

COVID-19 Vaccines: Information to Assist in Making an Informed Decision



Hotel Dieu Shaver is committed to the safety of its staff, physicians, patients, and volunteers against COVID-19.

Along with existing public health measures and use of PPE, the COVID-19 vaccine is the most effective way to prevent the COVID-19 infection.





Purpose of this Module

- To provide you with the most accurate and up-to-date information about COVID-19 vaccinations.
- To help <u>you</u> make an informed decision!
- The COVID-19 vaccination, like all vaccines, helps to keep us, our families, friends, coworkers, patients and our community safe.



Impact of the Pandemic

 As of Aug. 26, 2021 over **214 million** people have been infected with COVID -19 resulting in nearly 4.5 million deaths

(https://coronavirus.jhu.edu/map.html on Aug. 26/21)



 In Ontario with almost 600,000 people infected, 28,820 people have landed in hospital and nearly 10,000 people have died

(https://www.publichealthontario.ca/en/data-and-analysis/infectious-disease/covid-19-data-surveillance/covid-19-datatool?tab=trends on Aug. 26/21)



Impact of the Pandemic

- The demographics of those impacted by COVID-19 has shifted. It's no longer an illness of our older population. Younger people are being impacted.
- On March 21st 2021 almost 60% of COVID-19 patients in Ontario ICU's were between the ages of 40-69.
- Many patients (including those who were previously healthy) are now experiencing long term complications with their memory, fatigue, body aches, and heart and lung damage that is lasting for months.

Accessed from: Sunnybrook COVID-19 Vaccine Education: https://360.articulate.com/review/content/e77b56e0-45ed-42d0-9d9f-1b51eb8277ed/review



Impact of the Pandemic

• On August 27, 2021 only 8.5% of patients with COVID-19 in the ICU of Ontario Hospitals were fully vaccinated.



Search hospitalization status by area

Accessed from Ontario.ca: https://covid-19.ontario.ca/data/hospitalizations

Impact of Vaccination

- Vaccines save lives.
- Prevent the spread of diseases.
- Reduce health care costs.
- The picture on the right compares the number of cases of (6) six vaccinepreventable diseases in Canada before and since the introduction of vaccinations.

Source: Kingston Health Sciences Covid 19 Vaccine Education





Why Get Vaccinated? The Benefits...

- Substantially reduces your risk of becoming infected with COVID-19.
- As a result of the direct effects of the vaccination program, an estimated **37,408 cases** among individuals 18 years of age and older have been **prevented** to date

Vaccination Program Impact

Figure 4a. Observed number of COVID-19 cases and expected number of COVID-19 cases in the absence of vaccination among individuals 18 to 69 years of age



*Indicates the age-specific proportion of the Ontario population that have received at least one dose of a COVID-19 vaccine. For example, the number of individuals that are 40-69 years of age who have received at least one dose is shown as the proportion of the Ontario population that is 40-69 years of age.

Note: Only direct effects of vaccination on cases were estimated. Indirect effects, including reduced transmission as a result of vaccination were not estimated. As a result, the impact of the vaccination program on the reduction in cases and is likely an underestimate.

Note: Doses administered outside of Ontario and prior to December 14, 2020, when the vaccination program began in Ontario, are excluded from trends over time figures, but are included in overall counts for coverage estimates.

Source: COVID-19 Vaccine Update and Program Impact in Ontario: December 14, 2020 to August 14, 2021



Why Get Vaccinated? The Benefits...

- If you do get COVID, the vaccine reduces your risk of severe sickness with COVID -19.
- Helps in stopping transmission of COVID-19. People who are vaccinated and catch COVID have lower viral loads and reduced duration of infectiousness. <u>PHO: Risk of COVID-19 Transmission from</u> <u>Vaccinated Cases</u>
- Helps achieve community immunity. Approximately 90% of the entire province must be vaccinated for this to happen!



Why Get Vaccinated? The Benefits...

 Your vaccine might stop COVID-19 from reaching someone who won't survive it. Taking steps to protect ourselves, helps protect:

Our patients and colleagues who are most vulnerable (e.g. those living with cancer, dialysis, the immunocompromised)

Our children who cannot yet be vaccinated



What are the risks of NOT being vaccinated?

 8 times more likely to "catch" COVID-19 and more likely to have severe symptoms and illness.

Table 1. Confirmed post-vaccination cases of COVID-19: Ontario, December 14, 2020 to August 7, 2021

	Not yet protected: 0-13 days after dose 1	Partially vaccinated: 14-27 days after dose 1	Partially vaccinated: 28+ days after dose 1	Partially vaccinated: 0-13 days after dose 2	Partially vaccinated: Total	Breakthrough: 14+ days after dose 2	Total
Symptomatic	14,854 (52.2%)	4,793 (16.8%)	6,820 (24.0%)	576 (2.0%)	12,189 (42.8%)	1,403 (4.9%)	28,446 (100.0%)
Asymptomatic	3,865 (38.7%)	2,274 (22.8%)	2,397 (24.0%)	396 (4.0%)	5,067 (50.8%)	1,052 (10.5%)	9,984 (100.0%)
Total	18,719 (48.7%)	7,067 (18.4%)	9,217 (24.0%)	972 (2.5%)	17,256 (44.9%)	2,455 (6.4%)	38,430 (100.0%)

PHO: Confirmed cases of COVID-19 Following Vaccination in Ontario: December 14, 2020 to August 7, 2021



What are the risks of NOT being vaccinated?

- Research has documented that up to 76% of COVID-19 patients have at least one persistent symptom 6 months after infection (<u>https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(20)32656-</u> <u>8/fulltext accessed on August 26/21</u>)
- Not getting back to normal activities, including limits on gathering with family and friends.
- Contributing to hospital and community transmission, which in turn increases potential of new variants. Even if your symptoms are minor, this may result in bad effects for another individual.



COVID-19 Vaccines approved in Canada:

- Have shown in clinical trials to be 70 95% effective at preventing infection and even with the new variants protection against severe disease is over 85%
- Click <u>here</u> to learn more about the Health Canada vaccine approval process.



- Look at the next slide:
 - The top picture in yellow shows the Ontario daily COVID-19 case count in Ontario from Apr. 24/20 to June 8/21.
 - The bottom picture is the case count in Long Term Care where 90% of residents and 55% of staff were vaccinated. Due to the vaccination rate, there was no 3rd wave in Long Term Care Homes (LTCH).



COVID-19 daily case counts and rates by episode date in Ontario - April 24, 2020 to June 8, 2021

COVID-19 daily case count LTCH residents and staff in Ontario April 24, 2020 to June 7th, 2021





- They are VERY effective at:
 - Preventing going to hospital with COVID-19
 - Preventing death from COVID-19

Figure 6a. Hospitalizations (including intensive care unit admissions) among unvaccinated, partially vaccinated and breakthrough confirmed cases* of COVID-19: Ontario, December 14, 2020 to August 7, 2021



Unvaccinated Cases Partially Vaccinated Cases Breakthrough Cases

PHO: Confirmed cases of COVID-19 Following Vaccination in Ontario: December 14, 2020 to August 7, 2021



- We know that the vaccines are not 100% effective. As the statistics show there are "breakthrough cases".
- It's important to understand that persons with underlying health conditions may experience severe outcomes even when vaccinated. This is why it's important to get vaccinated to protect others.
- That said.... look at the next slide. The people who are getting COVID-19 are mostly unvaccinated people.

As of Aug. 7, 2021:

- 95.2% of COVID-19 cases are in unvaccinated people.
- Unvaccinated (yellow)
 - 92.5% of hospitalizations
 - 92.1% of deaths
- Partially Vaccinated (green)
 - 6.7% of hospitalizations
 - 6.7% of deaths
- Fully Vaccinated (Blue)
 - 0.8% of hospitalizations
 - 1.2% of deaths

Figure 4. Proportion of confirmed COVID-19 cases, hospitalizations (including intensive care unit admissions), and deaths among unvaccinated, partially vaccinated, and breakthrough cases: Ontario, December 14, 2020 to August 7, 2021



Sources:

- https://covid-19.ontario.ca/data/case-numbers-and-spread#vaccinestatus-data
- https://www.publichealthontario.ca/-/media/documents/ncov/epi/covid-19-epi-confirmed-cases-postvaccination.pdf?sc_lang=en



What is a Vaccine?

- A vaccine is a substance that is used to stimulate the immune system to produce antibodies and provide immunity against a specific disease – they are a safe and effective way of protecting people from harmful diseases – even before they come into contact with them.
- Click on the link below to watch a short video to learn more about what ingredients can be found in a vaccine and the safety standards that exist in Canada

Vaccine Safety – Immunize Canada

https://www.youtube.com/watch?v=Y4N4_1PNtfk

Vaccine Development – Safety is Important

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Vaccine development



Review and approval of vaccines



Health Canada







Ongoing Monitoring & Review

- Health care providers report adverse events to local public health authorities.
- Public Health Authorities report adverse events to the Public Health Agency of Canada.
- Health Canada monitors vaccine related events in Canada and internationally and monitors effectiveness of the vaccines.
- Manufacturers continue to follow their study participants for 1 (AstraZeneca/COVISHIELD) to 2 years (Pfizer-BioNTech & Moderna)

Accessed from: https://health.gov.on.ca/en/pro/programs/publichealth/coronavirus/docs/vaccine/COVID-19_vaccine_approval_process_safety.pdf Comfort. Care. Hope.



COVID-19: How vaccines were developed

 Click on the link below and watch the video for a review of how vaccines are developed and approved in Canada



<u>Click here</u> to watch the above video



Approved Vaccines for COVID-19

- Health Canada approved vaccines include:
 - Pfizer-BioNTech
 - Moderna
 - Astra-Zeneca/COVISHIELD
 - Janssen (Johnson & Johnson) currently not available
- If you would like to independently research to approved vaccines click <u>here</u>.

Types of COVID-19 Vaccines & how they work

There are 2 types of COVID-19 vaccine that are being distributed in Canada

Viral Vector Vaccines

mRNA Vaccines



<u>Click here</u> to watch the above video



<u>Click here</u> to watch the above video



COVID-19 Vaccine Facts

- It is NOT possible to give someone COVID-19 from a COVID-19 vaccine because the vaccines do not contain the virus that causes COVID-19
- The vaccines cannot change your DNA:
 - The vaccines do not affect or interact with a person's DNA and the cell breaks down and gets rid of the mRNA as soon as it is finished using the instructions
 - mRNA cannot enter the part of the cell that contains our DNA (the cell nucleus)



Are the Vaccines Safe?

- All the steps to evaluate the safety, effectiveness and quality of the vaccines were followed in the approval process for the COVID-19 vaccines.
- These vaccines were able to be created quickly because:
 - mRNA technology has been researched over the past 20 years and has successfully been used in cancer treatments – the technology has matured. For more information click <u>here</u>.
 - We had previous knowledge about other members of the coronavirus family (e.g. from SARS).
 - There has been international collaboration among scientists, health professionals, industry and governments – virtually unlimited financial, scientific and technological resources



Are the Vaccines Safe?

- These vaccines were able to be created quickly because (cont.):
 - Health Canada (and other world approval bodies like the FDA) made review of this data a priority due to the pandemic
 - Quick recruitment of volunteers for clinical trials and fast set-up of those trials.



<u>Click here</u> to watch the above video



Are the COVID-19 Vaccines Safe?

As of August 26, 2021:

• 5.08 billion doses given worldwide (accessed from

https://ourworldindata.org/covid-vaccinations?country=OWID_WRL_)

• 52,787,898 doses given in Canada (Public Health Agency of Canada. Canadian report on COVID-19 vaccine doses administered. Ottawa: Public Health Agency of Canada; August 26, 2021. https://health-infobase.canada.ca/covid-19/vaccine-administration/)

As of Aug. 13, 2021:

 3522 serious adverse events following immunization reported in Canada – 0.0007% of doses administered (Government of Canada, August 27, 2021. https://health-infobase.canada.ca/covid-19/vaccine-safety/)

This is safer than commonly used medications like Advil and Tylenol

Common Side Effects of the Vaccines

 These symptoms mean the vaccine is working to produce protection and they usually go away in 1-3 days.



The most common side effects are: fatigue, headache, muscle aches, mild fever and/or chills



Vaccine Safety – Canada (Dec. 13/20 – Aug.13/21)

- There has been a total of 51,241,615 doses of vaccine administered.
 - 12,680 total adverse event reports (0.025% of all doses administered) of which 9370 were non-serious (0.018% of all doses administered)
 - 3310 total adverse event reports or 0.0006% of all doses that were serious
- To access the most recent report for more information click <u>here</u>.
- The upcoming slides provides some highlights



Vaccine Safety – Canada

What you need to know up to and including August 20, 2021





Events Reported

Adverse Event Report Type	Events reported/100,000 doses administered	Comments
Anaphylaxis	0.31	
Bell's Palsy	0.70	More events reported after Astrazeneca
Myocarditis/Pericarditis	0.96	Primarily in young males 18-24 after a mRNA vaccine
Low platelets	0.13	More events reported after Astrazeneca
Guillain Barre Syndrome	0.13	More events reported after Astrazeneca
Deep vein Thrombosis	0.33	More events reported after Astrazeneca
Capillary Leak Syndrome	2 cases in Canada	After Astrazeneca doses

https://health-infobase.canada.ca/covid-19/vaccine-safety/#newSafetyIssues



Consider This...

Many medications that are approved by Health Canada can lead to the user experiencing side-effects, but they are still approved because severe adverse events are **rare**.

You've seen commercials like this before:





<u>Click here</u> to watch the above video <u>Click here</u> to watch the above video



Who should not get vaccinated?

- There are very few reasons for a medical exemption. The largest group of individuals who may receive a medical exemption are those who have had a <u>serious</u> allergic reaction or <u>anaphylaxis</u> to a previous dose of a COVID-19 vaccine or any components of the vaccine.
- There are existing protocols to administer COVID-19 vaccines to individuals with other types of allergies.
- For medical exemption please obtain a medical exemption form from Occupational Health. Consultation with a physician or nurse practitioner will be required.



Talk to a Healthcare Provider

- Before receiving the vaccine, talk to your health care provider or vaccine clinic staff if:
 - You are currently feeling unwell or have signs and symptoms of COVID-19
 - You have had a previous allergic reaction to a COVID-19 vaccine, any ingredients in the vaccines or any other vaccine
 - You have any allergies or allergic conditions
 - You are immunosuppressed due to disease or treatment or have been diagnosed with an autoimmune condition
 - You have a bleeding disorder or are taking medication that could affect blood clotting
 - You have received any other vaccine (not COVID-19 vaccine) in the past 14 days



Can women who are pregnant or breastfeeding get the vaccine?

- The Society of Obstetricians and Gynecologist of Canada (SOGC) supports the use of all available COVID-19 vaccines approved in Canada in any trimester of pregnancy and during breastfeeding.
- Surveillance has been ongoing on a global scale and has not detected adverse pregnancy outcomes related to any COVID-19 vaccine and emerging evidence shows passive antibody transfer to infants
- Given that pregnancy is a demonstrable risk factor for severe COVID-19 disease, and there are emerging reports from major Canadian centres that have identified an increased burden of disease affecting pregnant individuals.
- For additional information check here: https://www.niagararegion.ca/health/covid-19/pdf/vaccination-pregnancy.pdf)



Remember ...

Not all of the situations on the previous slide will mean that you should avoid getting the vaccine.

After a discussion, your healthcare provider will be able to recommend if you should get the vaccine or if you may require any accommodations in timing of the vaccine.



Policy and Resources

Hotel Dieu Shaver's Policy

Policy II-OH-21: COVID-19 Immunization and Management

Additional Resources:

Visit these websites for more information:

<u>Niagara Region Public Health</u>: COVID-19 Vaccination <u>Ontario Ministry of Health</u>: About COVID-19 Vaccines



FAQ's About the Vaccine

- If I had COVID-19, should I still get the vaccine?
 - Yes, you should still get your vaccine when you're out of self-isolation and your symptoms are resolving. If you had COVID-19, you may have some immunity but we don't know how much or how long it may last.
- Is it acceptable for someone with food or seasonal allergies to receive the COVID-19 vaccine?
 - Yes. If you have allergies that are not related to any components of the COVID-19 vaccine, you can still be vaccinated
- Does the vaccine work against the virus variants (a virus with one or more mutations)?
 - Yes. All Health Canada approved vaccines provide strong protection against COVID-19 and its variants including the Delta variant.



Things to Consider ...

- Getting your vaccine is an important step in ending the pandemic. It is a safe and effective way to protect yourself, your loved ones, and your community from COVID-19.
- By choosing not to get vaccinated against COVID -19 you are risking the following:
 - Your health as you will have an increased risk of severe illness and death and could develop a long-term, post-COVID-19 condition.
 - The health of others as you may unintentionally pass COVID-19 to someone who may not survive, such as: friends, family, colleagues, and those you care for.
 - The health of your community as decreased vaccination rates will lower the herd immunity and put the community at risk
 - Delayed return to normal with continued risk of COVID-19 transmission there is increased likelihood of additional COVID-19 waves, variants of concerns and the social and economical lock-downs that come with them



Updating Vaccine Status

If you would like to update your immunization or exemption status:

- If you received a copy of your vaccine receipt by e-mail, forward it to <u>hdsvaccines@hoteldieushaver.org</u>
- Download your vaccination receipt here: <u>https://covid19.ontariohealth.ca</u>
 - Email the PDF version to Occupational Health at: <u>hdsvaccines@hoteldieushaver.org</u>

OR

2. Print a copy and deliver it to Occupational Health

(This information will only be reviewed by OHS and is kept confidential)



If you would like to receive the vaccine:

• NH COVID-19 Vaccination Clinic:

- Located in the Mental Health Outpatient Clinic at the St. Catharines Site (behind the Walker Family Cancer Centre).
- Open Monday to Sunday between 8am and 4pm (closed between 12 and 1pm and dependant on scheduling and supply).
- Walk-ins welcome between 8am and 3:30pm or book a same day or future appointment.
- **Provincial Booking Tool:** https://covid-19.ontario.ca/bookvaccine/ or by calling 1-833-943-3900



Complete the Attestation Form

In order to comply with Hotel Dieu Shaver's Mandatory Vaccine Policy, please download and complete the Attestation Form and provide to Occupational Health by 8:00 a.m. on Friday, October 8th, 2021.

Download Here