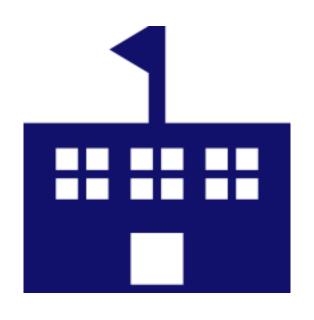


Update on COVID-19: Schools and Vaccines



Dr. Vinita Dubey

Associate Medical Officer of Health

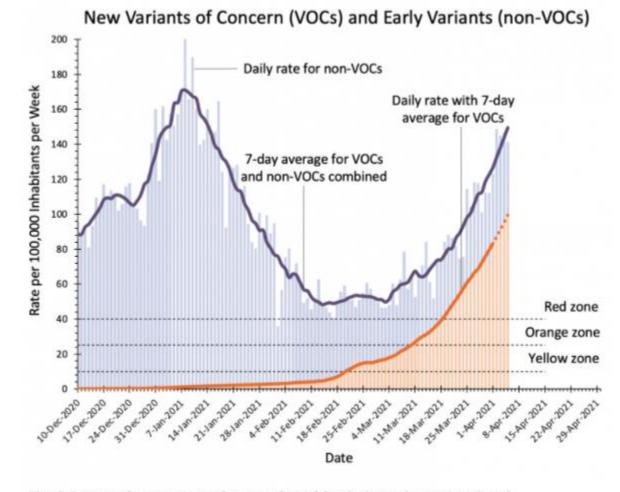
Nicole Welch

Director & Chief Nursing Officer Toronto Public Health

- 1. Overview of COVID-19 to date
- 2. COVID-19 vaccines
- 3. Q and A

Variants of Concern

- The coronavirus continues to mutate & change
- Different variants are now in Ontario. They spread infection more easily and cause more serious disease
- Public health measures and vaccine work against variants



The daily rates of new variants of concern (VOCs) for the last 4 days are predicted.



COVID-19 Monitoring Dashboard

Download Excel Data

Technical Notes

Current Overall Status: Red

Red

Yellow

Green



Virus Spread & Containment

Status: Red



Laboratory Testing Status: Yellow

Health System Capacity
Status: Red

, i



Public Health System Capacity

Status: Red

Virus Spread and Containment

Status: RED - Indicators trending away from goals

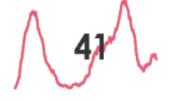
New COVID-19 cases, 7 day moving average¹ New Hospitalizations, 7 day moving average¹ Active daily COVID-19 outbreaks in institutions¹ Effective Reproductive Number for COVID-19 Cases²



Goal: A 14-day decline* OR a stable trend with less than an average of 1 case per 100,000 per day (30



Goal: A 14-day decline OR a stable trend with less than an average of 2 hospitalizations per million population per day (6 hospitalizations)



Goal: A 14-day decline* OR a stable trend AND below 10% of healthcare institutions with an active outbreak (18 facilities) Rt=1.12

(90% CI 0.96 to 1.30)

Laboratory Testing

Status: YELLOW - Indicators need attention

Percent of new COVID-19 tests with a turnaround time of 24hrs1 Percent of new COVID-19 tests with a turnaround time of 48hrs¹ COVID-19 Laboratory Tests Percent Positivity, previous week average³

Hover over number for data note

Goal: Under 1.0

61%

within 24 hours (7 day moving average) 94%

within 48 hours (7 day moving average)



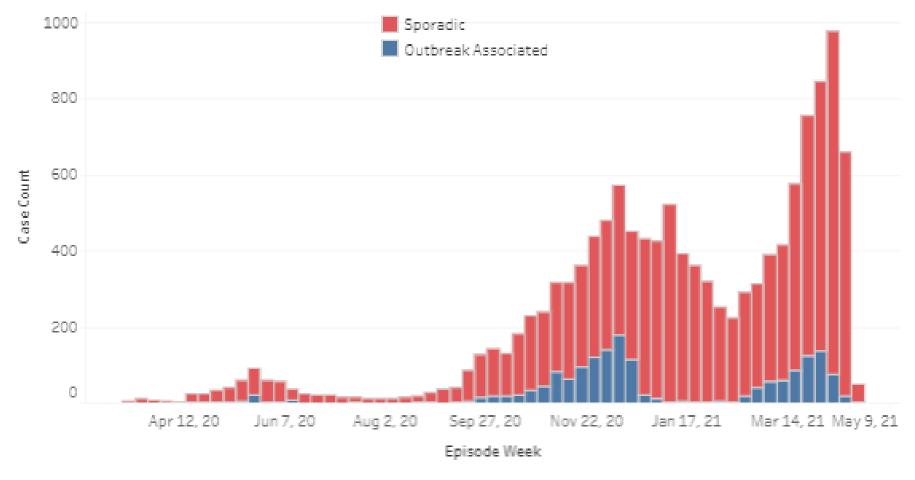
Goal: 2 60% within 24 hours Goal: 2 80% within 48 hours

Goal: <3% positivity



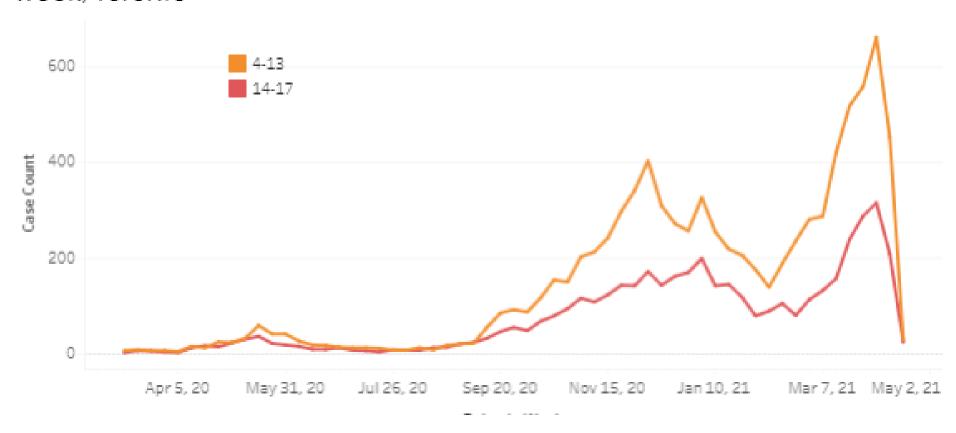
Cases and outbreaks of COVID in schools have increased in this third wave.

Figure 1. COVID-19 cases in school-aged children (4 to 17 years) by outbreak type and week, Toronto



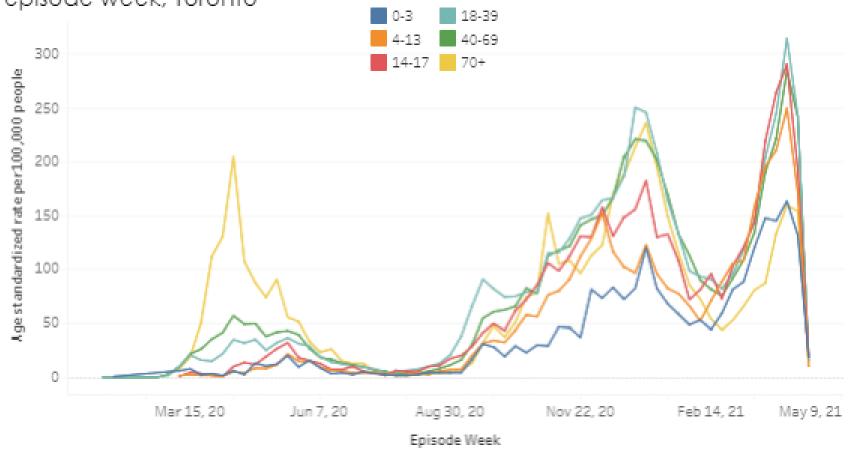
Cases in children are the highest in the pandemic so far

Figure 2. COVID-19 cases in school-aged children by age group and week, Toronto



Rates of cases in children are very high

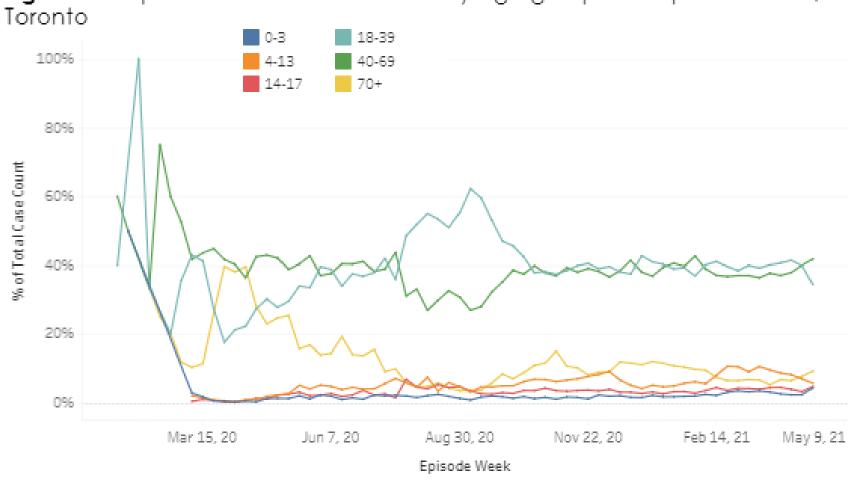
Figure 3. Case rate of COVID-19 per 100,000 population by age group and episode week, Toronto





Overall, while rates are high in children, proportion of cases is still highest in adults

Figure 4. Proportion of COVID-19 cases by age group and episode week,





School Data-Toronto COVID-19 Data

Active	Cumulative	Total Case
Outbreaks	Outbreaks	Counts
In Schools	In schools	In Schools
30	347	1738

- Average Cases per outbreak 4.6
- Average Outbreak duration= 20.5 days
- For number of cases in schools, please go to <u>the</u> <u>Ministry of Education</u> website
- For Toronto COVID Data, see the TPH website:
 Status of Cases in Toronto

Data extracted: April 19 at 2 PM



New TPH School/Parent Resource on Testing

COVID-19 TESTING

for School Students and Staff JK-12



When should you get tested?

If you have symptoms of COVID-19

Get tested if you have 1 or more new or worsening COVID-19 symptoms at an assessment centre or take-home test kit (if available at your school).

- on-site at the school, or through take-home test kits.
- If you have symptoms, get tested right away.

If school-wide testing is available and you have no symptoms

- · School-wide testing helps with a COVID-19 investigation at the school.
- Testing may be organized at the closest assessment centre, on-site testing at the school, or through take-home test kits.

If early identification testing is available and you have no symptoms

- · Testing may be arranged by the school and the provincial Ministry of Education for publicly-funded schools.
- · Testing is conducted at a "hub" school and is open to other schools.

What to expect when going for testing?

- · The student and/or parent/guardian may be asked to fill out a form with name, date of birth, etc.
- A health card is not needed to get tested.

March 24, 2021



TORONTO.CA/COVID19



COVID-19 TESTING

for School Students and Staff JK-12

Types of COVID-19 tests

PCR Test (Polymerase Chain Reaction Test)

- · Used for people with symptoms or who are close contacts of someone who has tested positive for COVID-19.
- Samples can be collected in different ways:
 - Nasopharyngeal (NP) swab: inserted deep into the nasal cavity.
 - Mouth/nose swab: inside of the mouth and front of the nose.
 - Saliva test: bottle is used to collect saliva. Used for children or when the other collection type is not possible or tolerated. It is only available at some testing centres.

Rapid Antigen Test

- · Used for people who do not have symptoms and who are not close contacts of someone with COVID-19.
- A swab is taken from the nose or throat.
- Results are returned quickly as fast as 15 minutes.
- If results are positive, a confirmation PCR test is needed.

Antibody Testing

- This is a blood test.
- Looks for protective antibodies from a previous COVID-19 infection.
- · Not widely available in Ontario.

What happens after testing?

For more information, please read, the Follow-up instructions for school children, staff and visitors tested for COVID-19.

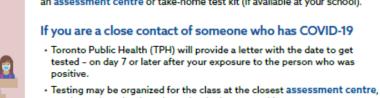
More information

For more information about COVID-19 testing, please visit COVID-19 Testing.

TORONTO.CA/COVID19







Hi Redd, this is Toronto Public
Health. We want to let you know
that you may have recently been
exposed to COVID-19. We'd like
you to complete an assessment
form to help slow the spread and
provide you with instructions.
The form will expire in 24hrs so
please complete it before then!
Your information is protected by
Ontario's privacy laws. By clicking
the secure link, you are confirming
it is OK to contact you via SMS.
To opt out, please text STOP.

COVID-19 TEXT NOTIFICATIONS

You may receive a text message from Toronto Public Health if you test positive or if you may have been exposed to COVID-19 in certain settings.

The message will include:

- Your name
- A secure link that is unique to you.

 The URL will include covid.ontario.ca

You will need to provide information to confirm your identity, but no financial information will ever be requested.





TPH Resource

Caring for a child who has COVID-19

(PDF)



April 9 202

If you are caring for a child who is self-isolating or has COVID-19, everyone in the home should practice <u>everyday prevention measures</u> such as washing hands often and covering your cough or sneeze. Anyone in your household who has COVID-19 should follow public health <u>guidance for people who have COVID-19</u>, which includes staying in a separate room away from others much as possible and not eating meals in the same room as others in the home.

If a child in your household is sick with COVID-19, has symptoms, or is self-isolating because they were a close contact of someone who tested positive, parents and caregivers should continue providing care and support for their daily needs, but should take additional steps to prevent further spread of COVID-19 in their home.

This includes:



Wearing a mask inside the home, if you are able to do so;



Isolating as much as possible from family members who are at high-risk of serious illness from COVID-19:



Increasing ventilation by opening up windows if it is safe to do so;



Disinfecting non-food items such as dishes and utensils;



As much as possible, stay six feet/two metres apart from all others in the household

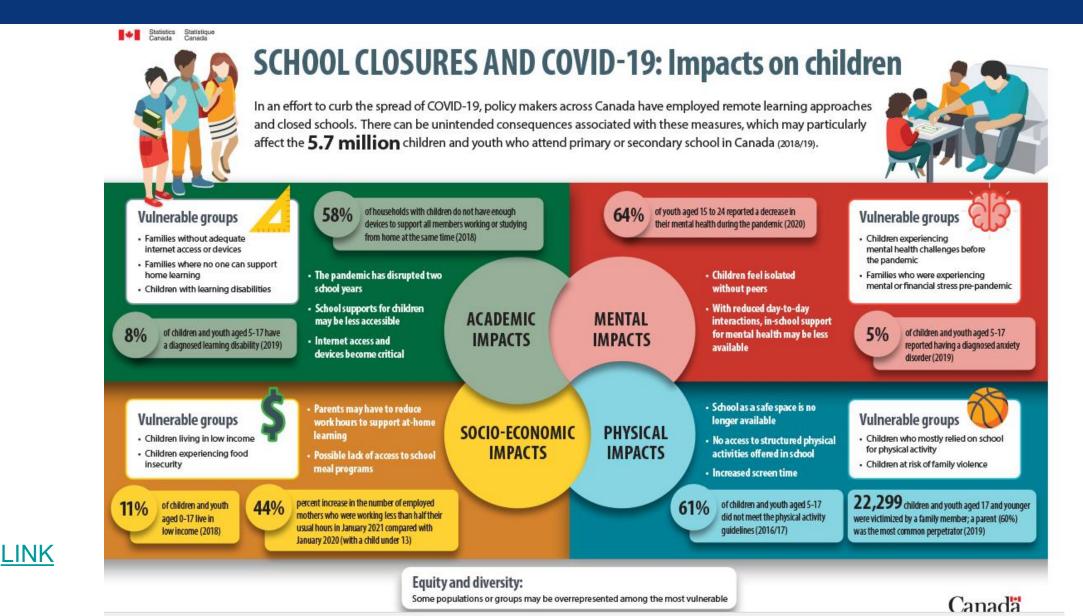
Caregivers and parents should also monitor themselves for symptoms of COVID-19, and get tested if they develop symptoms.

TORONTO.CA/COVID19





Opening schools is a priority



Vaccines can help

Vaccines used in Canada are safe and they work.



Vaccines help to protect us from serious illness

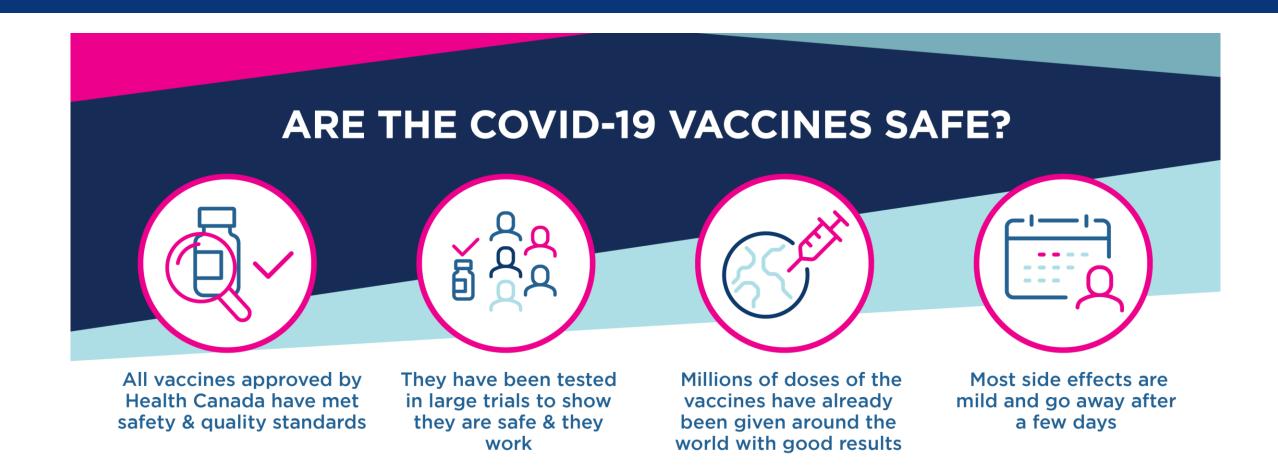


COVID-long...

- Some people with COVID-19 infection have symptoms months after the infection is gone.
- COVID-19 infection can cause damage to the lungs, heart or brain, thus increasing the risk of long-term health effects.
- Long term symptoms may include fatigue, shortness of breath, cough, joint pain, pounding heartbeat, trouble concentrating, skin rash or hair loss.



Facts about COVID-19 Vaccination



Getting vaccinated is a personal choice & is free



Vaccines are safe for most people

The vaccines are safe for most people including:



People with health conditions such as heart disease, asthma, diabetes, high blood pressure, or on blood thinners, with hepatitis B, C or HIV.

It is also safe for people with a weakened immune system, autoimmune disorder and pregnancy.

Over 894 million doses given

As of April 18, 2021:

- More than 894 million doses of COVID-19 vaccine have been given in 155 countries.
- 209 million doses have been administered in the US, using the same vaccines approved by Health Canada.
- Many more people have been vaccinated in real-world conditions compared to the clinical trials.



4 vaccines available in Canada







For 16-18 years & older, including seniors

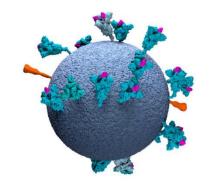
Real world effectiveness

2 dose schedule, except for Janssen

Name	Technology	Ages	Dose schedule	Availability
Pfizer BioNTech	mRNA	16 years +	2 doses	Available
Moderna	mRNA	18 years +	2 doses	Available
AstraZeneca/ COVISHIELD	viral vector	40 years +	2 doses	Available
Janssen	viral vector	18 years +	1 dose	Not yet available

How the COVID-19 vaccines work...

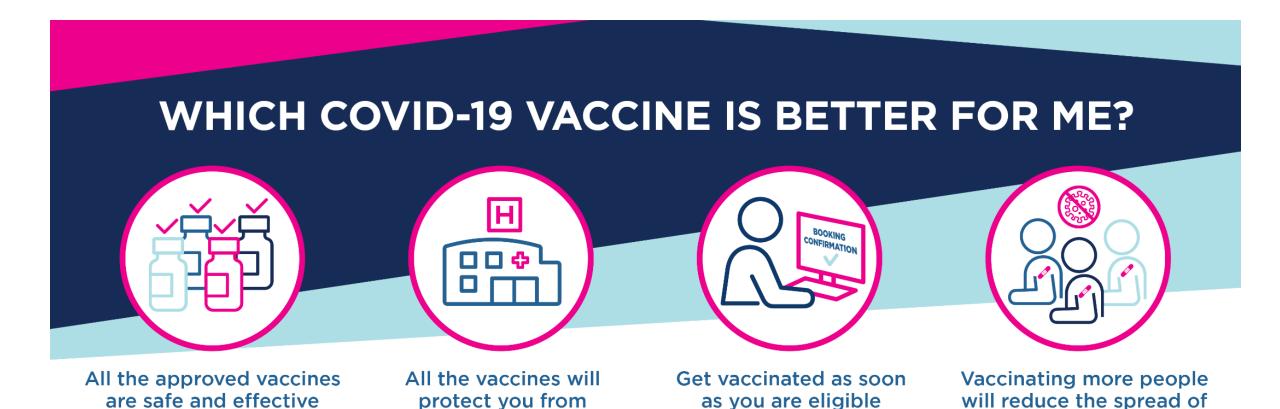
The COVID-19 vaccines works by telling our body to make *"spike proteins"*, a protein specifically found on the surface of the coronavirus. These proteins will stimulate our body to start making antibodies against COVID-19.



- Pfizer BioNTech and Moderna use mRNA technology.
 - mRNA research and technology has been around for over 10 years.
 - Breaks down and is removed from body in days
- AstraZeneca/COVISHIELD and Janssen use a viral vector.
 - A cold virus that is inactivated (adenovirus), has instructions to make the spike protein in it.



All COVID-19 vaccines protect from severe illness



serious illness

COVID-19



AstraZeneca/COVISHIELD vaccine

- Rare reports of serious blood clots and low blood platelet counts following vaccination (1 in 250,000 people vaccinated).
- Blood clots can occur in the brain, arms/legs or abdomen
- There have been reports of this rare event in Canada.
- With proper medical care, can be treated
- In Ontario, available for people 40+ (starting April 20)
- Informed consent: Benefits of vaccine outweigh potential risk.
- Watch for any side effects following vaccination on days 4 to 20. Seek immediate medical attention if you develop:
 - Trouble breathing, chest pain, abdominal pain that does not go away
 - Sudden severe headache, blurred vision, skin bruising or spots

What is in the vaccines?

- The vaccines provide instructions for our body to make antibodies
- Vaccine ingredients include lipids, salts, sugars and buffers
- Vaccines do not have eggs, gelatin (pork), latex, preservatives, antibiotics, formaldehyde, thimerosal, or aluminum
- There is no COVID-19 virus in the vaccine, so they can't give us COVID-19 infection



What if I have allergies?

I HAVE ALLERGIES. CAN I GET A COVID-19 VACCINE?



Allergies towards the COVID-19 vaccines are rare



Speak with your health care provider if you have questions



The vaccines do not contain eggs, gelatin, preservatives, latex or antibiotics



The vaccines are safe if you have food, antibiotic or environmental allergies



If you have allergies to any vaccine ingredient do not get the vaccine



Allergies to look for

Pfizer-BioNTech & Moderna: Polyethylene glycol, also found in:

- laxatives or products for colonoscopy, cough syrup, ultrasound gel
- cosmetics, skin creams,
- shampoos, toothpastes, hair products, contact lenses & solutions,
- some fast foods, baked goods

Moderna vaccine: Tromethamine, also found in:

contrast media for CT scans / MRI, some medications, skin creams

AstraZeneca/COVISHIELD & Janssen vaccines: Polysorbate 80, also found in:

- processed food, pickles, ice cream, whipped cream, gelatin, shortening, chewing gum,
- cosmetic, soaps, creams, body butter, bath gels, shampoo, mouthwash,
- eye drops, vitamin supplements, heart medication, contraceptives

Vaccines and pregnancy, breastfeeding

- The <u>Society of Obstetricians & Gynecologists of Canada</u> recommends that <u>pregnant and breastfeeding people should be offered</u> <u>vaccination</u> when they are eligible as long as they do not have any contraindications.
- Speak with your doctor or midwife for more information.
- COVID-19 can be serious in pregnancy.
- Review the risks and benefits based on your current situation (eg. cannot work from home, live in a crowded household).
- As a precaution, people who are planning a pregnancy can wait for a month after vaccination.

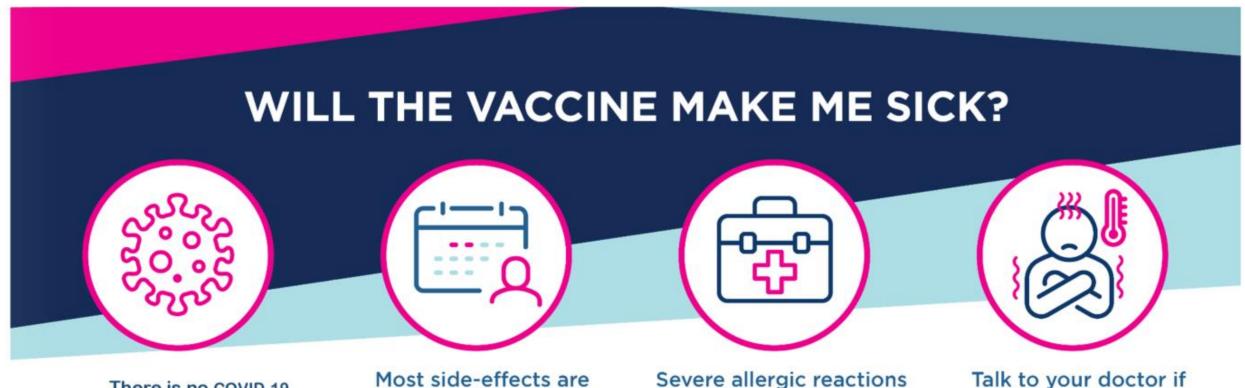
Vaccines and children

- Current vaccines available are for people age 16+
- Research is currently being done to assess COVID-19 vaccine safety and efficacy in younger children
- May be licensed in 12 to 15 years of age shortly

- The best way to protect children is:
 - to keep following public health guidelines, and
 - for adults to be vaccinated as soon as they can



Will it make me sick?



There is no COVID-19 virus in the vaccine that can make us sick

Most side-effects are mild & will go away after a few days

Severe allergic reactions are rare and are treated right away Talk to your doctor if your symptoms don't go away after 3 days



Vaccine side effects

- Most vaccine side effects are similar to the flu shot, lasting 1 to 3 days:
 - pain, redness & swelling where the needle is given
 - headache, feeling tired, muscle ache, joint pain
 - fever, chills, nausea or vomiting
 - swelling & tenderness under the armpit / enlarged lymph nodes
- Side effects are more common after the 2nd dose (Pfizer/Moderna)
- Stay at the clinic for 15 minutes after vaccination, so you can be monitored for any allergic reactions

I already had COVID-19...

Do I need the vaccine, if I already had COVID-19?

A: Yes. Based on the latest scientific evidence, natural immunity from COVID-19 may not last long. It is possible to get re-infected after a previous COVID-19 infection.

Learn more: toronto.ca/COVID19







Phase 2 of vaccine rollout

Projected Phase Two sequencing April to June - updated as of April 9

	Phase 2					
	April		May		June	
Older Adults	Over 75 Over 70 Over 65 Over 60					
Health Conditions	Individuals with Health Conditions					
	Highest Risk & Caregivers	High Risk 8 Caregi	C14/4/4/20	At-Risk Health Conditions		
Congregate Settings	High Risk Congregate Settings					
Hot Spots	COVID-19 Hot Spots Communities			* Peel and Toronto		
	Highest Risk Communities *	Remaining Commi	DOMEST DOMESTICATION			
Other priority*	Special Education Workers Education Workers in hot spots		*contact risk equivalent to HCW			
Cannot-Work-From-			Workers who cannot work from home			
Home			Gr	oup 1	Group 2	

Source: https://www.tvo.org/article/heres-ontarios-revised-phase-2-vaccination-plan



Hot Spot Communities Postal Codes (Toronto)

North York West	North York Central	Scarborough South	Scarborough North
M3J	M2J	M1B	M1S
M3K	M2M	M1C	M1T
M3L	M2R	M1E	M1V
M3M	M3A	M1G	M1W
M3N	M3C	M1H	
M6B	M3H	M1J	
M6L	M4A	M1K	East Toronto
M6M		M1M	M1L
M9L	North Toronto	M1P	M4H
M9M	M5N	M1R	
M9N	M6A	M1X	
M9P			North Etobicoke Malton
	Mid-East Toronto	South Etobicoke	West Woodbridge
West Toronto	M4X	M9A	M9R
M6K	M5A	M9B	M9V
M6N	M5B	M9C	M9W
M8V			

Source: https://assets.documentcloud.org/documents/20586240/20210406_technical-briefing-final-eng.pdf



Ways to get vaccinated

Red & white or no health card?
Register using telephone #

City clinics https://covid-

19.ontario.ca/book-

vaccine/

Or call: 1-888-999-6488

(TTY 1-866-797-0007)

Hospital clinics

www.vaccineto.ca

Or call: 1-888-385-

1910

Visit https://covid-19.ontario.ca/book-vaccine/ to find a **pharmacy**Or call your local pharmacy / website

Mobile & pop-up clinics

Host organizations will promote clinics directly to the target community









Interactive map available online:

toronto.ca/covid19vaccinemap

Assistance getting to vaccine clinics

- For those with no other means to get to their vaccination appointment
 - 1. Toronto Ride 416-481-5250; www.torontoride.ca
 - 2. iRide 1-844-474-3301; www.circleofcare.com/vaccinerides;
 - 3. Scarborough Ride 416 736-9372; www.schcontario.ca/schc-scarborough-ride--transportation--hemodialysis.html
 - 4. Uber Canada
 - 5. TTC

Vouchers distributed through a network of partner community agencies

More information: https://www.toronto.ca/home/covid-19/covid-19-protect-yourself-others/covid-19-vaccines/covid-19-how-to-get-vaccinated/?accordion=transportation-to-clinics



strong protection

Second dose extended, but still necessary

WHY IS THE 2ND VACCINE DOSE **EXTENDED TO 4 MONTHS?** Data shows the **Extending the** Vaccinating more Vaccines can provide first dose provides 2nd dose allows us to people will reduce the protection against spread of COVID-19 **COVID-19 variants**

Protection is 80% after 1 dose of mRNA vaccine and 90% after the 2nd dose.

vaccinate more people

Ref - CDC: https://www.cdc.gov/mmwr/volumes/70/wr/mm7013e3.htm?s cid=mm7013e3

How you can help....

- Share your experience with others
- Be positive and respectful, even if they refuse vaccination right now
- Listen to their concerns
- Emphasize the facts
- Balance information on risk and benefits
- Focus on burden of illness or disease
- Know where to get information, if you are not sure of the answers
- Maintain trust so they can approach you again if they have more questions later

And, get vaccinated when it is offered to you

Why it matters

TORONTO STAR (

They got their COVID-19 vaccines. Now, in their own languages, they want to tell you how it felt — and why it matters



Ron McLester Oneida / English VP, Truth and Reconciliaton at Algonquin College



Onion Ubaldo Tagalog
Doctor



Hang Ying Wong
LTC resident



Kwasi Adu-Basowah English Registered Nurse



Joe Savikataaq Premier of Nunavut



Vivek Govardhanam Doctor



Shahid Husain Infectious Diseases Doctor



https://www.thestar.com/news/canada/2021/03/16/they-got-their-covid-19-vaccines-now-in-their-own-languages-they-want-to-tell-you-how-it-felt-and-why-it-matters.html?fbclid=lwAR3uPzyb3xpC3VwoOFGOtLpew_gOrW2Fe6jL6WkT-yQO2nEnm6Xnv-tiOUw



Don't spread misinformation

DON'T PLAY

THE TELEPHONE GAME

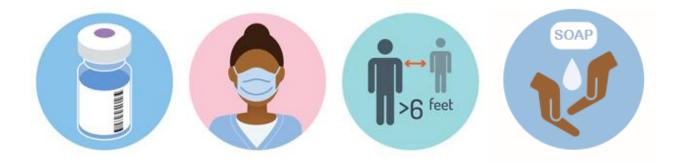
STOP THE SPREAD OF COVID-19 MISINFORMATION





Public Health Measures

Vaccines are **one** of many tools we have to fight the COVID-19 pandemic. It will take time before we have enough vaccine to get everyone vaccinated.



For now, we still need to wear a mask, keep our distance and wash our hands frequently.

More Than A Disease



Mental Health Support

Mental Health Support during COVID-19

It's okay not to feel okay. Many people may feel sad, worried, scared, confused or angry during COVID-19. These are normal and common responses to unexpected or stressful situations.



Stay connected. Play a virtual game, check in on a neighbour, have a video conference.



Be active & take care of yourself. Excercise, eat well, get enough sleep.



Take time to engage virtually or by phone with friends, family or loved ones.



Learn something new. Try a new hobby or take an online course.



Help someone else. Doing good can feel good.



Reach out for help. Talk to someone you trust or seek professional support.

You are not alone

You are not alone. Support is available.

Call 211 if you are having a hard time. Through 211 anyone be connected to free mental health supports, including including kids, seniors, racialized, Indigenous, Black and LGBTQ2S communities.

Language interpretation is available if you don't speak English.



Be part of something greater

Be part of something greater. Your shot protects others too!



Protected together.

TOGETHER, WE CAN GET OUT OF THE 3RD WAVE



Take care of your physical & mental wellbeing.



Stay home except for essential reasons & exercise.



Gather only with members of your household.



Keep your distance, wear your mask, wash your hands.



Get the COVID-19 vaccine when it is available to you.



Questions?





Toronto Public Health COVID-19 Hotline

Have questions?

Call Toronto Public Health

416-338-7600

8:30 am to 8:00 pm

Interpreter service is available in many languages.

TTY 416-392-0658

More information about COVID-19 & vaccines: toronto.ca/covid19

http://www.toronto.ca/COVID19Schoolinfo

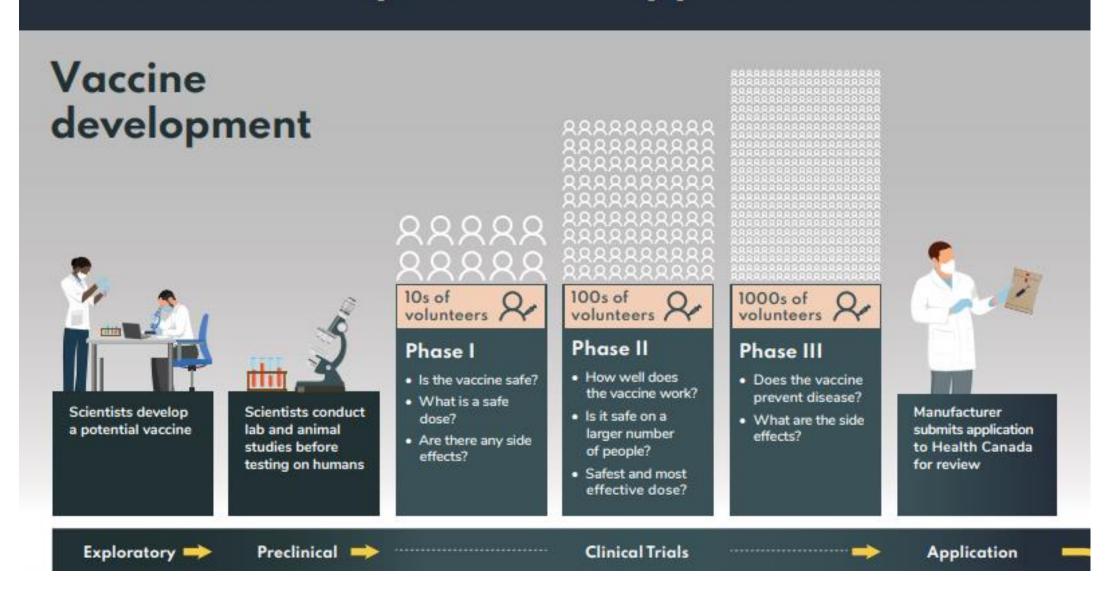


Supplemental Slides

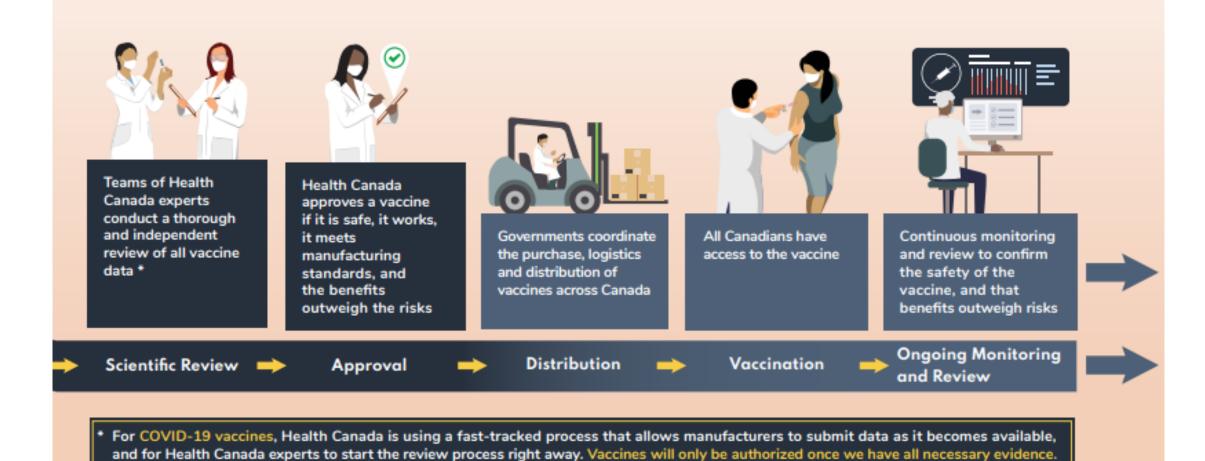
How vaccines were developed so fast?

- Scientists & researchers around the world sharing data
- Building on existing research & technology
- Large scale funding allowed for multiple testing and large clinical trials
- Over 280 vaccine products were tested
- All vaccines approved by Health Canada still had to meet all safety, efficacy and quality standards

Vaccine development and approval in Canada



Review and approval of vaccines



Source: Government of Canada. Vaccine development and approval in Canada. Dec 08 2020.

Vaccine ingredients

Pfizer-BioNTech	Moderna	AstraZeneca / COVISHIELD	Janssen
active ingredient: mRNA	active ingredient: mRNA	 active ingredient: ChAdOx1-S recombinant 	 active ingredient: Ad26.COV2.S recombinant
lipids, cholesterolpolyethylene glycol [PEG-2000]	lipids, cholesterolpolyethylene glycol [PEG-2000]	 amino acid: L-Histidine, L-Histidine hydrochloride monohydrate emulsifier: polysorbate 80 	 emulsifier: 2- hydroxypropyl-β- cyclodextrin, polysorbate- 80
 salts: potassium chloride, monobasic potassium phosphate, sodium chloride, dibasic sodium phosphate dehydrate sugars: sucrose 	 salts: acetic acid, sodium acetate, sugars: sucrose buffers: tromethamin, tromethamin hydrocholoride 	 salts: sodium chloride, disodium edetate dihydrate (EDTA), magnesium chloride hexahydrate sugars: sucrose alcohol: ethanol 	 buffers: citric acid monohydrate, hydrochloric acid, sodium hydroxide, trisodium citrate dehydrate salts: sodium chloride alcohol: ethanol



Vaccines offer protection against COVID-19 variants

VACCINES OFFER PROTECTION AGAINST NEW VARIANTS







Protection offered by vaccines is important as variants can spread more easily



Booster doses may be used in the future for specific variants

Vaccines have been used successfully in countries with variants

TORONTO Public Health



Mass immunization clinic locations



- North Toronto Memorial Community Centre (200 Eglinton Avenue West)
- Mitchell Field Community Centre (89 Church Avenue)
- The Hangar (75 Carl Hall Road)
- Metro Toronto Convention Centre (255 Front Street West)
- Scarborough Town Centre (300 Borough Drive)
- Carmine Stefano Community Centre (3100 Weston Road)
- Toronto Congress Centre (650 Dixon Road)
- Malvern Community Recreation Centre (30 Sewells Road)
- Cloverdale Mall (250 The East Mall)

Interactive map available online:

toronto.ca/covid19vaccinemap



Community Immunity





Herd immunity protects our community from infection when many people are vaccinated.



It is another way to protect others by reducing COVID-19 spread.



It also protects people who can't get vaccinated like newborn babies.



Until we have herd immunity, we need to wear our mask & keep a distance from people we don't live with.



What to expect after receiving your 1st dose of the COVID-19 vaccine





You may experience mild side effects that go away in 1-3 days



It takes 2 weeks after each dose for the vaccine to take effect



The clinic where you received your 1st dose will make your 2nd dose appointment



Keep your distance, wear a mask and wash your hands until more people are vaccinated



Need help getting to a city-run clinic for your vaccination appointment?



If you cannot drive yourself or take transit, ask family or friends



If ride sharing, sit in the back seat with the windows open & wear a mask



If you cannot access or afford transportation you may be eligible for supports



Plan ahead - find more information, maps and pictures of city-run clinics at toronto.ca/COVID19