damage to the heart, brain, lungs and increases the risk of long-term health problems.

Section 3 Resource

- [Long Term Symptoms and Conditions of COVID-19](#)
  - 2 minute video from the Mayo Clinic

Section 4: Benefits of Vaccination Against COVID-19

Why should I get the COVID-19 vaccine?

Personal benefits:

- Protects you against serious illness associated with COVID-19
- Decreases serious illness resulting in hospitalization due to COVID-19
- Helps with long-term side effects, including protecting your brain, heart, and lungs from possible effects of the COVID-19 virus
- Protects your loved ones from COVID-19

Societal benefits:

- Protects the most vulnerable from COVID-19
- Reduces and prevents community outbreaks
- Avoids overwhelming our health care system
- Supports a return to normal activities and economic recovery

Quick Facts: COVID-19 & Vaccination in Ontario

Since October 2021, vaccines have prevented an estimated 70,000+ cases of COVID-19 in Ontario.

Compared to vaccinated individuals, unvaccinated individuals are ...

8x more likely to catch COVID-19

29x times more likely to be in hospital

48x times more likely to be in the Intensive Care Unit

Who should get the vaccine?

Anyone born in 2009 and earlier (without contraindications) should get the COVID-19 vaccine.

This includes:

- Anyone who has tested positive (in the past).
- Anyone exposed to someone with COVID-19 (in the past).

Special Populations

Pregnant and breastfeeding

- The vaccine is recommended for pregnant and breastfeeding women. The vaccine can protect pregnant women, their unborn child and may help protect the baby after it is born. To learn more:
    - [SOGC Statement on COVID-19 Vaccination in Pregnancy](#)
    - [Vaccination in Pregnancy & Breastfeeding Patient Decision-Making Tool](#)

Autoimmune Conditions & Immunocompromised

- All Health Canada authorized COVID-19 vaccines are not live vaccines, and are safe and encouraged for persons with autoimmune conditions and/or immunocompromised.
    - COVID-19 Vaccination Recommendations for Special Populations

In rare cases, vaccines are not recommended

Medical reasons for not getting the COVID-19 vaccine are:

- Severe allergies to any component of the vaccine or its container.
- The full list of ingredients is available online for each COVID-19 vaccine approved and available in Canada: Pfizer and Moderna
  - Serious reaction to the first dose of the vaccine.
  - For more information, refer to Section 5 (Side-effects)

Remember: Wait until you are feeling well if you are sick.
Questions? Talk to a health care provider.

Why is a second dose important?

A complete COVID-19 vaccine series provides stronger and longer protection. The second dose is especially important to prevent hospitalization against the Delta variant.

- Vaccine effectiveness is about 60-80% for preventing symptomatic COVID-19 infection 3-4 weeks after receiving a single dose of an mRNA vaccine (Pfizer or Moderna).

- Vaccine effectiveness increases to greater than 94% after a second dose of mRNA vaccine.

What about booster doses?

- The safety and effectiveness of a third (or booster) dose of COVID-19 vaccination is an area of current research that the Ministry of Health and National Advisory Committee on Immunization are following closely.

- Stay up to date on third dose eligibility and guidance at GetTheVaccine.ca

Section 4 Resources

Pregnancy

- [SOGC Statement on COVID-19 Vaccination in Pregnancy](#)
- [Vaccination in Pregnancy & Breastfeeding Patient Decision-Making Tool](#)

Special Populations

- [COVID-19 Vaccination Recommendations for Special Populations](#)

1 Minute "Ask and Expert" videos from Health Canada

- [Ingredients in the COVID-19 vaccine](#)
- [Second Doses?](#)

Section 5: Possible side-effects of vaccination

Side-effects of COVID-19 vaccination

To date, over 54 million COVID-19 vaccines have been administered in Canada. Of these, 0.02% reported non-serious side-effects and 0.008% reported serious side-effects.

- [Reported side effects following COVID-19 vaccination in Canada](#)

Reported adverse events aren't always related to the vaccine. They can also be:

- Anxiety about immunization
- An allergic reaction to another substance
- Related to a pre-existing condition
- Coincidental

What are the possible side-effects?

Side-effects of COVID-19 vaccination are usually mild to moderate, and can include:

- Pain at the injection site
- Headache
- Fatigue (tiredness)
- Muscle and joint pain
- Fever, chills

Rare serious reactions

While most side-effects of the COVID-19 vaccines are mild, some serious adverse events following immunization (AEFI) have been reported.

- Mild heart inflammation (Myocarditis/ Pericarditis) after mRNA vaccine (Pfizer, Moderna) have been reported in a small number of people. Despite this, the benefits of the mRNA vaccines continue to outweigh their risks.

- Rare blood clots (Vaccine-induced Immune Thrombotic Thrombocytopenia) after viral vector vaccines (AstraZeneca) have been reported in a small fraction of the millions of doses delivered. Canada is not currently administering AstraZeneca as a first dose in Ontario.

These events are rare for all vaccine types.

What happens if you have a serious reaction?

If you experience a serious reaction to the COVID-19 vaccine:

- Report to your healthcare provider for further assessment. If urgent, seek medical attention immediately.
- Health care providers report adverse events following immunization to Public Health.
- Public Health then reviews the situation and the Medical Officer of Health will make a recommendation regarding your second dose.

Learn more about [vaccine safety after authorization.](#)

Section 5 Resources

- [How are Vaccine Side-Effects Monitored in Canada?](#)
  - 1 Minute "Ask and Expert" video from Health Canada

- [COVID-19 Side Effects](#)
  - 1 Minute "Ask and Expert" video from Health Canada

Section 6: Common questions and misconceptions

Common misconceptions

Will the vaccine change my DNA?

• No, the vaccine can't change your DNA.

Does the vaccine have a microchip that will track me?

• No, the vaccine does not contain a microchip.

After getting vaccinated, will I be able to spread the virus to others (viral shedding)?

• No, the COVID-19 vaccines do not contain live virus.

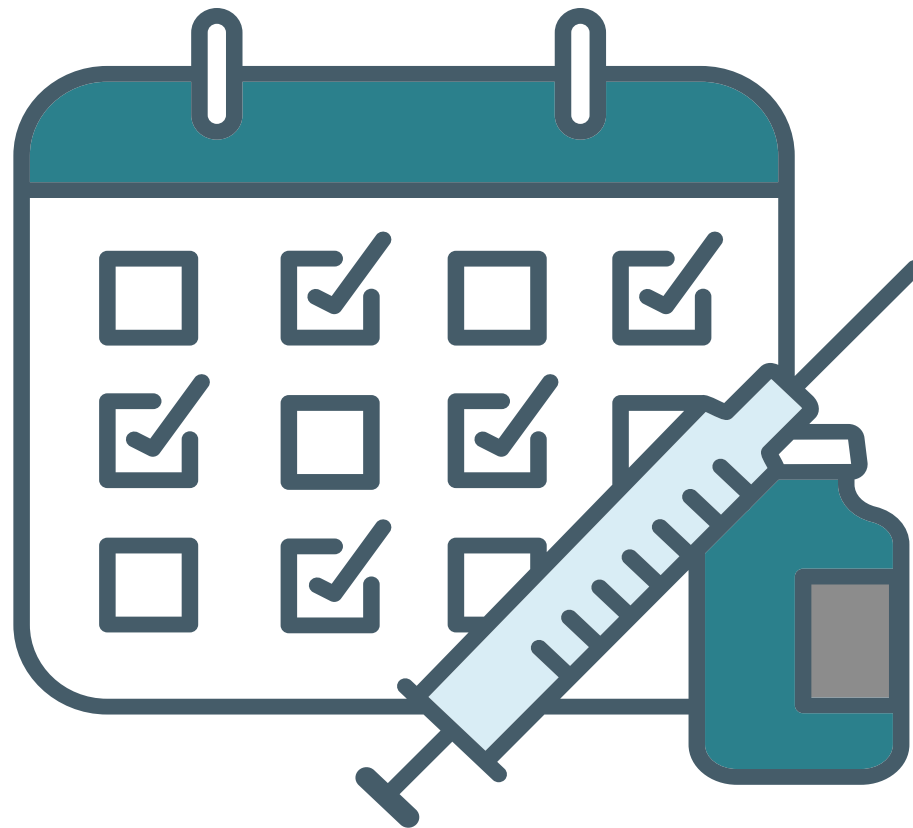# Section 6 Resources - Ask an Expert Videos

- [Can someone get COVID-19 from the vaccine?](#)

- [Will COVID-19 vaccines protect me against new variants?](#)

- [I'm young and healthy. Why should I get vaccinated?](#)

- [Can the COVID-19 vaccine affect fertility?](#)

- [Without long-term data, how do we know that the vaccine is safe?](#)

Have more questions?

Check out the [FAQ on GetTheVaccine.ca](#) or [contact us](#)
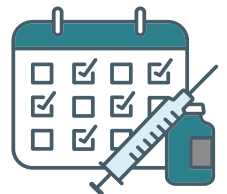
Section 7: Vaccination Opportunities

Vaccination opportunities in Lambton County

Getting vaccinated *protects* **you, your co-workers, family members and those who can't be vaccinated due to eligibility or medical reasons.** Access points to get your COVID-19 vaccinations:

- Community clinics
- Pharmacy
- Health care provider

Visit GetTheVaccine.ca for a full list and details.

COVID-19 Vaccination is Important

Do you still have questions?

- Talk with your health care provider
- Call the COVID-19 Vaccine Call Centre
  - 226-254-8222

Access more information online at GetTheVaccine.ca

For more information

- [Government of Ontario](#)
- [Public Health Ontario](#)
- [Health Canada](#)

This presentation was prepared by Lambton Public Health, adapted with permssion from Puiblic Health Sudbury & Districts