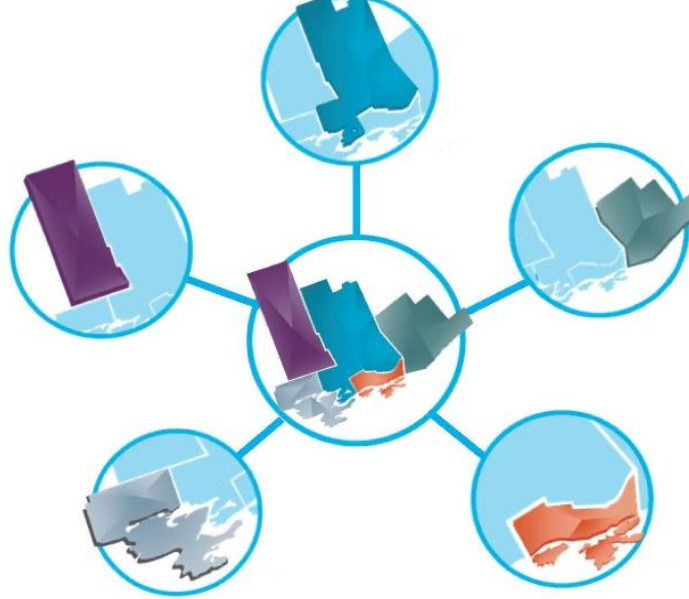

South East
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EDUCATION
PRACTICE
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COVID-19 Vaccine Education

HELPING YOU MAKE AN INFORMED DECISION

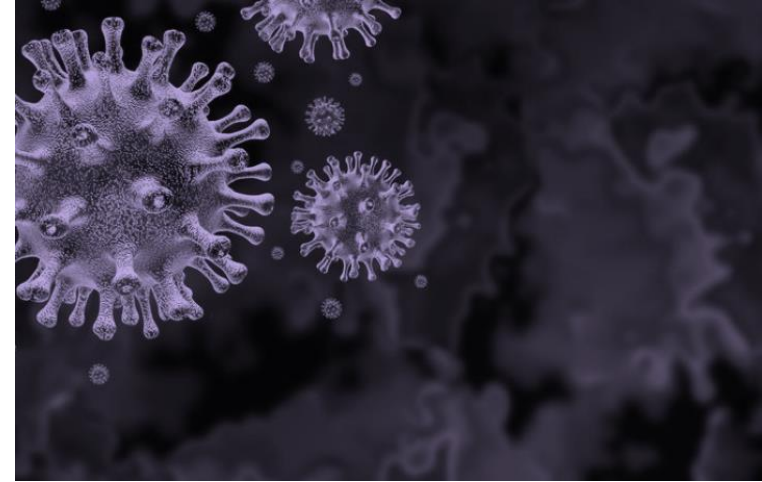
PRESENTED BY THE SOUTH EAST INFECTION PREVENTION AND CONTROL HUB AND
KINGSTON HEALTH SCIENCES CENTRE

Adapted from Sunnybrook Health Sciences Centre COVID-19 Vaccine Education

Purpose of COVID-19 learning module

To provide you accurate information on:

- COVID-19
- COVID-19 vaccinations



To help you make an informed decision!

If you have been fully vaccinated or have a medical exemption you may not be required to complete this learning module; however, the information provided will still be beneficial and informative.

If you are unsure or have decided *not to be vaccinated* this learning module must be completed to ensure you are making an informed decision.

Learning Objectives

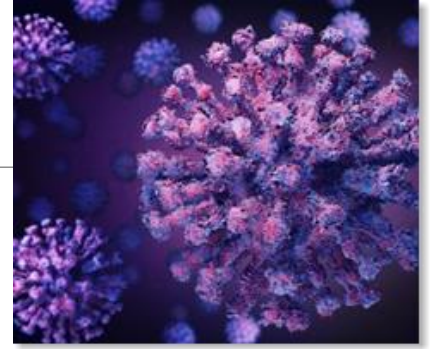
- What is COVID-19?
- What are the benefits and risks of COVID-19 vaccination and do they work?
- What are the types of COVID-19 vaccines available and how do they work?
- Are COVID-19 vaccines safe?
- What are the common side effects of COVID-19 vaccines?
- What can I expect before, during, and after immunization?

COVID-19 Pandemic Impact – August 2021

Infection Rate	Death Rate	Societal Impacts
<ul style="list-style-type: none">209 million infections worldwide and counting<ul style="list-style-type: none">Click here to see COVID-19 infection mapOntario: 556,438 cases<ul style="list-style-type: none">Ontario COVID-19 DataLocal Health Unit COVID Data:<ul style="list-style-type: none">Public Health Regions	<ul style="list-style-type: none">Nearly 5 million deaths worldwideNearing 10,000 in OntarioVariants of Concern (VOC)<ul style="list-style-type: none">4 times higher risk of ICU admission2 times the risk of deathCase-fatality rate is 8-10x higher than seasonal influenza	<ul style="list-style-type: none">Straining our health care system<ul style="list-style-type: none">Delay in surgeries and treatmentsIncreased hospital capacityRestrictions on daily life



What is COVID-19?



- SARS-CoV-2 coronavirus
- First identified in Wuhan China-2019
- Causes respiratory illness ranging from mild common cold symptoms to severe pneumonia
- May cause severe illness, long-term post-COVID conditions, and death
- Impacts individuals, their community, and our health care system
- Affects people of all ages

What are variants of concern?

Variants are SARS-CoV-2 viruses that have changed or “mutated” COVID-19 viruses become a “variant of concern” or “VOC” when its changes have a clinical or public health significance that affects one or more of:

- Increased transmissibility (spread)
- Increased virulence (severity of disease)
- Decreased vaccine effectiveness
- Impact on diagnostic testing

Each time the virus is transmitted from person-to-person the virus can change, leading to mutation in the virus and variants of concern

There are currently **4 variants** of COVID-19 that are a concern to public health. They are commonly referred to as the Alpha, Beta, Gamma and Delta variants, respectively.

Delta is now the most dominant strain, accounting for **more than 90%** of all new COVID-19 cases in Ontario

Signs and Symptoms of COVID-19

MOST COMMON

- Fever
- New cough or worsening chronic cough
- Shortness of breath or difficulty breathing
- Tiredness or weakness

Remember: If you have these symptoms you should self isolate and be tested for COVID-19 and potentially other respiratory pathogens.

LESS COMMON

- Sore throat
- Runny nose or nasal congestion
- Headache or dizziness
- Loss of taste or smell
- Conjunctivitis
- Gastrointestinal symptoms (abdominal pain, diarrhea, vomiting)
- Skin changes or rashes



How is COVID-19 Spread?

Person-to-person transmission:

- Direct contact-droplets and short-range aerosols from coughing or sneezing when people are within 2m of each other
- In-direct contact-touching an object or surface that has been contaminated and then touching your mouth, nose or eyes with unclean hands



Respiratory Droplets



Direct Contact

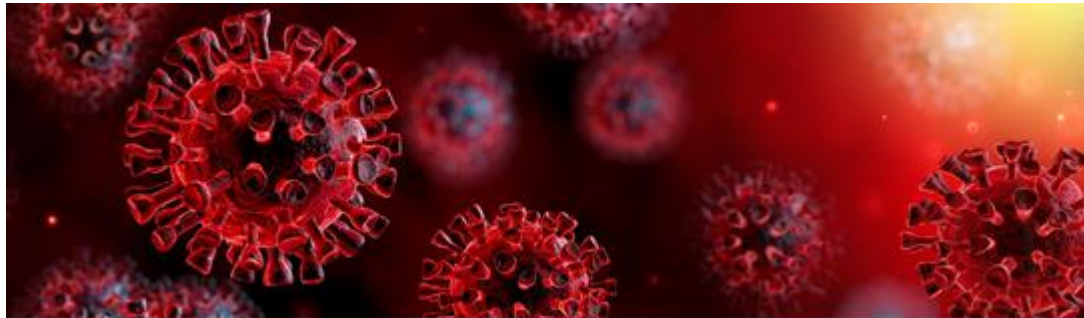


Indirect Contact

How soon after I'm exposed do I get sick?

Incubation Period = up to 14 days

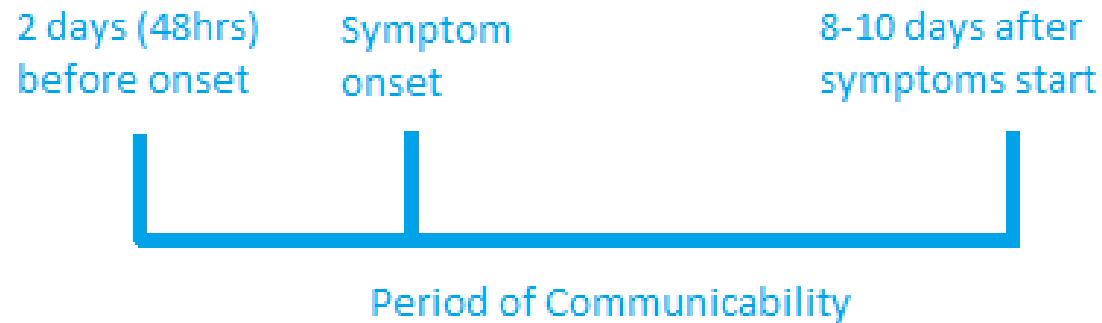
- Average=5-6 days
- Most common=within 11.5 days



When am I contagious to others?

Period of Communicability

- 2 days (48hrs) before symptom onset → 8-10 days after onset
- Most infectious immediately prior and at the onset of symptoms



You can be infectious without symptoms, and still spread the virus to others

How can I stop the spread of COVID-19?

HEALTHY HABITS:

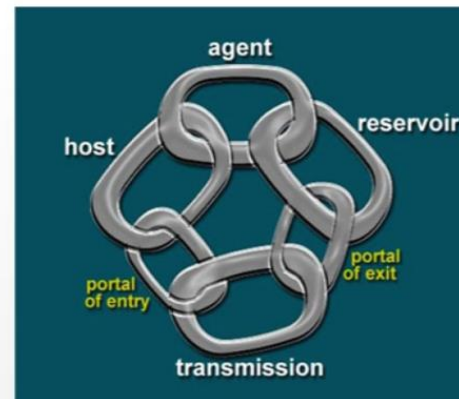
- Clean your hands often
- Respiratory Etiquette
- Avoid touching your eyes, nose and mouth
- Stay home if you are sick
- Stay away from people who are sick

Stay up to date with your vaccines, live a healthy life to reduce your risk of being a susceptible host by getting vaccinated

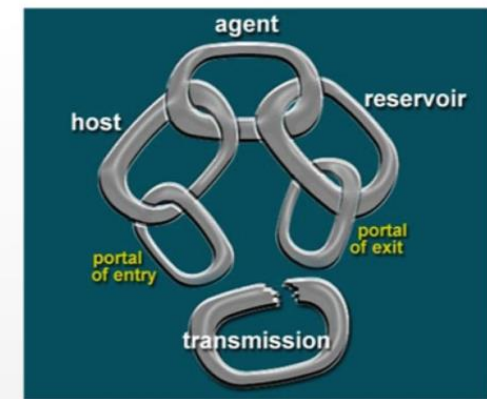
FOLLOW PUBLIC HEALTH MEASURES:

- Physical distancing
- Universal masking
- Avoiding crowded spaces
- Get vaccinated

The Chain of Infection



Breaking the Chain of Infection



QUESTIONS:

1. What is the primary source of transmission for COVID-19?
2. COVID-19 affects only those with weak immune systems and the elderly? (true or false)
3. What are 3 symptoms of COVID-19?
4. COVID-19 poses a significant risk to Public Health and our health care system? (true or false)

What Are The Benefits of COVID-19 Vaccination?

For you, your loved ones and your community:

- Vaccination reduces your risk of getting COVID-19
- Significantly reduces your risk of severe illness from COVID-19
- Reduces your risk of passing COVID-19 to someone who may not survive it
- Helps achieve community immunity (herd immunity)

YOUR BEST DEFENSE!

For those you care for:

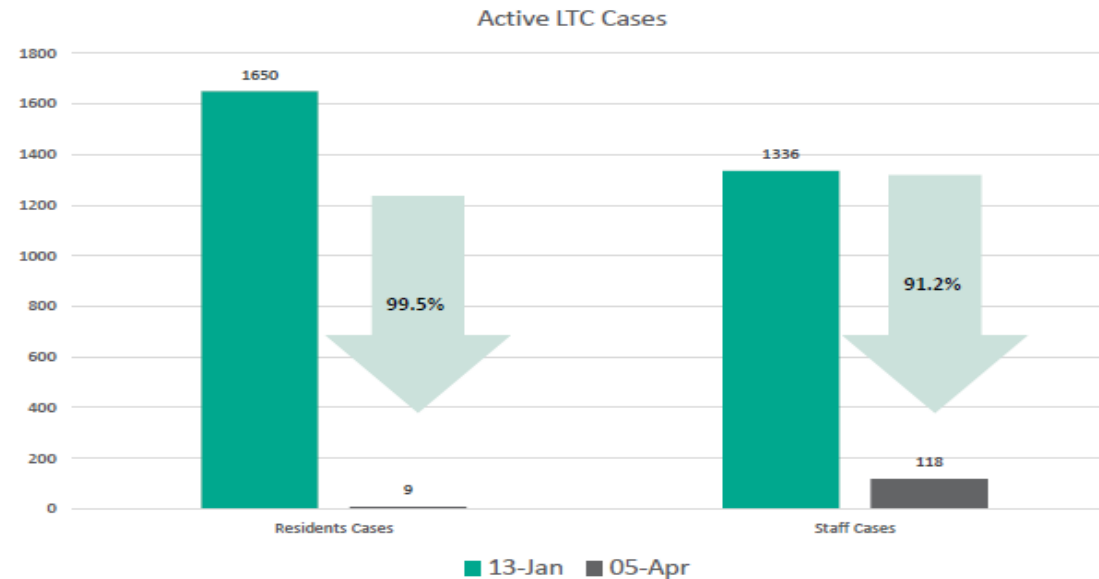
- Reduces the risk of transmission to your residents and colleagues
- Community immunity limits the risk of outbreaks in congregate care
- Residents who are immunocompromised/have co-morbidities have the highest risk of severe illness or death from COVID-19

THEIR BEST DEFENSE!

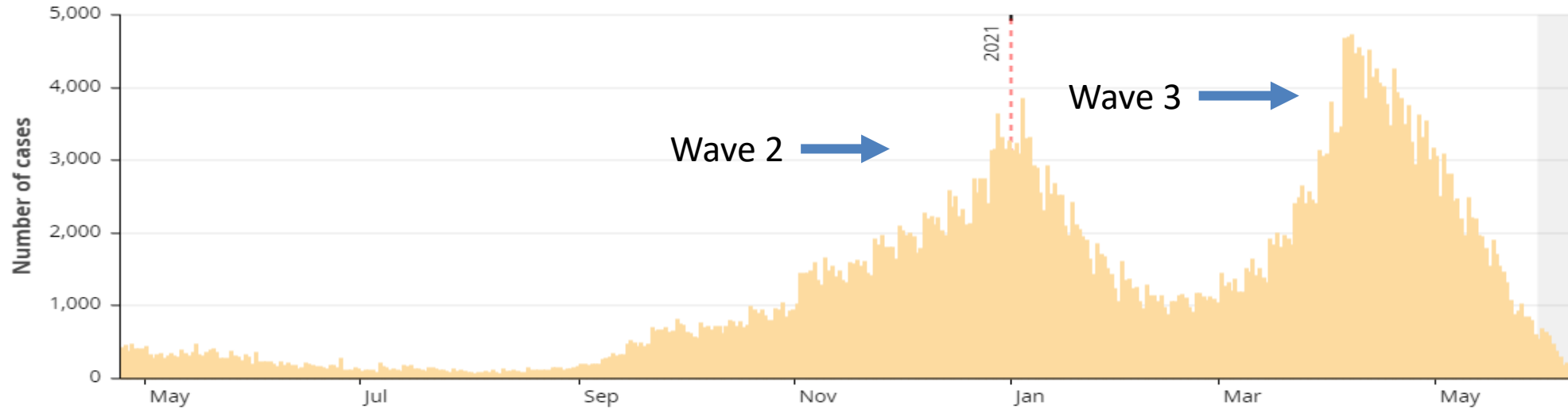
Do COVID-19 Vaccines Work?

Vaccines approved in Canada:

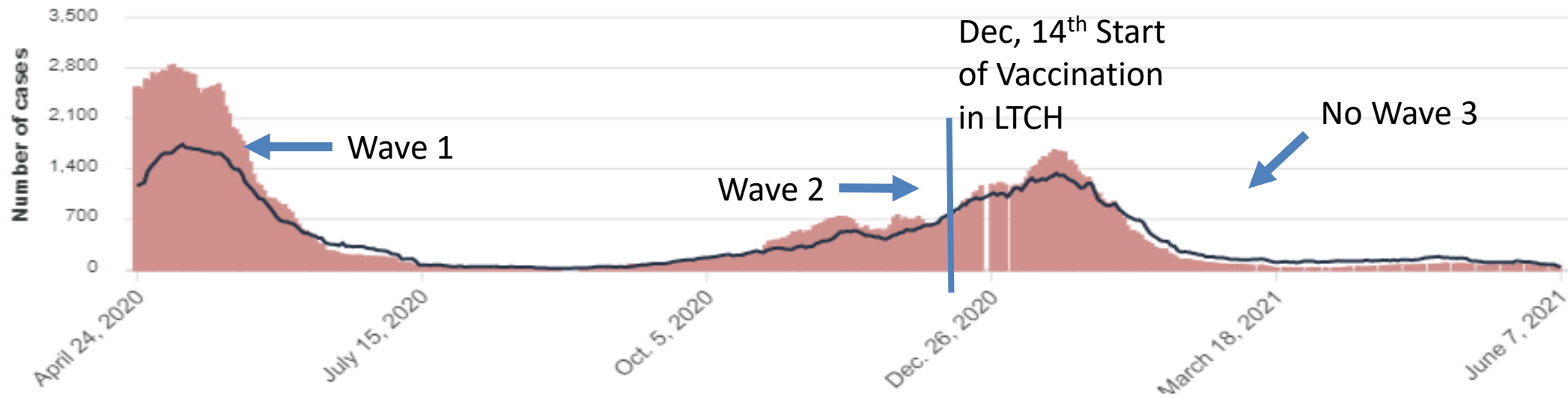
- 70-95% effective at preventing even mild infection
- Nearly 100% effective at preventing hospitalization and death from COVID-19



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



Do COVID-19 Vaccines Work?

95.2% COVID-19 cases are in unvaccinated individuals

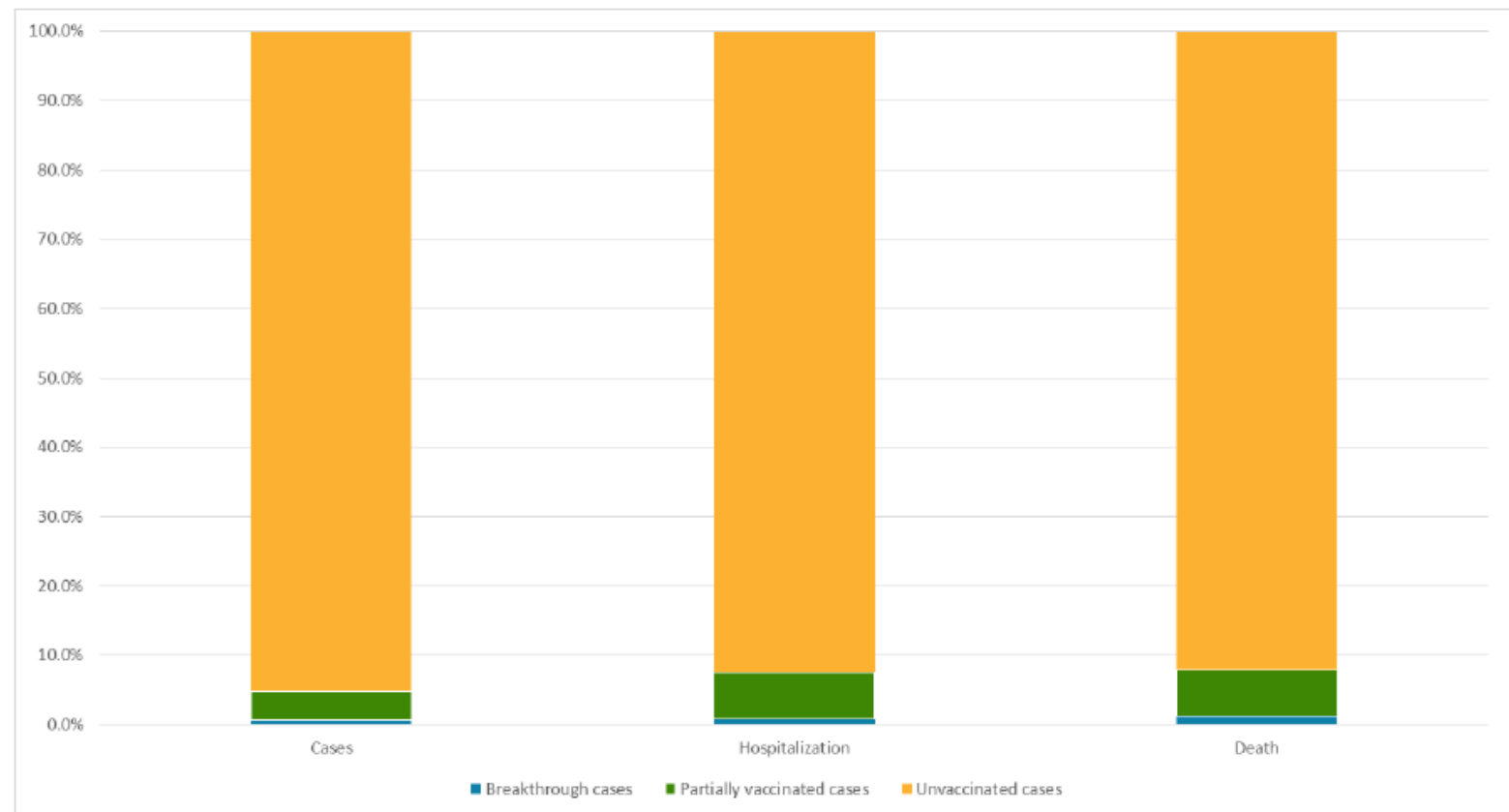
Unvaccinated (yellow):

- 92.5% of hospitalizations
- 92.1% of deaths

Fully Vaccinated (blue):

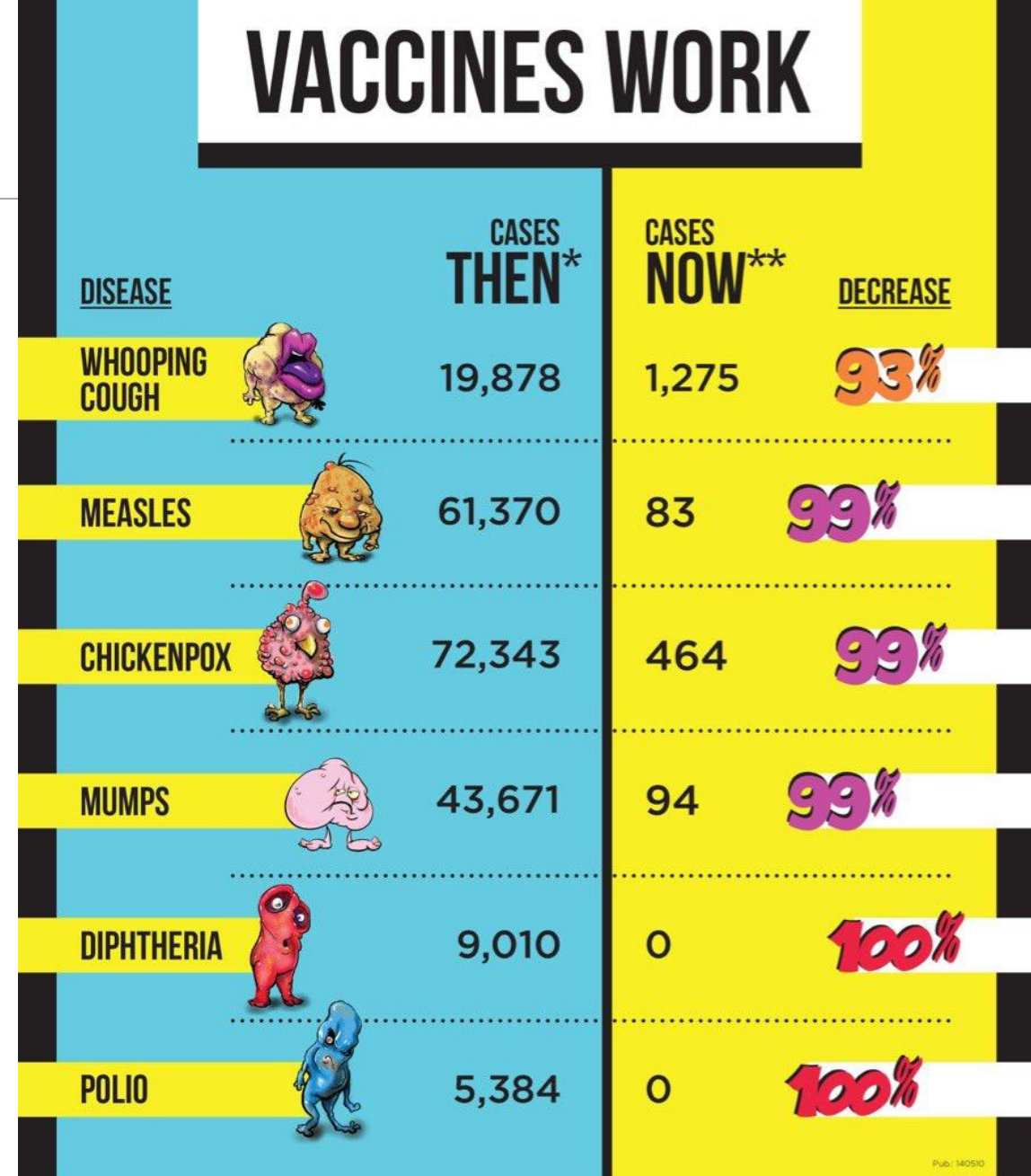
- 0.8% of hospitalizations
- 1.2% of deaths

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



Immunizations

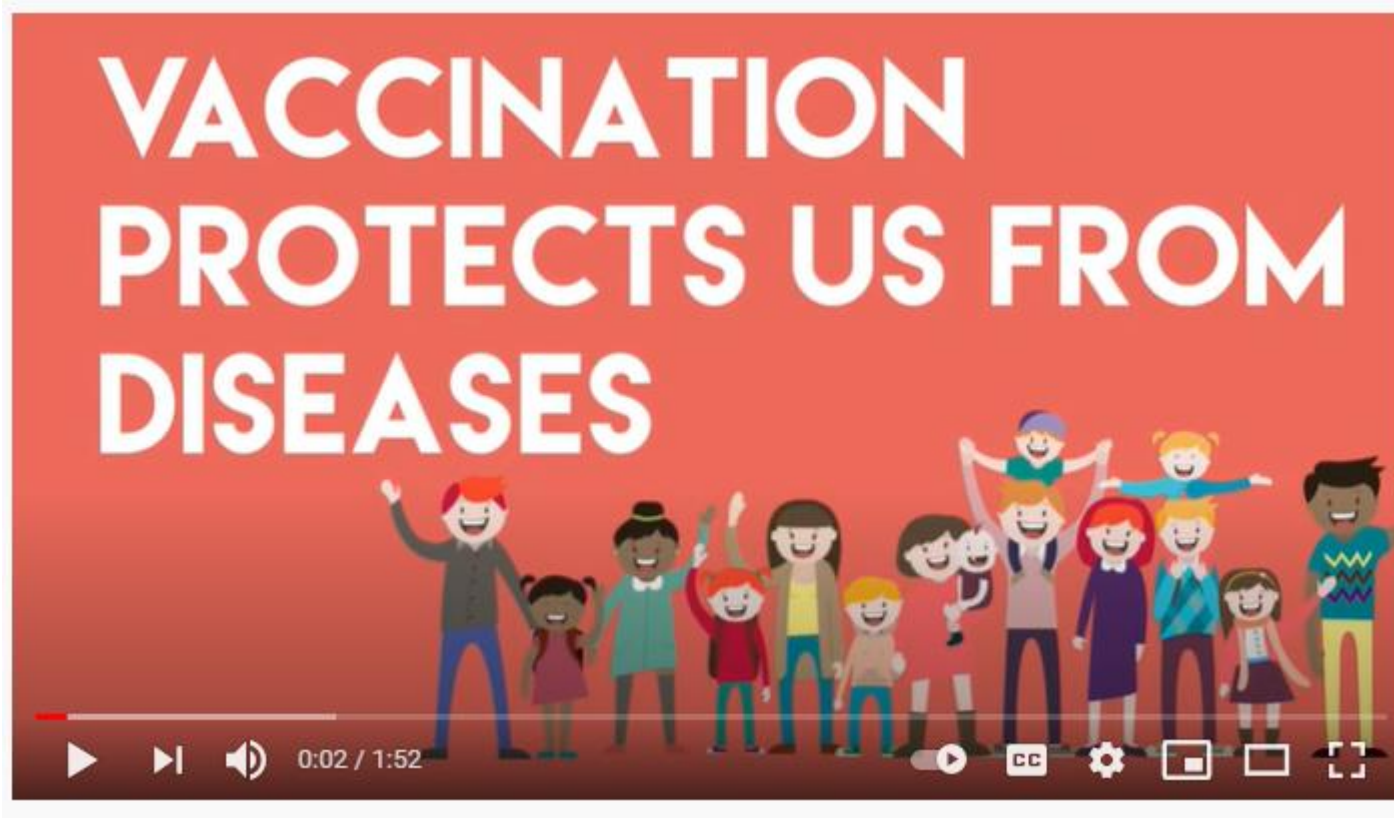
Immunization is widely recognized as one of the greatest public health achievements of the twentieth century. Vaccines save lives, prevent the spread of diseases and reduce health care costs. Immunization programs are an important foundation of Ontario's health system.



* Highest number of cases in a single year in the five years preceding vaccine introduction.

** Data for measles are from the Canadian Measles and Rubella Surveillance System (CMRSS). All other data are from the Canadian Notifiable Disease Surveillance System (CNDSS). Most recent report of cases in Canada in 2013. 2013 is the most recent validated data available for publication.

What is a vaccine?



**Click here to play the
YouTube video**

What are the types of COVID-19 Vaccines available?

Currently authorized and recommended COVID-19 vaccines:

- Are safe,
- Are effective, and
- Reduce your risk of severe illness



The best?

The first one that is available to you! Do not wait for a specific brand!

All vaccines are rigorously tested and then reviewed and approved by Health Canada. If you have questions or concerns always speak to a trusted health care provider

Viral Vector Vaccines



Click here to play the
YouTube video

How Do They Work?

Viral Vector COVID-19 Vaccines

Use a modified version of a different virus (the vector) to deliver important instructions to our cells

- The cell displays the COVID-19 spike protein on its surface
- Our immune system recognizes the spike protein, triggering an immune response
- Our bodies are now prepared to protect from future COVID-19 exposure



mRNA Vaccines



**Click here to play the
YouTube video**

How Do They Work?

mRNA COVID-19 Vaccines

Teaches our cells how to make a protein (or a piece of protein)

- The cell displays the protein piece on its surface
- Our immune system recognizes the spike protein, and begins building an immune response
- Our bodies are now prepared to protect from future COVID-19 exposure

New type of vaccine



Myths about COVID-19 Vaccines

General:

- It is NOT possible to get COVID-19 from a COVID-19 vaccine
- Does not affect or change our DNA in any way

Viral Vector Vaccines:

- Do not cause an infection with COVID-19 or the vector used in the vaccine

mRNA Vaccines:

- Does not enter the part of the cell that contains our DNA (cell nucleus)
- Does not remain in our system-the cell breaks down and gets rid of the mRNA as soon as it is finished using it



Questions:

1. Do mRNA vaccines can change your DNA?
2. You get COVID-19 from the vaccine?

Process of vaccine development



**Click here to play the
YouTube video**

Are COVID-19 Vaccines safe?

Canada

50,254,577 doses given (more than 50 million)

12,006 adverse events following immunization (0.023%)

3063 serious side effects reported (0.006%)

Ontario

19,810,821 doses given (almost 20 million)

9,688 adverse events following immunization (0.048%)

536 serious side effects reported (0.003%)

That is safer than commonly used medications like Advil and Tylenol!



What are the most common side effects from the COVID-19 vaccines?

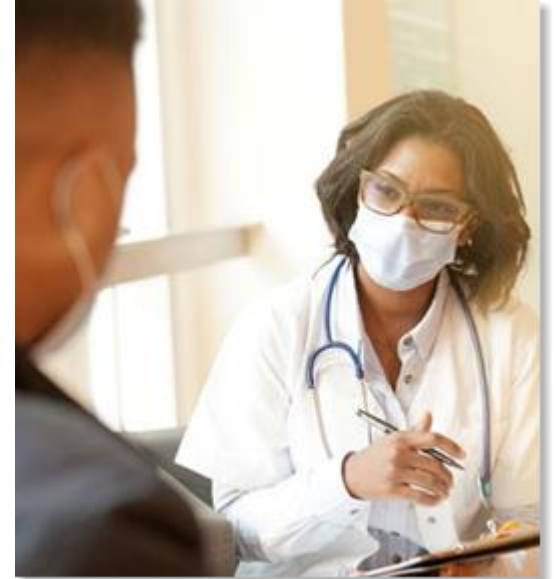
Localized reaction at the injection site:	Systemic reaction within the body:
<ul style="list-style-type: none">• Redness• Soreness• Swelling	<ul style="list-style-type: none">• Mild fever• Chills• Headache• Fatigue• Muscle aches• Joint pain

Severe allergic reactions

Anaphylaxis	Blood Clots	Myocarditis
<ul style="list-style-type: none"> • 155 cases out of over 50 million doses in Canada • Rate consistent with other common vaccines • Much lower than anaphylaxis rate for common medications like penicillin. 	<ul style="list-style-type: none"> • For AstraZeneca, very rare: 1 in 55,000 to 1 in 500,000 • Lower rate than air flights of > 4 hours which is 1 in 4,655. • COVID-19 illness increases the risk of blood clots. 	<ul style="list-style-type: none"> • 246 cases out of almost 20 million doses (Ontario Data) • Only found with mRNA vaccines • Usually mild cases go away without notice and complications

Talk to your health care provider if you:

- Are currently unwell or have signs and symptoms of COVID-19
- Have had a previous allergic reaction to any of the ingredients in the COVID-19 vaccine, or previous vaccines (including first COVID-19 vaccination)
- Have any allergies/allergic conditions
- Are immunosuppressed due to disease/treatment or have been diagnosed with an autoimmune condition
- Have a bleeding disorder or are taking medication that could affect blood clotting (this information will help the health care provider prevent bleeding/bruising at the injection site)
- Have received any other vaccine in the past 14 days
- You can still have your COVID-19 vaccine if you are pregnant or breastfeeding (consult your health care provider if you have any questions or concerns)



Not all of these are mean that you should not get the vaccine, but you should talk to your health care provider about their recommendation based on your known or reported health history.

Before Immunization

Communication is Key!

Let your health care provider know about any fears, stressors or anxiety related to immunizations and what could be done to make the experience more comfortable.



During Immunization

- Sit upright during vaccination
- Wear a short-sleeved or loose-fitting top
- Relax your arm by letting it feel loose
- Use deep breathing to help you relax and feel calm
- If you feel dizzy or faint, tell the person who's vaccinating you right away
- Distract yourself by reading or listening to music, or have a conversation
- Talk to your health care provider ahead of time about pain relief



After immunization

- Confirm what medications are recommended for any pain, discomfort at the immunization site or fever. Recommendations can be provided by clinic immunization staff, pharmacist or your health care provider.
- Side effects vary for everyone but normally last a few hours to a few days
- Applying a cool compress to the site can reduce swelling and provide comfort.
- Keep your arm moving
- Drink fluids to maintain hydration
- Some people may schedule their vaccination around pre-scheduled days off to be home the next day

Continuing Public Health measures

- Continue to stay home when you are feeling unwell
- Follow the current testing guidelines from your local public health agency if you develop symptoms similar to COVID-19
- Continue to follow public health restrictions that are in place
- Clean your hands often with soap and water or an alcohol based hand rub

Personal Protective Equipment (PPE) required for use when providing direct care must still be worn as indicated. COVID-19 is not the only infectious organism around!

Important reasons to consider the vaccine

- Help protect yourself from getting sick with COVID-19 if you are exposed to the virus
- Avoid spreading it to other people
- Help control the pandemic
- Help to get back to normal routines and activities



Protect yourself, family, friends, community and your residents and co-workers, and get back to what you enjoy and have missed the most!

#MyWhy on COVID Vaccination



**Click here to play the
YouTube video**

Risks of not getting COVID-19 Vaccine

Delaying or choosing not to be vaccinated means you are risking the following:

- **Your health:** as you will have an increased risk of severe illness and death. Additionally, you may 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, coworkers and those you provide care to.
- **The health of your community:** as decreased vaccination rates will lower community immunity (herd immunity) and put your community at risk
- **Delay return to normal:** with the continued risk of COVID-19 transmission, there is increased likelihood of additional COVID-19 waves and the social and economic impacts of public health measures used to control transmission or spread.



The decision is yours to make!

What do you choose?

I would like to proceed with my COVID-19 vaccination

I would like to decline COVID-19 vaccination at this time or would like more time to make a decision

CERTIFICATE OF COMPLETION

This certificate acknowledges that

First Name, Last Name

Has successfully completed the COVID-19 Vaccine Education Module



February 04, 20XX

Date Completed on

Resources

COVID-19 Vaccines and Pregnancy:

- [COVID-19 Vaccine Pregnancy Support Tool](#)
- [WHO Recommendations: Vaccines and Pregnancy](#)

COVID-19 Data Trackers:

- [Vaccination Tracker Canada](#)
- [COVID-19 Global Dashboard](#)
- [Long-Term Care Home COVID Data](#)
- [Ontario COVID-19 Data](#)
- [Public Health Ontario COVID-19 Data & Surveillance](#)

Booking your COVID-19 Vaccine:

- [How to Book a COVID-19 Vaccine](#)

Local Public Health Unit Vaccine Resources:

- [Public Health Regions](#)

Vaccine Safety:

- [COVID-19 Awareness Resources](#)
- [Vaccine Safety](#)
- [How Vaccines are Developed](#) (video)
- [COVID-19 Vaccine Approval Process and Safety](#)
- [Different COVID-19 Vaccines](#)
- [COVID-19 Vaccination Recommendations for Special Populations](#)
- [Recommendations on the use of COVID-19 Vaccines](#)

Websites:

- [Government of Canada COVID-19](#)
- [Government of Ontario COVID-19](#)
- [Public Health Ontario COVID-19](#)
- [Ministry of Health and LTC COVID-19](#)

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