

COVID-19
Community of
Practice for Ontario
Family Physicians

May 27, 2022

Dr. Jeff Kwong
Dr. Gerald Evans
Dr. Daniel Warshafsky



Vaccine effectiveness, Monkeypox, and more



Family & Community Medicine
UNIVERSITY OF TORONTO

Ontario College of
Family Physicians



Vaccine effectiveness, Monkeypox, and more

Moderator: Dr. Tara Kiran

Fidani Chair, Improvement and Innovation

Department of Family and Community Medicine, University of Toronto

Panelists:

- Dr. Jeff Kwong, Toronto, ON
- Dr. Gerald Evans, Kingston, ON
- Dr. Daniel Warshafsky, Toronto, ON

The COVID-19 Community of Practice for Ontario Family Physicians is a one-credit-per-hour Group Learning program that has been certified for up to a total of 32 credits.

Land Acknowledgement

We acknowledge that the lands on which we are hosting this meeting include the traditional territories of many nations.

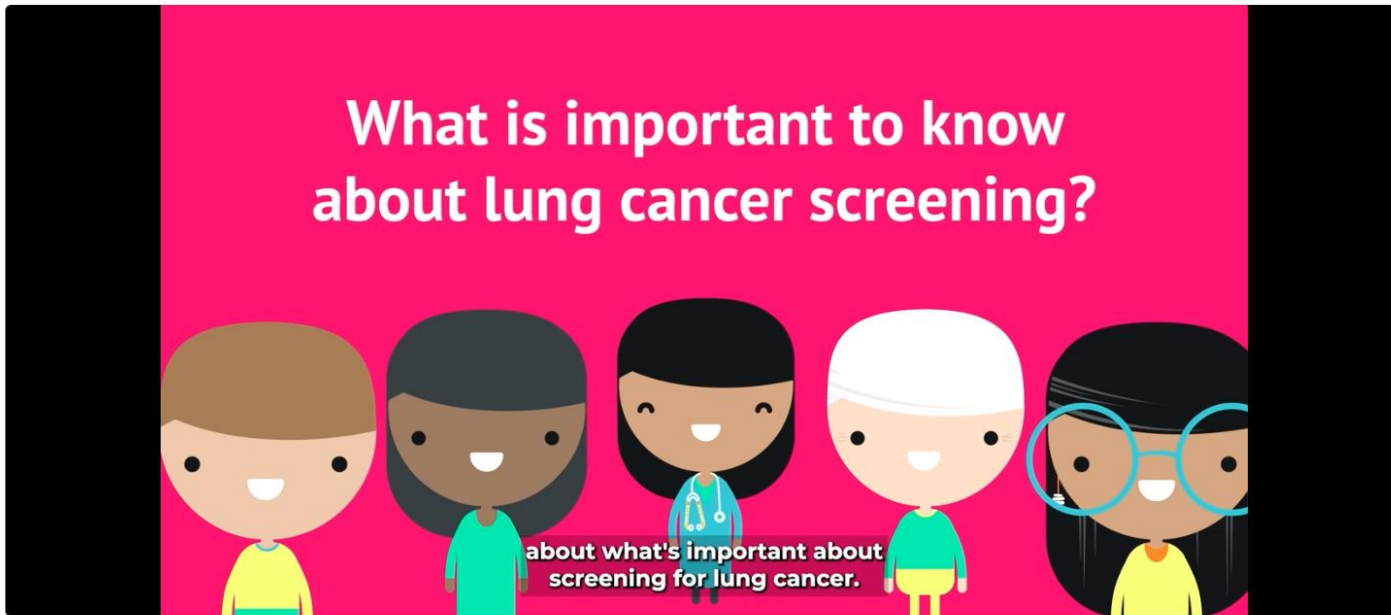
The OCFP and DFCM recognize that the many injustices experienced by the Indigenous Peoples of what we now call Canada continue to affect their health and well-being. The OCFP and DFCM respect that Indigenous people have rich cultural and traditional practices that have been known to improve health outcomes.

I invite all of us to reflect on the territories you are calling in from as we commit ourselves to gaining knowledge; forging a new, culturally safe relationship; and contributing to reconciliation.

Sudbury



Sudbury, Ont., doctors' animated videos encourage early cancer screening for Indigenous adults



**Dr. Erin Peltier, Family Physician,
Regional Indigenous Cancer Lead,
Northeast Regional Cancer Program**



<https://hsnsudbury.ca/en/Services-and-Specialties/Cancer-Care/Cancer-Screening/Conversations-about-Cancer-for-Indigenous-People>

Changing the way we work

A community of practice for family physicians during COVID-19

At the conclusion of this series participants will be able to:

- Identify the current best practices for delivery of primary care within the context of COVID-19 and how to incorporate into practice.
- Describe point-of-care resources and tools available to guide decision making and plan of care.
- Connect with a community of family physicians to identify practical solutions for their primary care practice under current conditions.

Disclosure of Financial Support

This CPD program has received in-kind support from the Ontario College of Family Physicians and the Department of Family and Community Medicine, University of Toronto in the form of logistical and promotional support.

Potential for conflict(s) of interest:

N/A

Mitigating Potential Bias

- The Scientific Planning Committee has full control over the choice of topics/speakers.
- Content has been developed according to the standards and expectations of the Mainpro+ certification program.
- The program content was reviewed by a three-member national/scientific planning committee.

Planning Committee: Dr. Tara Kiran (DFCM), Dr. Elizabeth Muggah (OCFP); Kimberly Moran (OCFP) and Mina Viscardi-Johnson (OCFP)

Previous webinars & related resources:

<https://www.dfcm.utoronto.ca/covid-19-community-practice/past-sessions>



Dr. Jeff Kwong – Panelist

Twitter: @DrJeffKwong

Epidemiologist, Family Physician, Toronto Western Family Health Team



Dr. Gerald Evans – Panelist

Infectious Disease Specialist and Chair of the Division of Infectious Diseases, Queen's University



Dr. Dan Warshafsky – Panelist

Senior Medical Consultant at the Office of the Chief Medical Officer of Health



Dr. David Kaplan – Co-Host

Twitter: @davidkaplanmd

Family Physician, North York Family Health Team and Vice President, Quality, Ontario Health



Dr. Liz Muggah – Co-Host

Twitter: @OCFP_President

OCFP President, Family Physician, Bruyère Family Health Team

Speaker Disclosure

- Faculty Name: **Dr. Jeff Kwong**
- Relationships with financial sponsors: ICES; Public Health Ontario; DFCM, University of Toronto;
 - Grants/Research Support: CIHR; Health Canada; US Centres for Disease Control and Prevention
 - Speakers Bureau/Honoraria: Ontario College of Family Physicians
 - Others: N/A

- Faculty Name: **Dr. Gerald Evans**
- Relationships with financial sponsors: N/A
 - Grants/Research Support: N/A
 - Speakers Bureau/Honoraria: N/A
 - Others: Ontario Covid-19 Science Advisory Table

- Faculty Name: **Dr. Daniel Warshafsky**
- Relationships with financial sponsors: N/A
 - Grants/Research Support: N/A
 - Speakers Bureau/Honoraria: N/A
 - Others: N/A

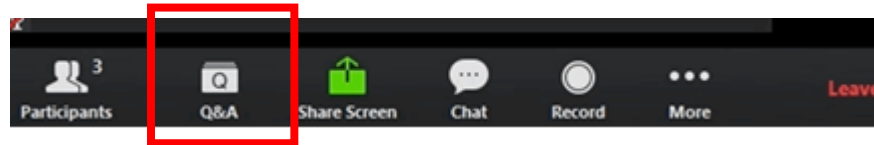
Speaker Disclosure

- Faculty Name: **Dr. David Kaplan**
- Relationships with financial sponsors:
 - Grants/Research Support: N/A
 - Speakers Bureau/Honoraria: Ontario College of Family Physicians
 - Others: Ontario Health (employee)
- Faculty Name: **Dr. Liz Muggah**
- Relationships with financial sponsors:
 - Grants/Research Support: N/A
 - Speakers Bureau/Honoraria: Ontario College of Family Physicians
 - Others: N/A
- Faculty Name: **Dr. Tara Kiran**
- Relationships with financial sponsors:
 - Grants/Research Support: St. Michael's Hospital, University of Toronto, Health Quality Ontario, Canadian Institute for Health Research, Ontario Ministry of Health, Gilead Sciences Inc (re: Hepatitis C), Staples Canada (re: Patient Engagement)
 - Speakers Bureau/Honoraria: Ontario College of Family Physicians, Ontario Medical Association, Doctors of BC, Nova Scotia Health Authority, Osgoode Hall Law School, Centre for Quality Improvement and Patient Safety, Vancouver Physician Staff Association, University of Ottawa, Ontario Health, Canadian Medical Association

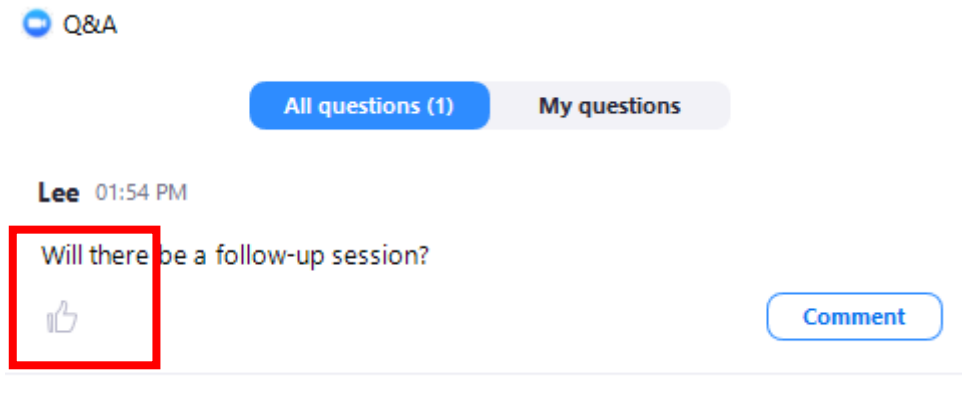
Outline for Today

How to Participate

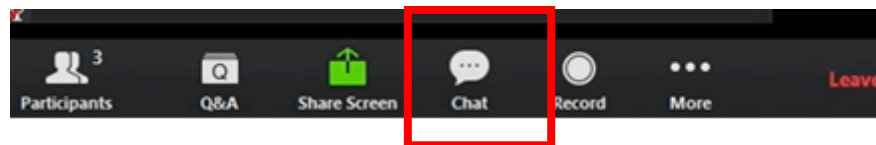
- All questions should be asked using the Q&A function at the bottom of your screen.



- Press the thumbs up button to upvote another guests questions. Upvote a question if you want to ask a similar question or want to see a guest's question go to the top and catch the panels attention.



- Please use the chat box for networking purposes only.





Dr. Jeff Kwong – Panelist

Twitter: @DrJeffKwong

Epidemiologist, Family Physician, Toronto Western Family Health Team



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Infectious Disease Specialist and Chair of the Division of Infectious Diseases, Queen's University



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VE in adolescents and children

Jeff Kwong

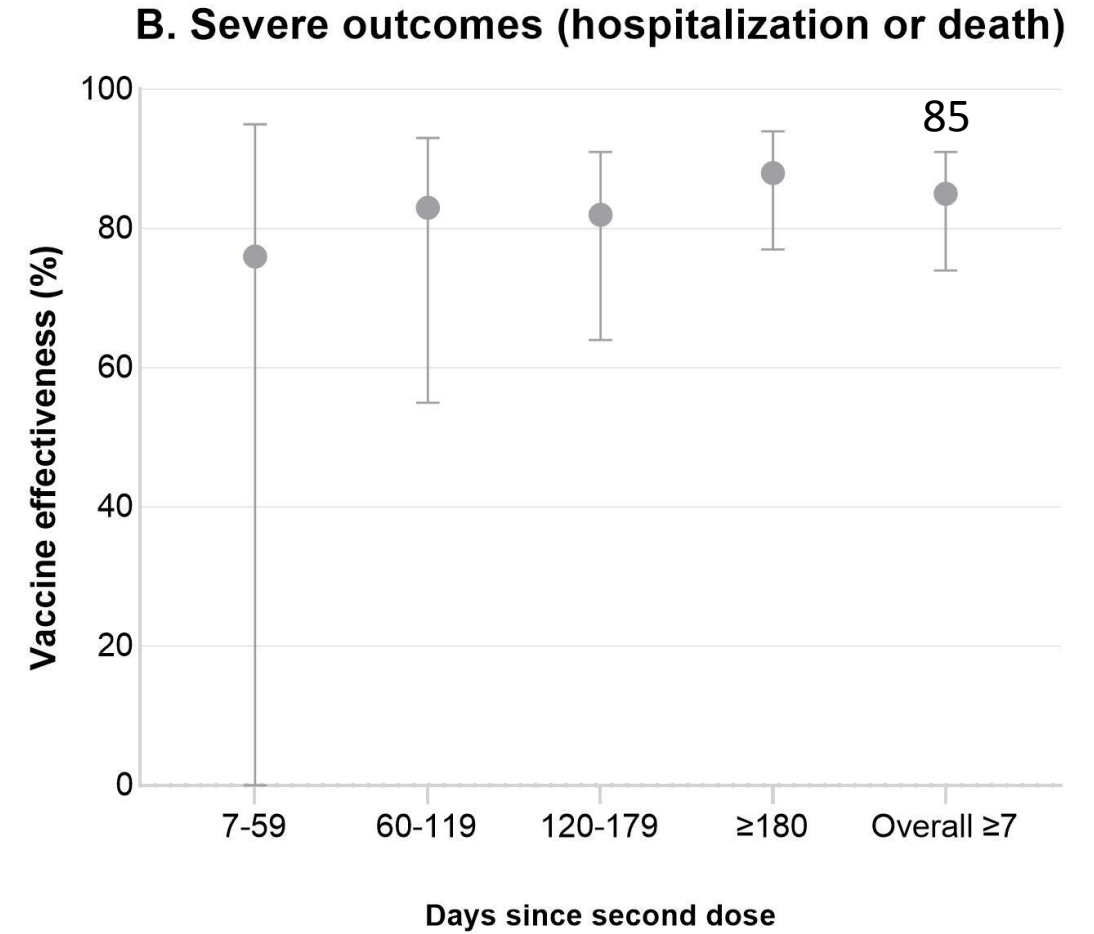
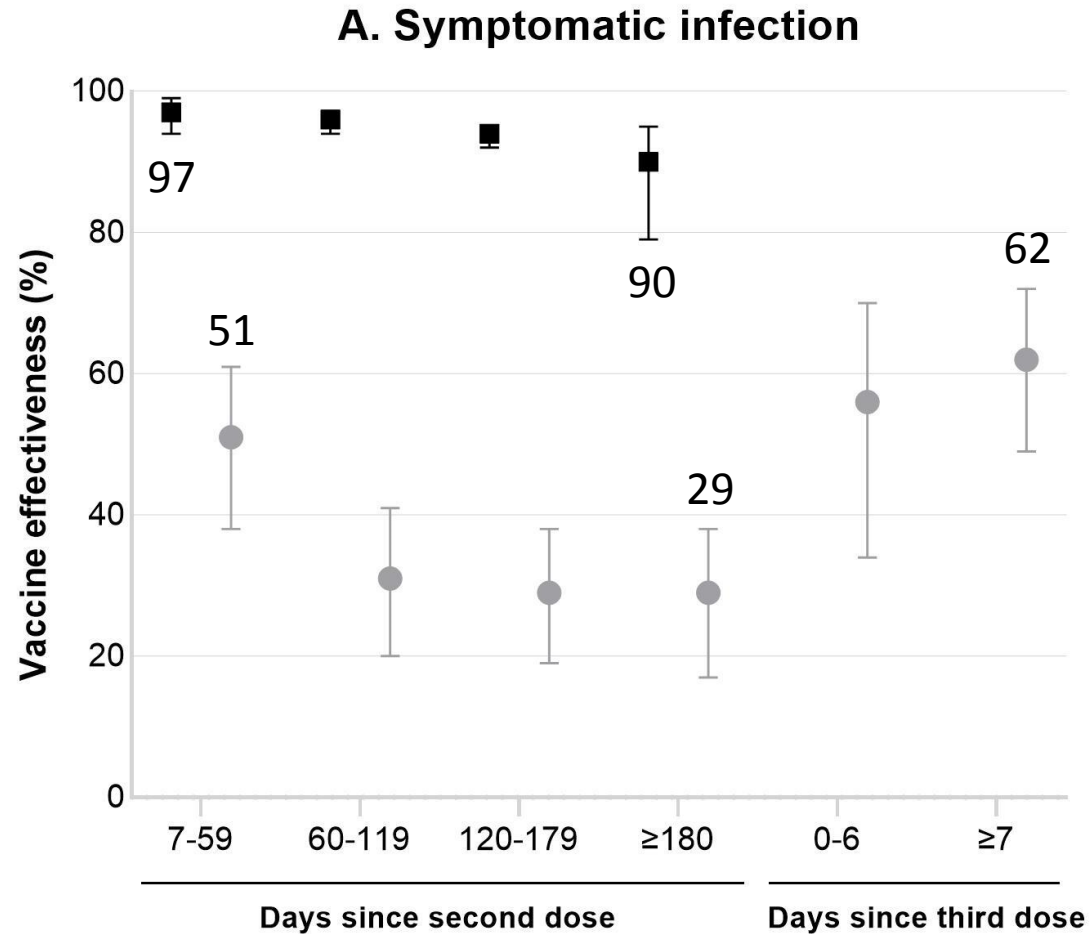
May 27, 2022

OCFP-DFCM CoP



Data
Discovery
Better Health

VE in adolescents (12-17) (Nov 22, 2021 to Mar 6, 2022)



■ Delta ● Omicron

Large Omicron waves in 2022, especially for those aged 5-11 years

Figure 1. Confirmed cases of COVID-19 by public health unit reported week: Ontario

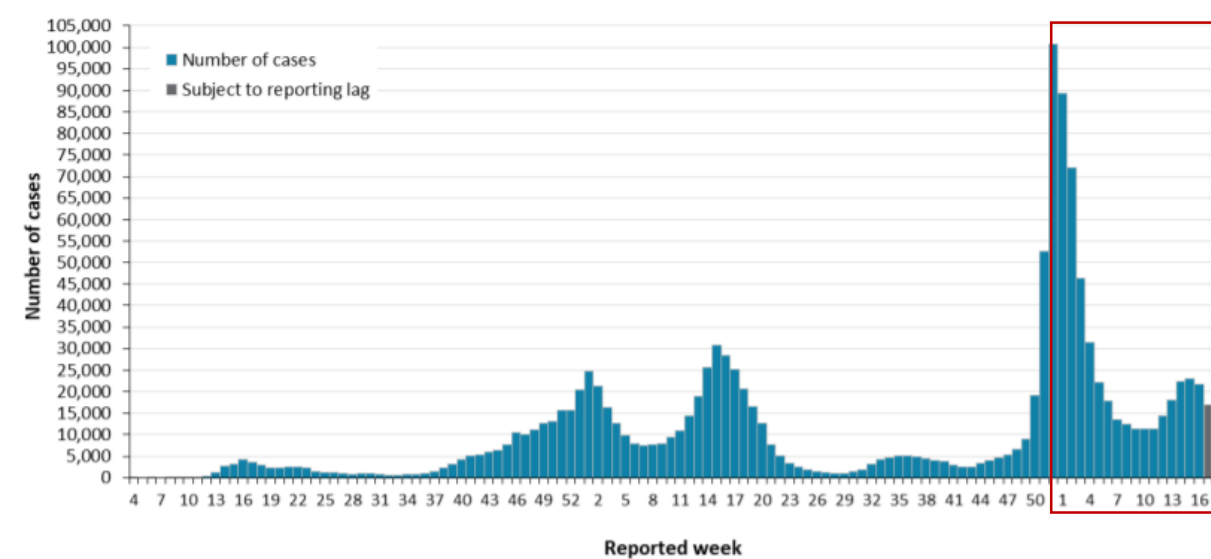
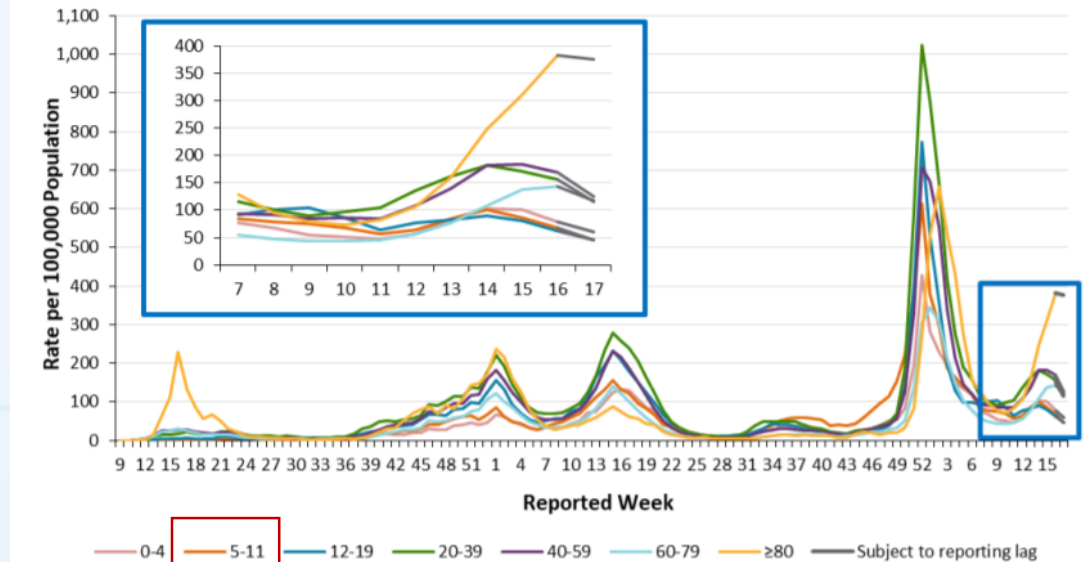
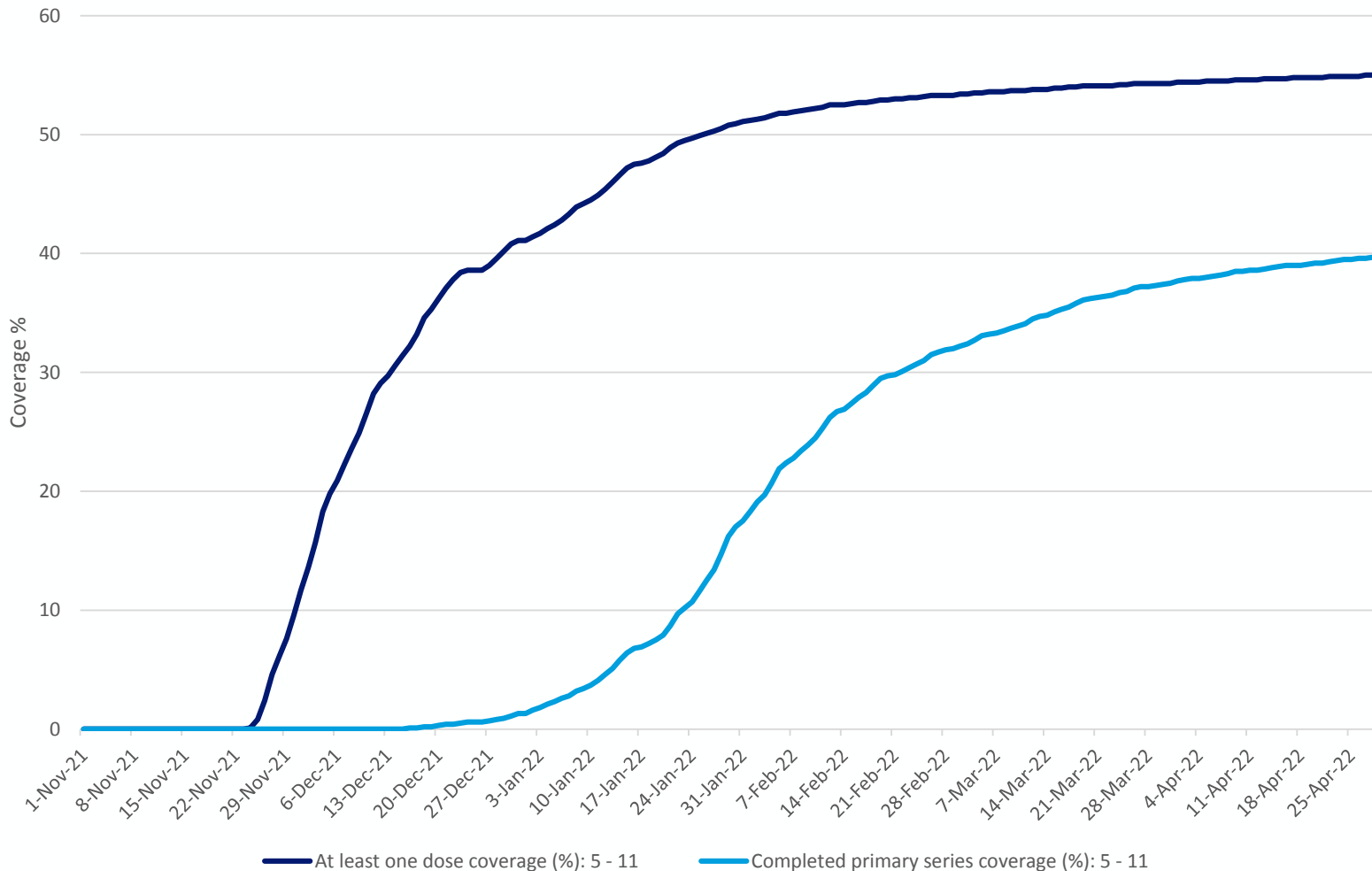


Figure 2a. Rate of confirmed cases of COVID-19 per 100,000 population by age group and public health unit reported week: Ontario



Vaccine coverage, 5-11 years in ON



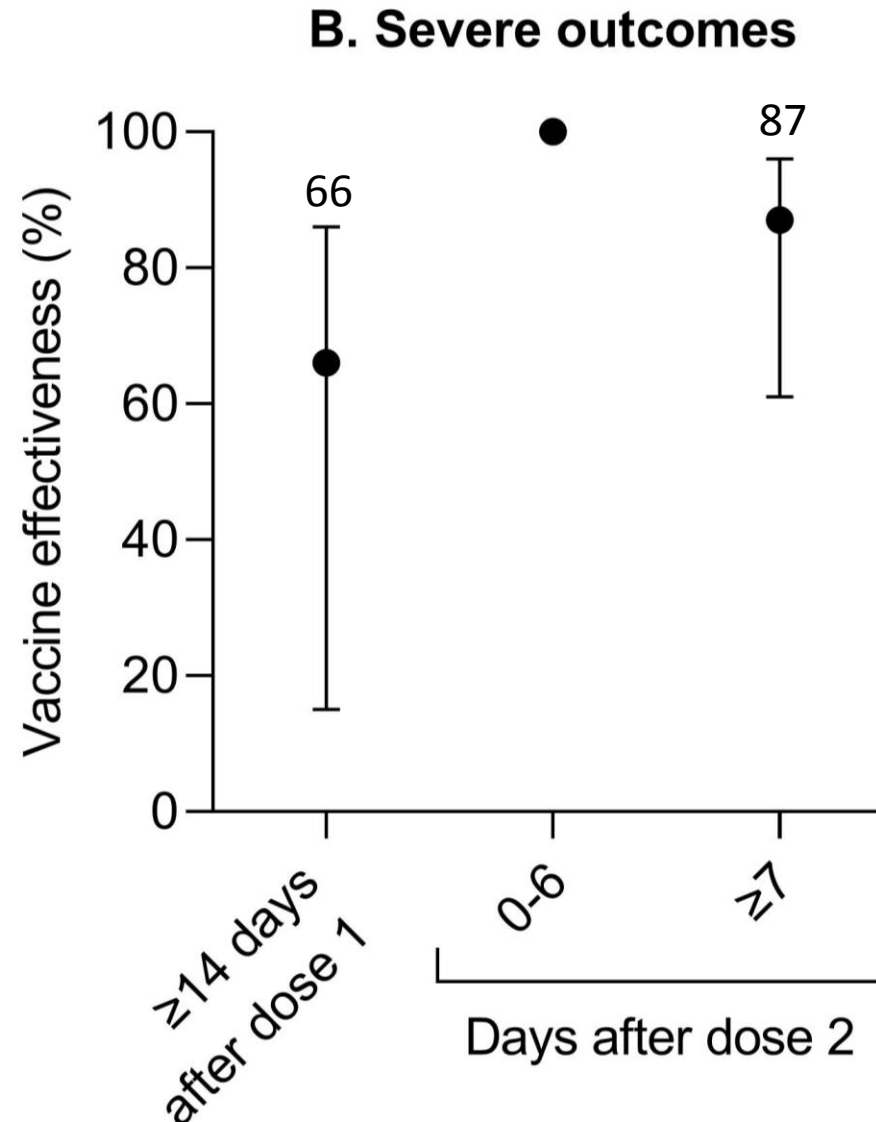
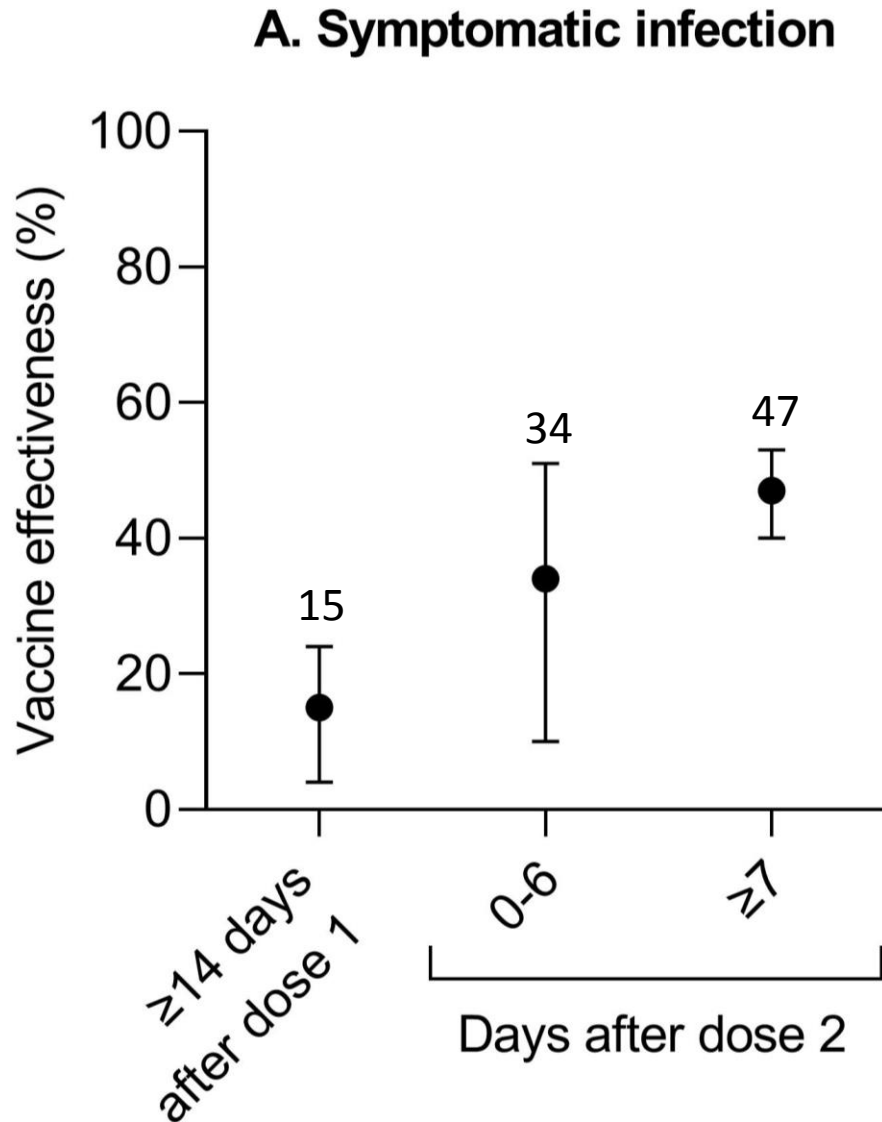
66% had a dosing interval of ≥ 56 days.

Only 4% had a dosing interval of 15-27 days



VE in children (5-11) (Jan 2 to Apr 30, 2022)

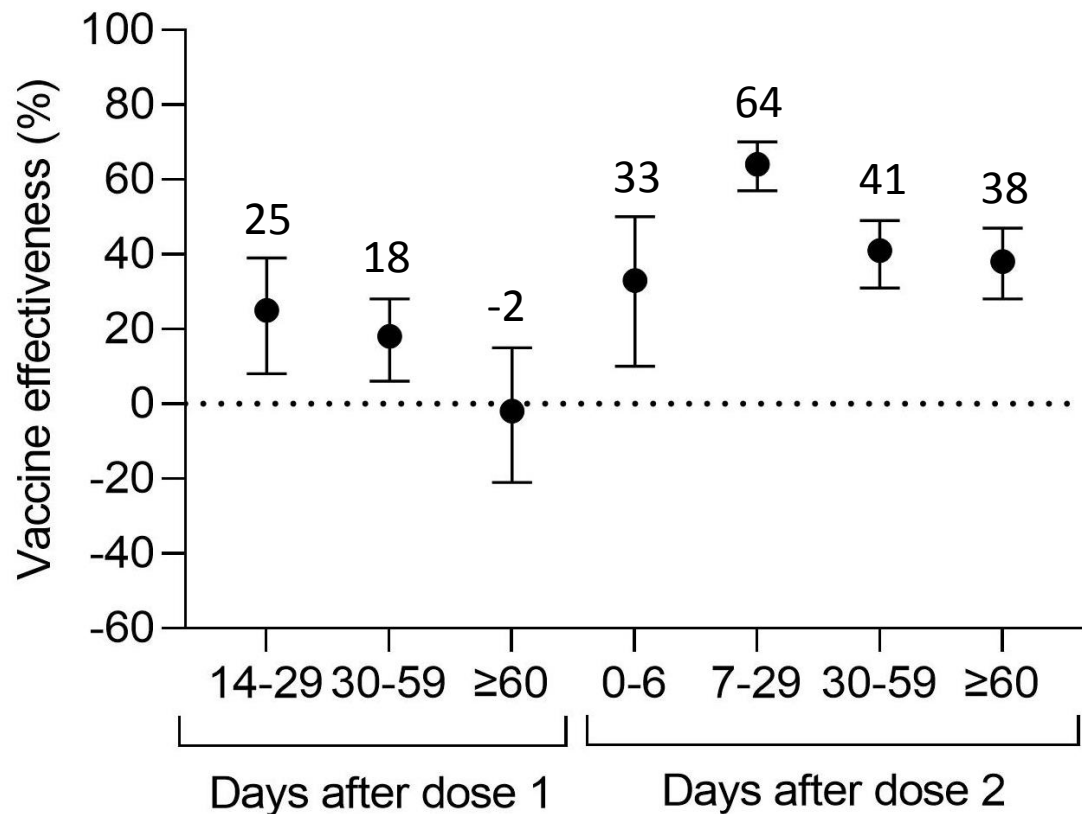
Research
in progress



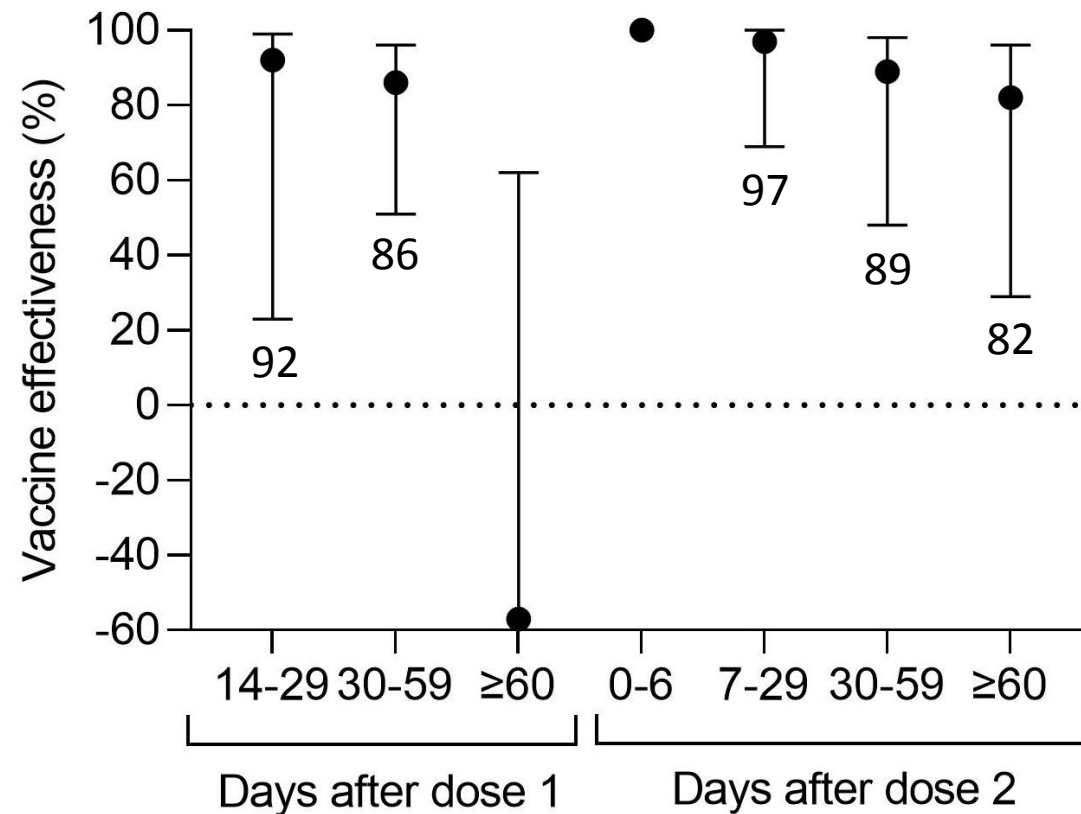
VE wanes over time

Research
in progress

A. Symptomatic infection

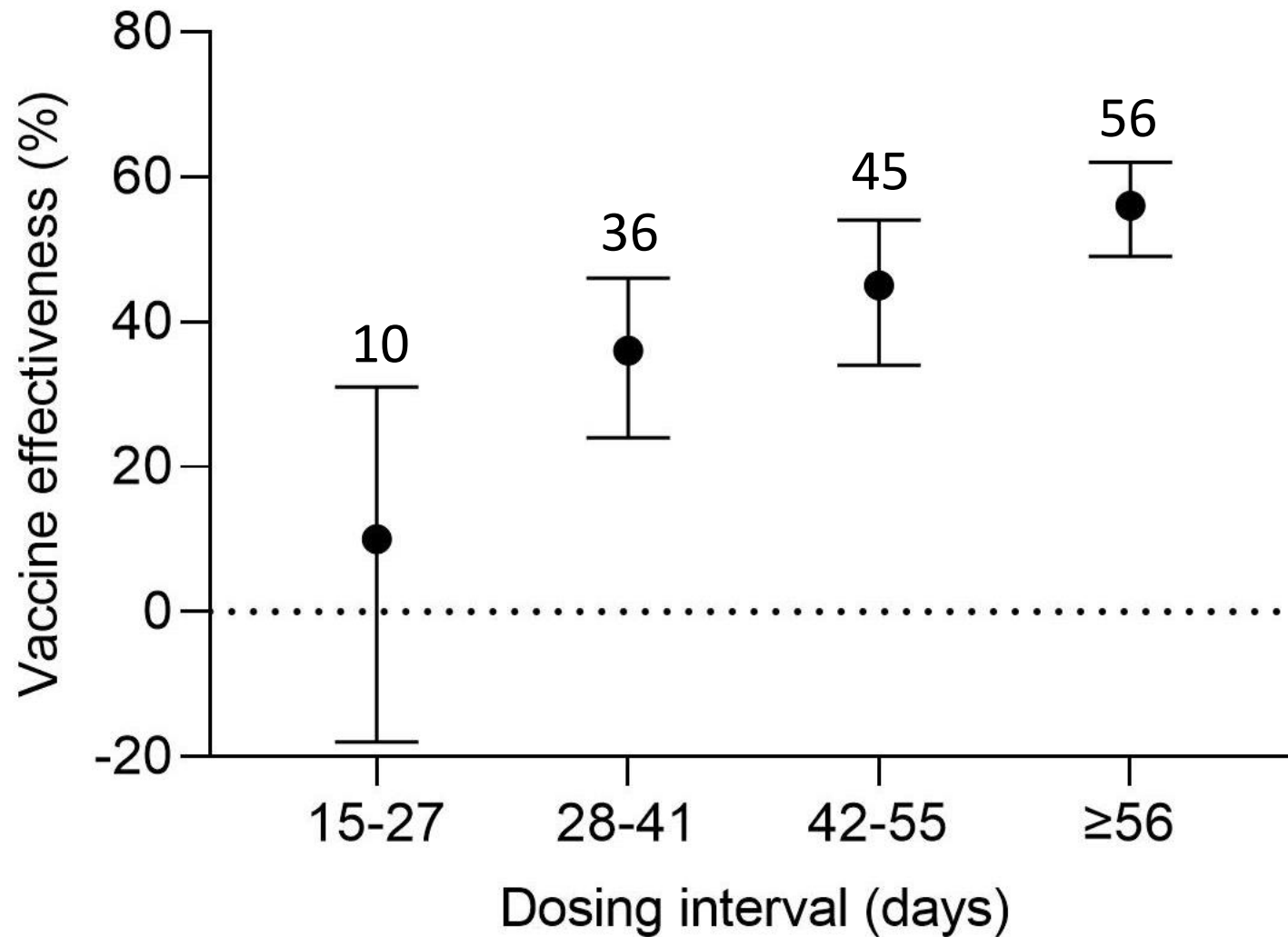


B. Severe outcomes



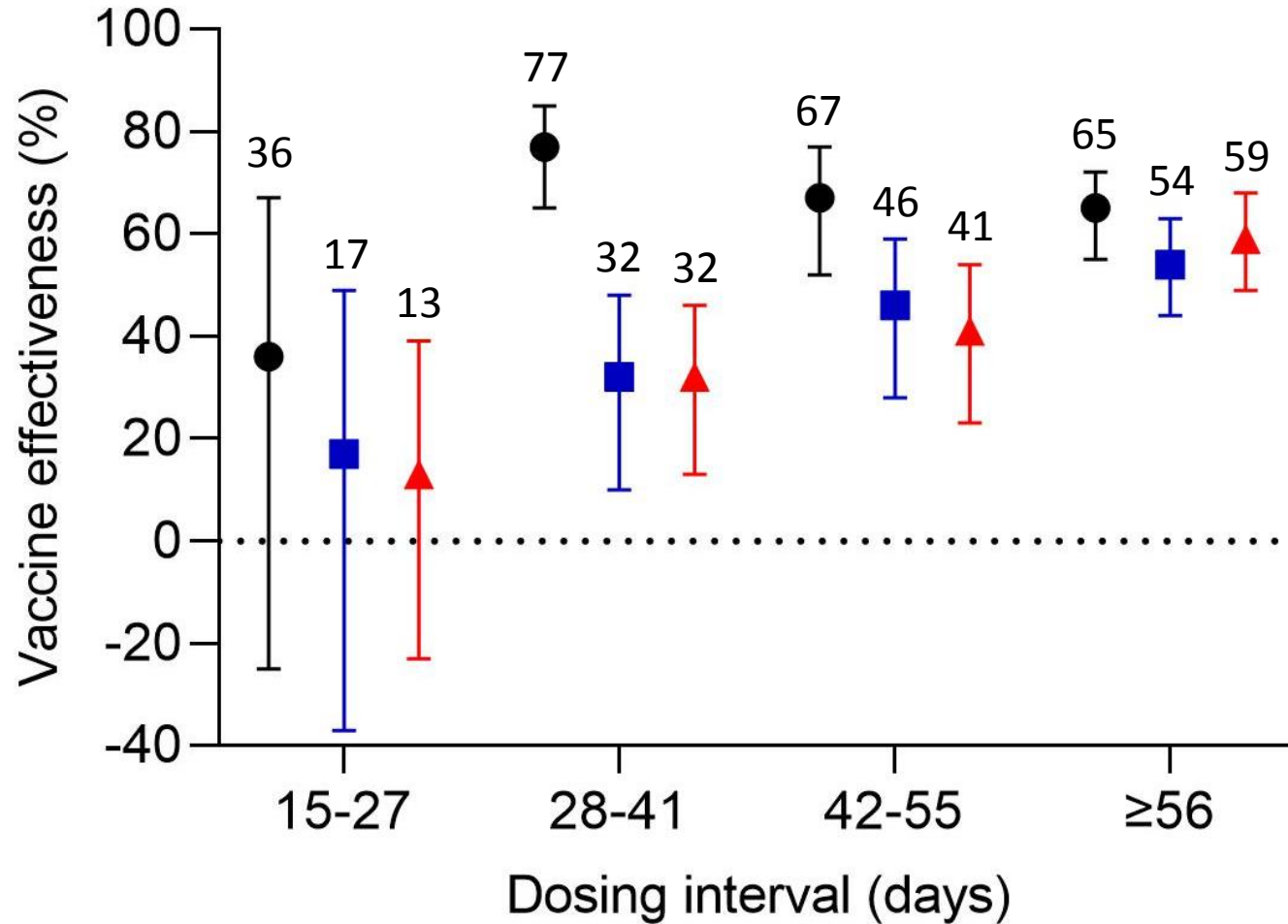
VE varies by dosing interval

Research
in progress



VE over time, by dosing interval

Research
in progress



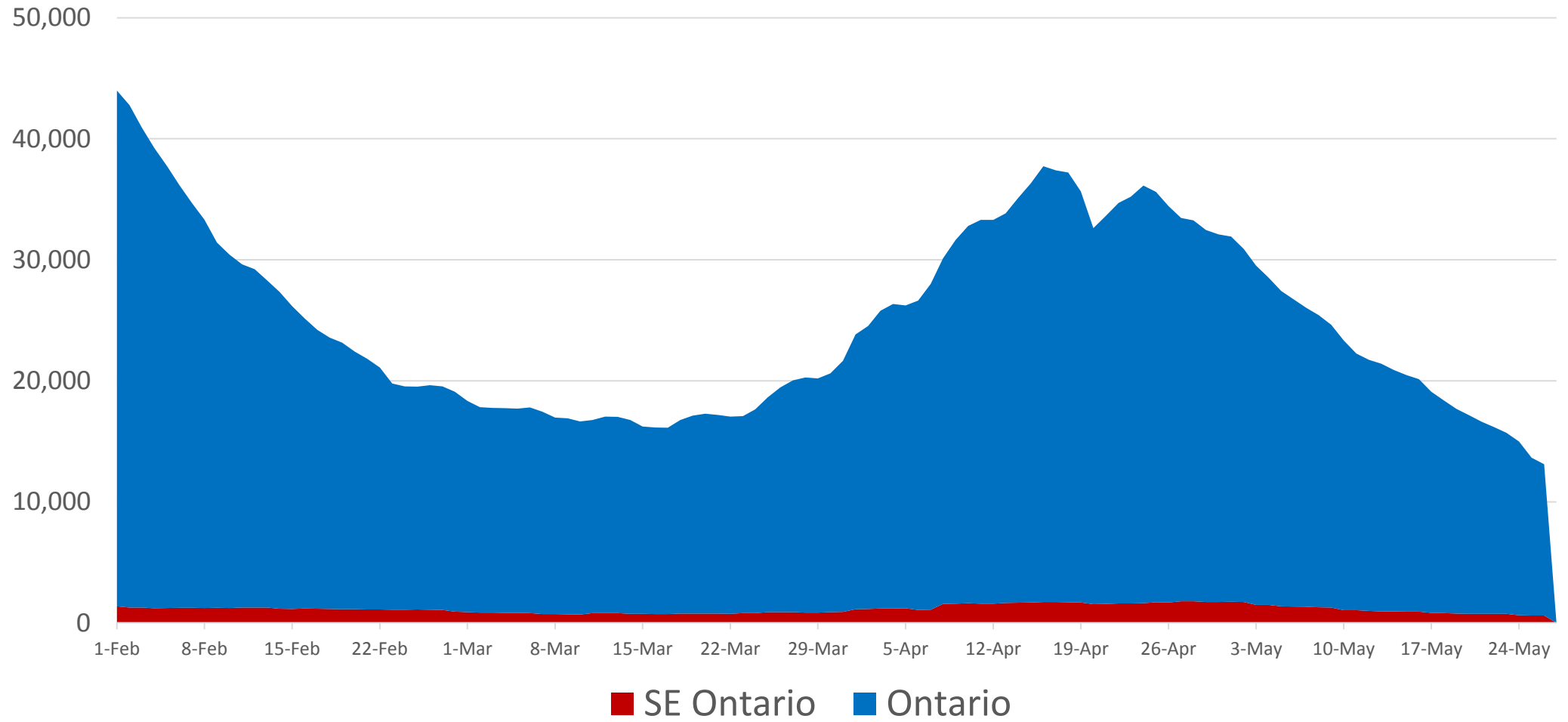
Time since dose 2: ● 7-29 days ■ 30-59 days ▲ 60 days



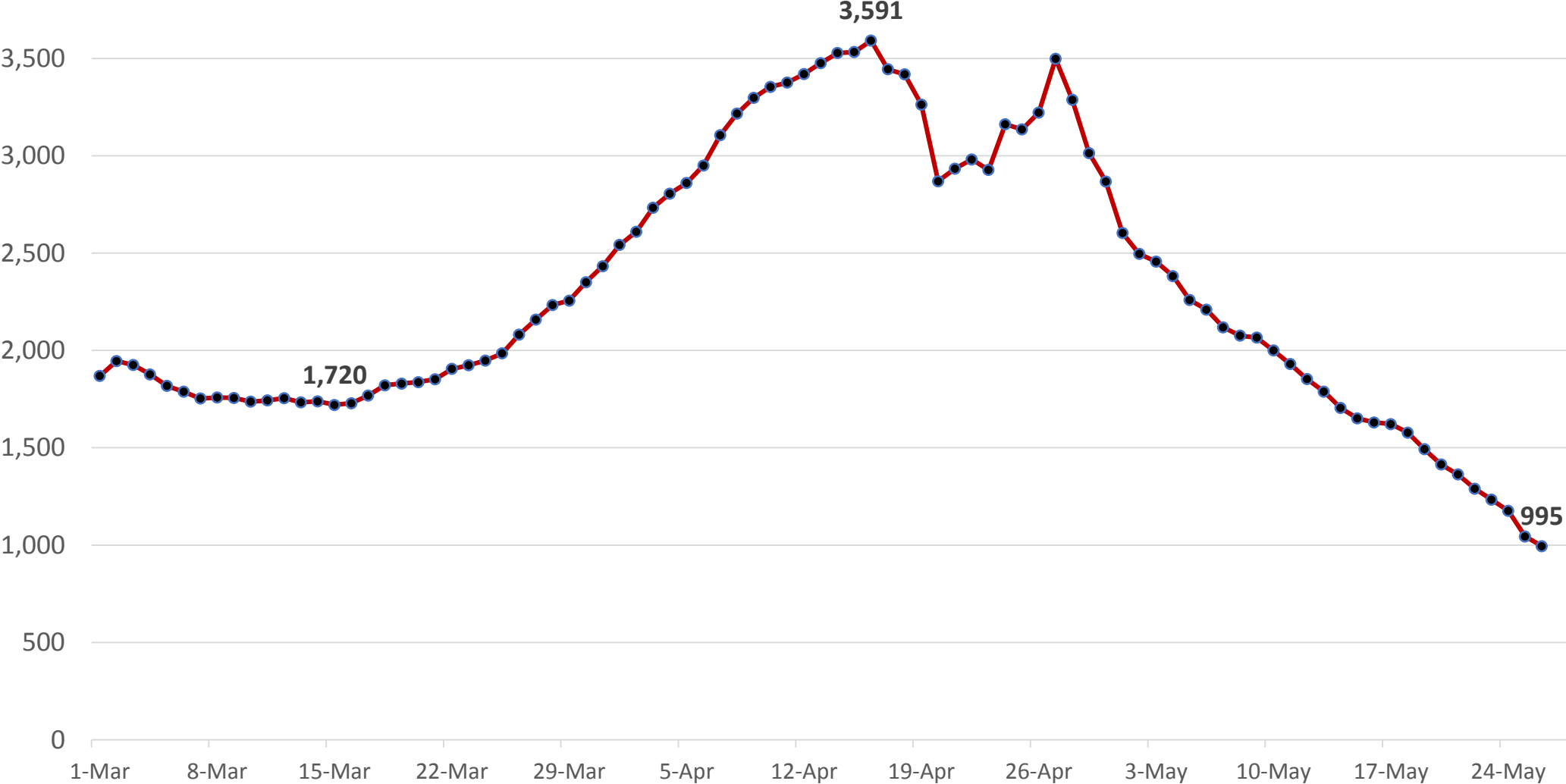
COVID-19 Update

May 27, 2022

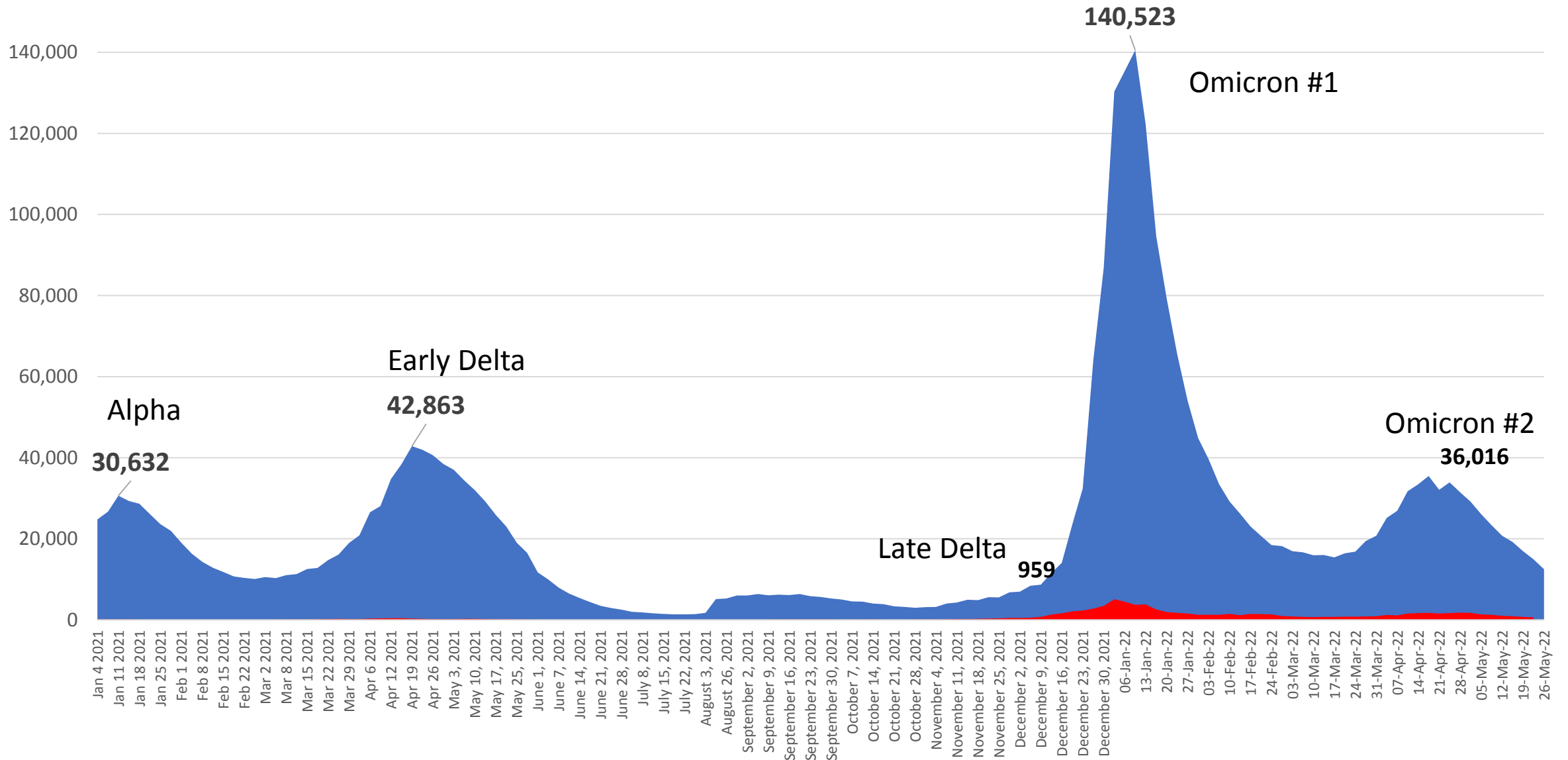
Ontario Active COVID-19 Cases



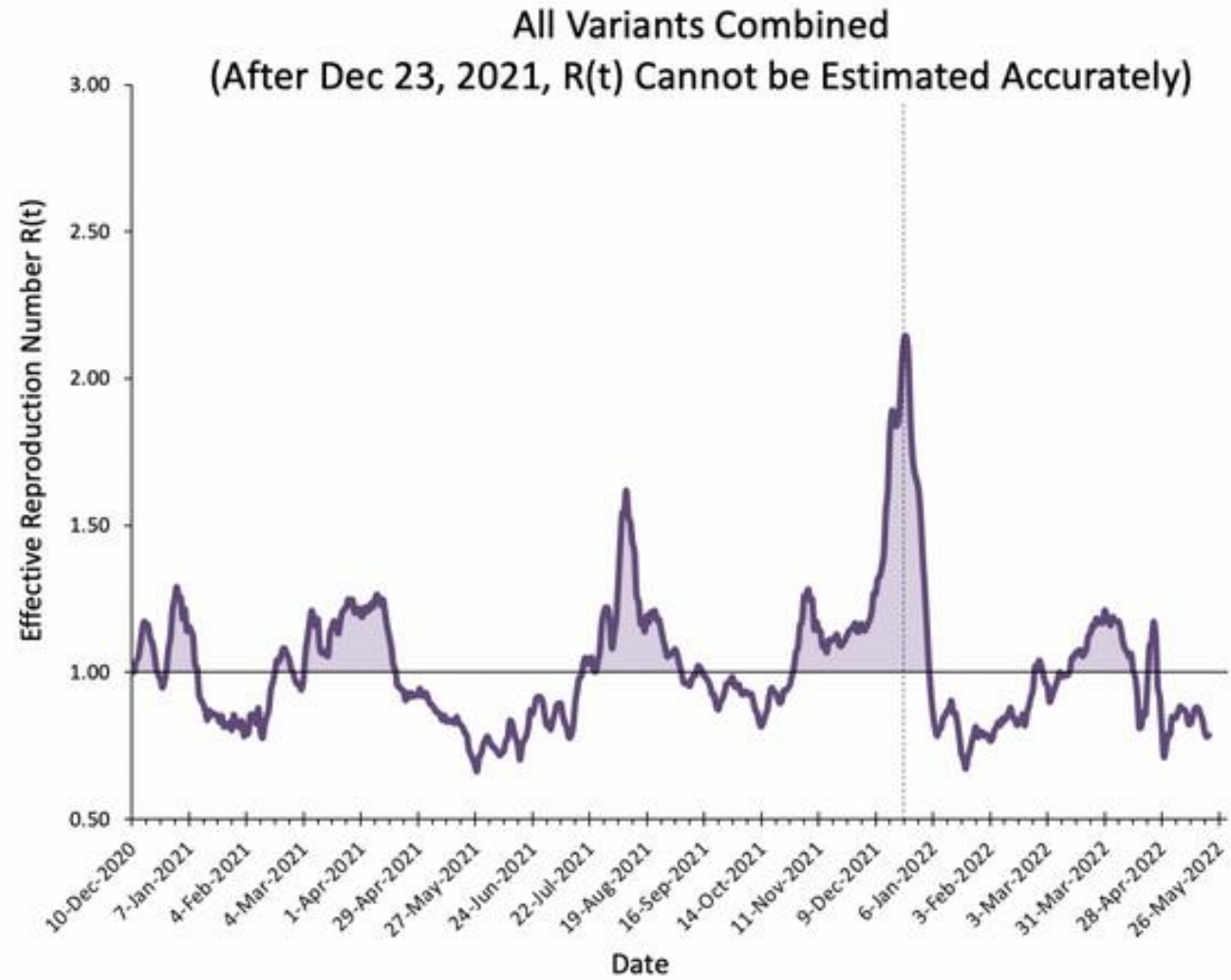
Ontario 7-Day Running Average of New Cases/Day



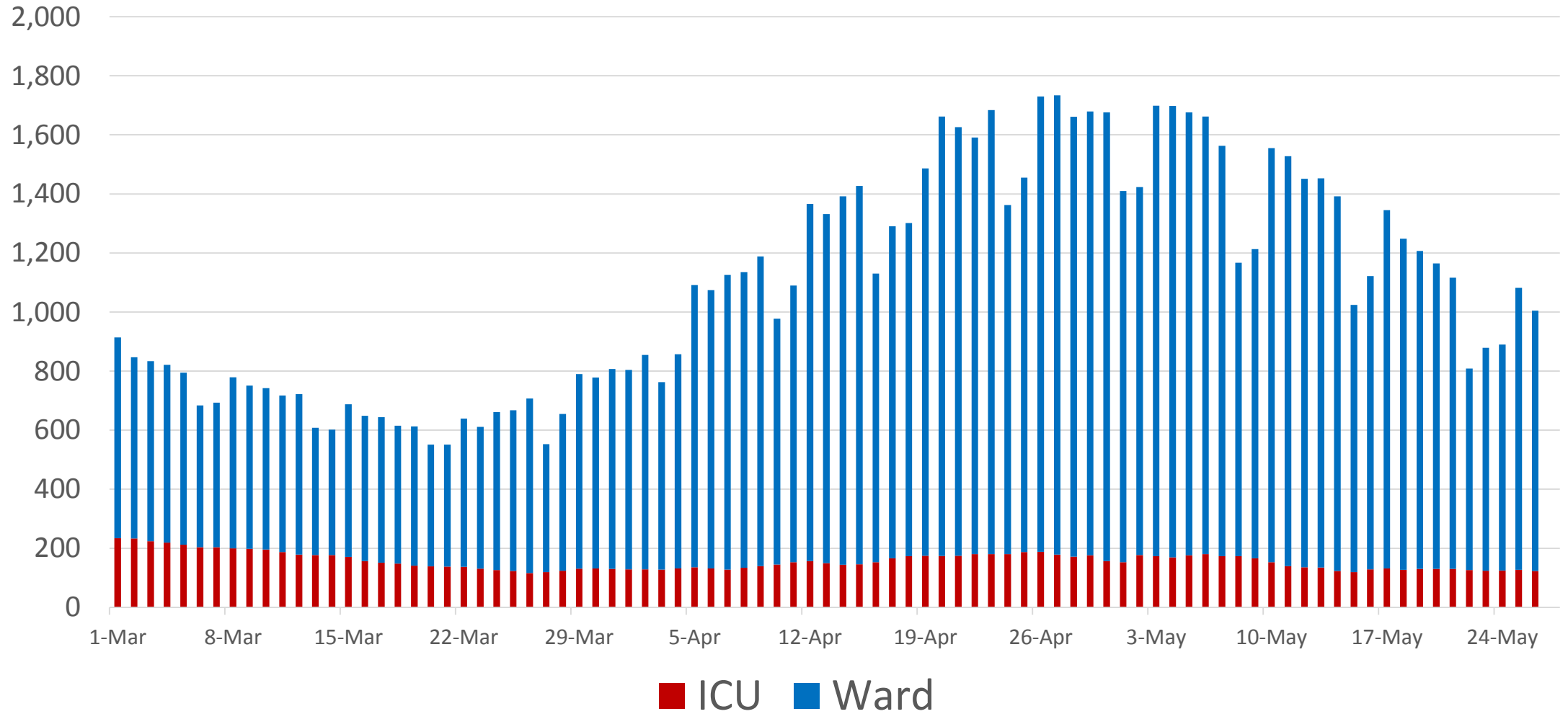
Ontario Active COVID-19 Cases - Jan 2021 - present



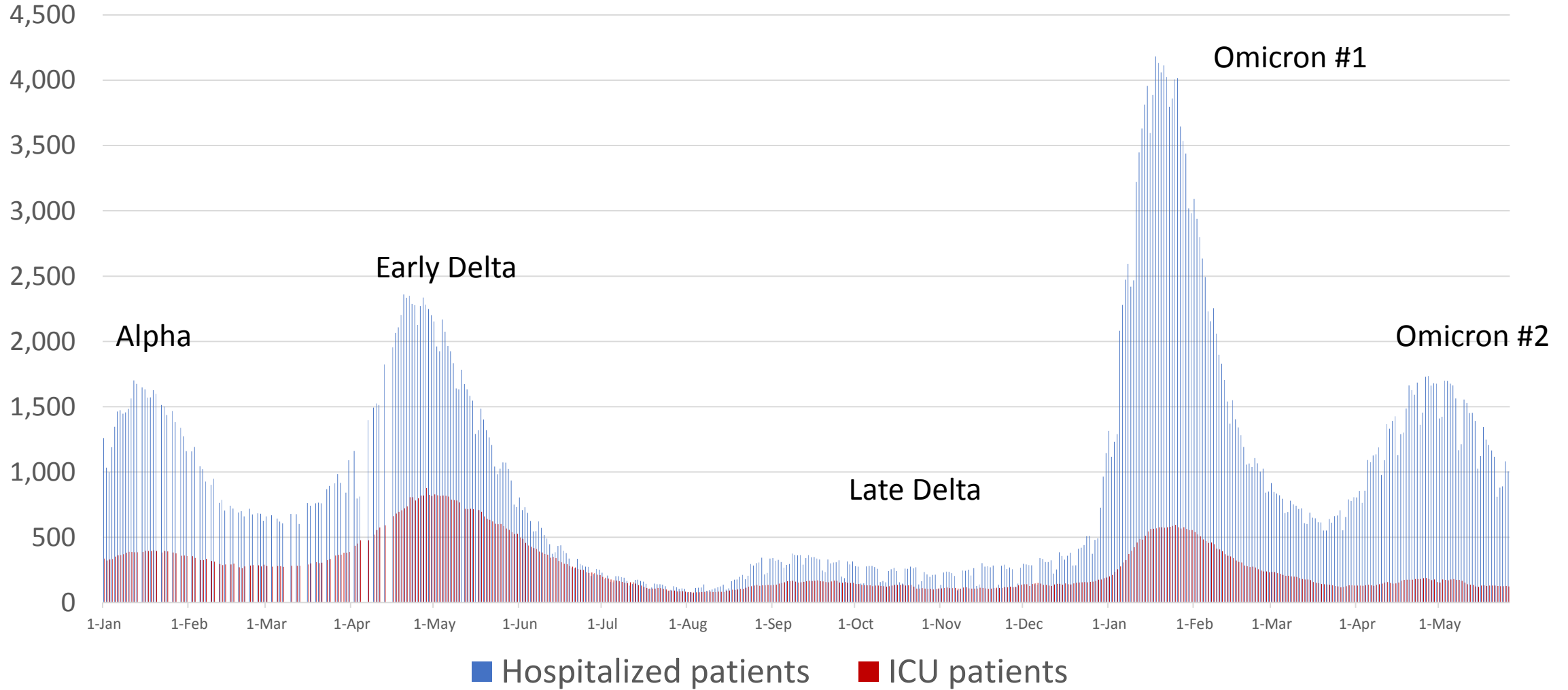
Effective Reproduction Number $R(t)$ in Ontario



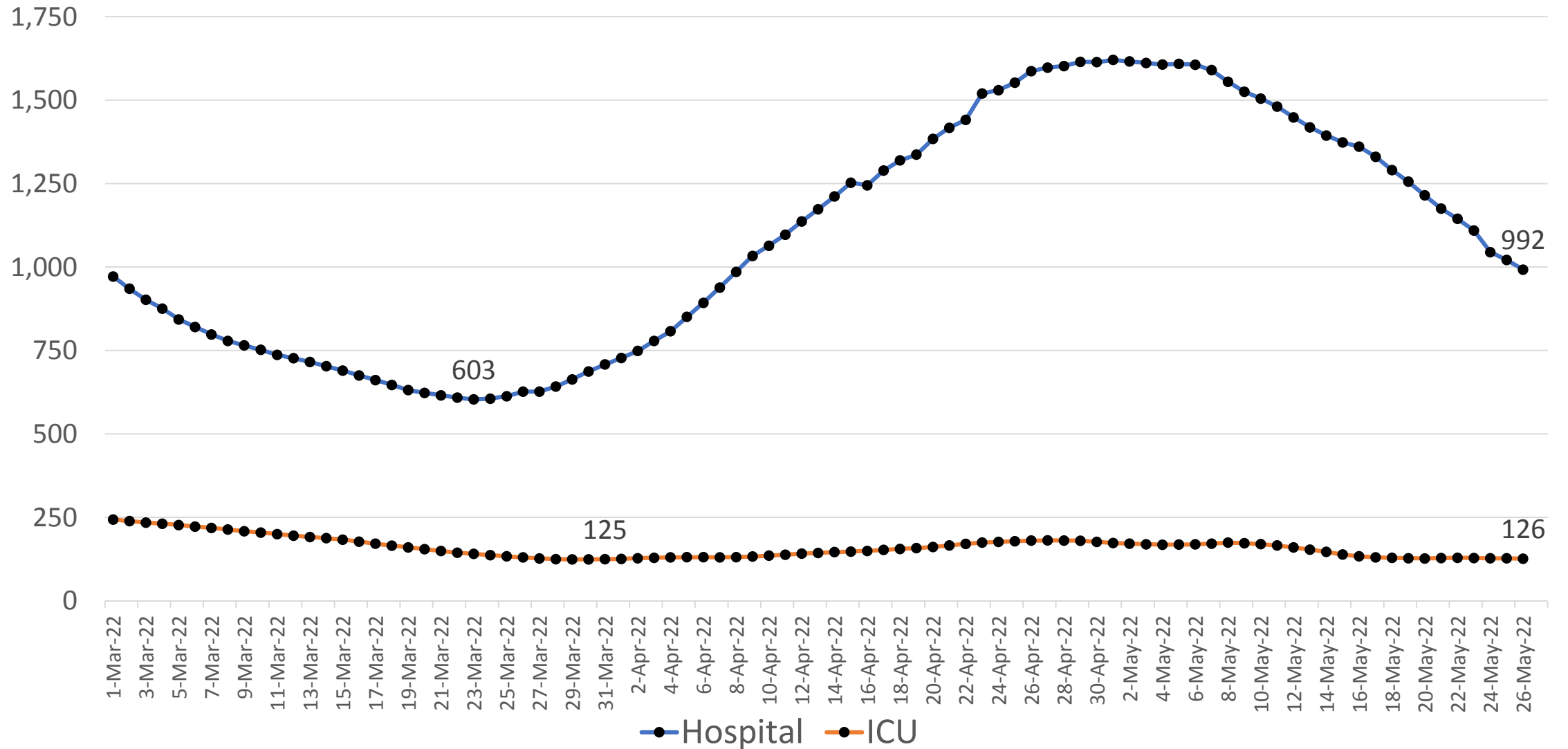
Ontario COVID-19 Hospital Occupancy by Bed Type



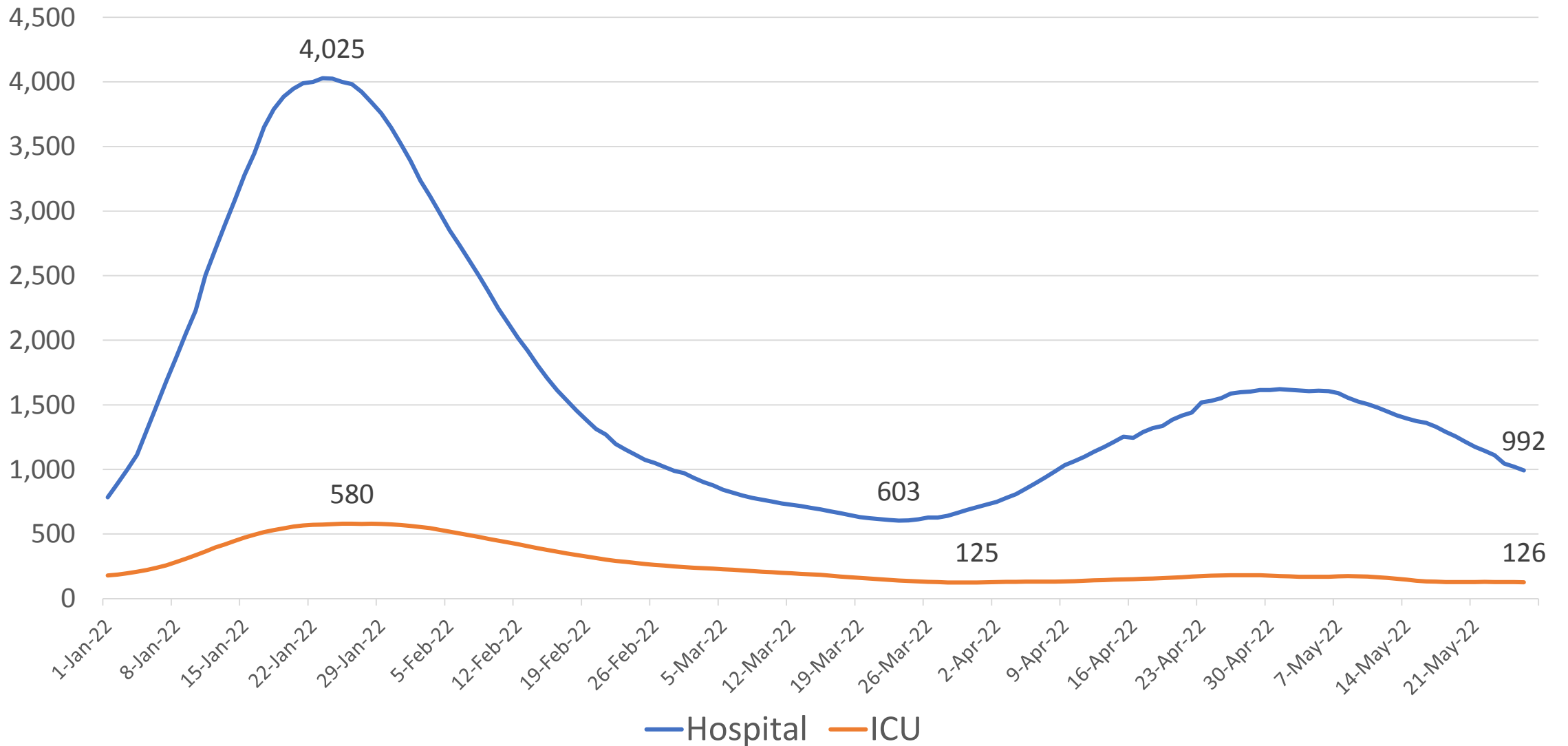
Ontario COVID-19 Hospital Occupancy



Smoothed (7-Day) Running Average Ontario COVID-19 Hospital & ICU Occupancy



Smoothed (7-Day) Running Average Ontario COVID-19 Hospital & ICU Occupancy



Surrogate Markers for Predicting COVID-19 Trend



Outbreak numbers

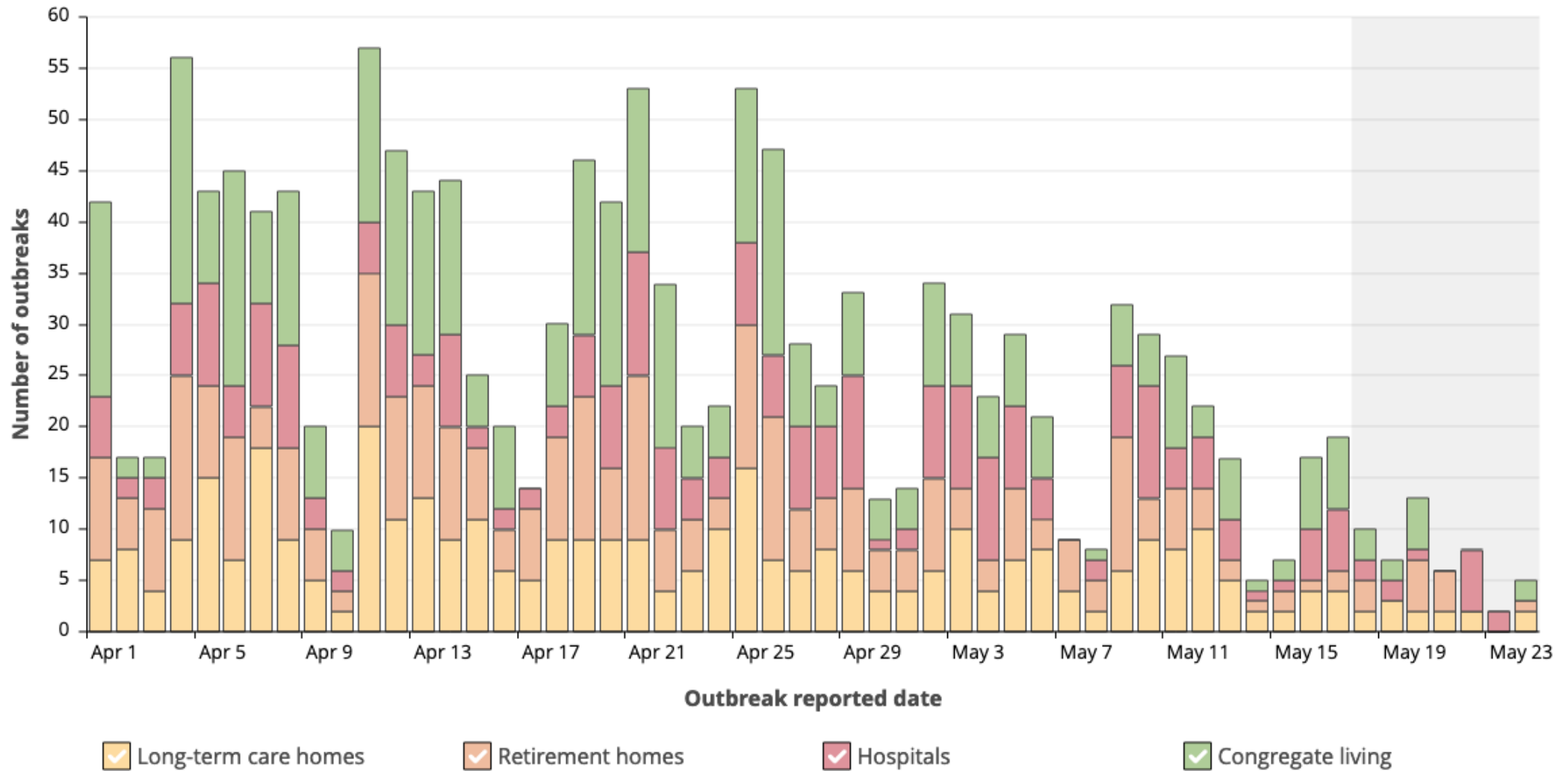


Test positivity

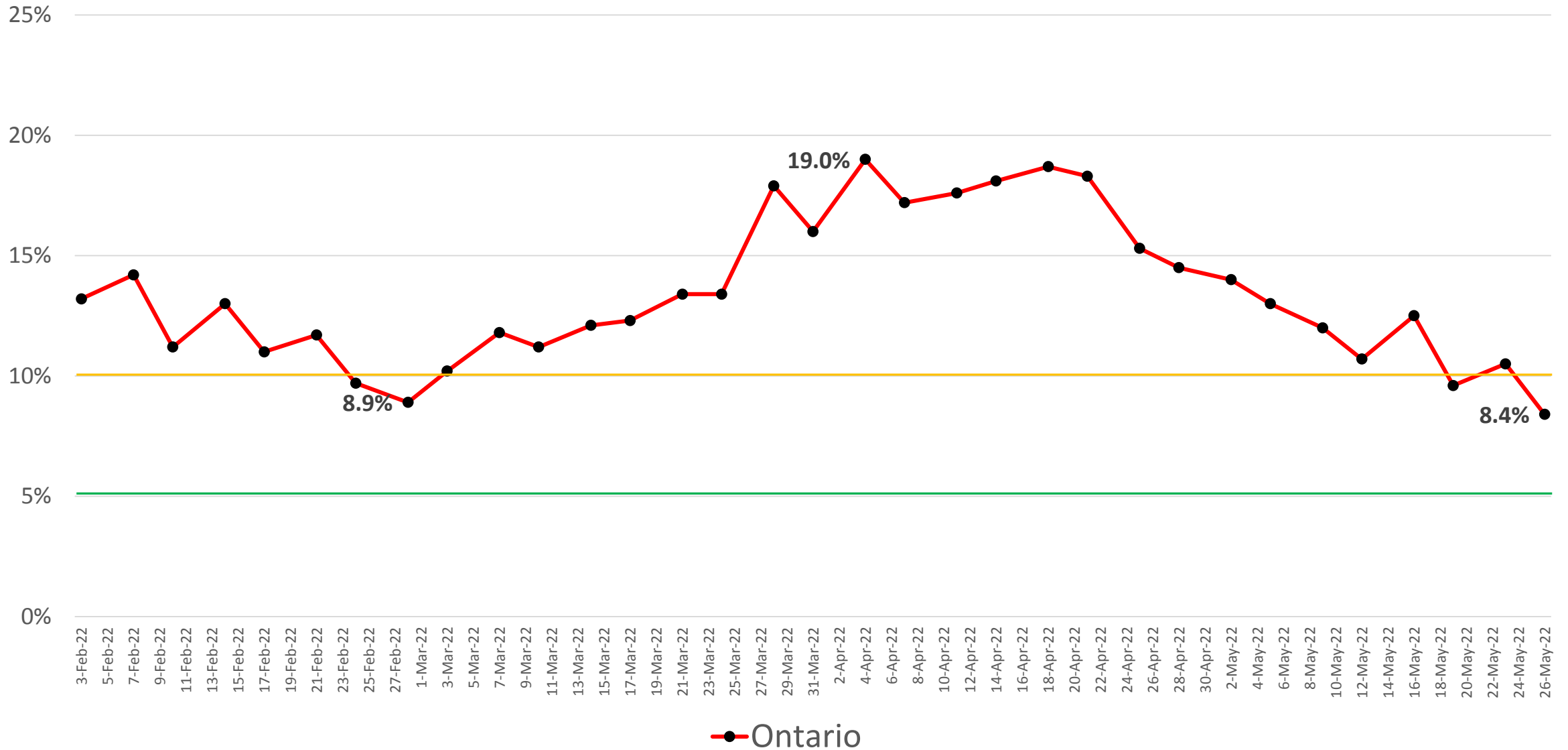


Wastewater detection

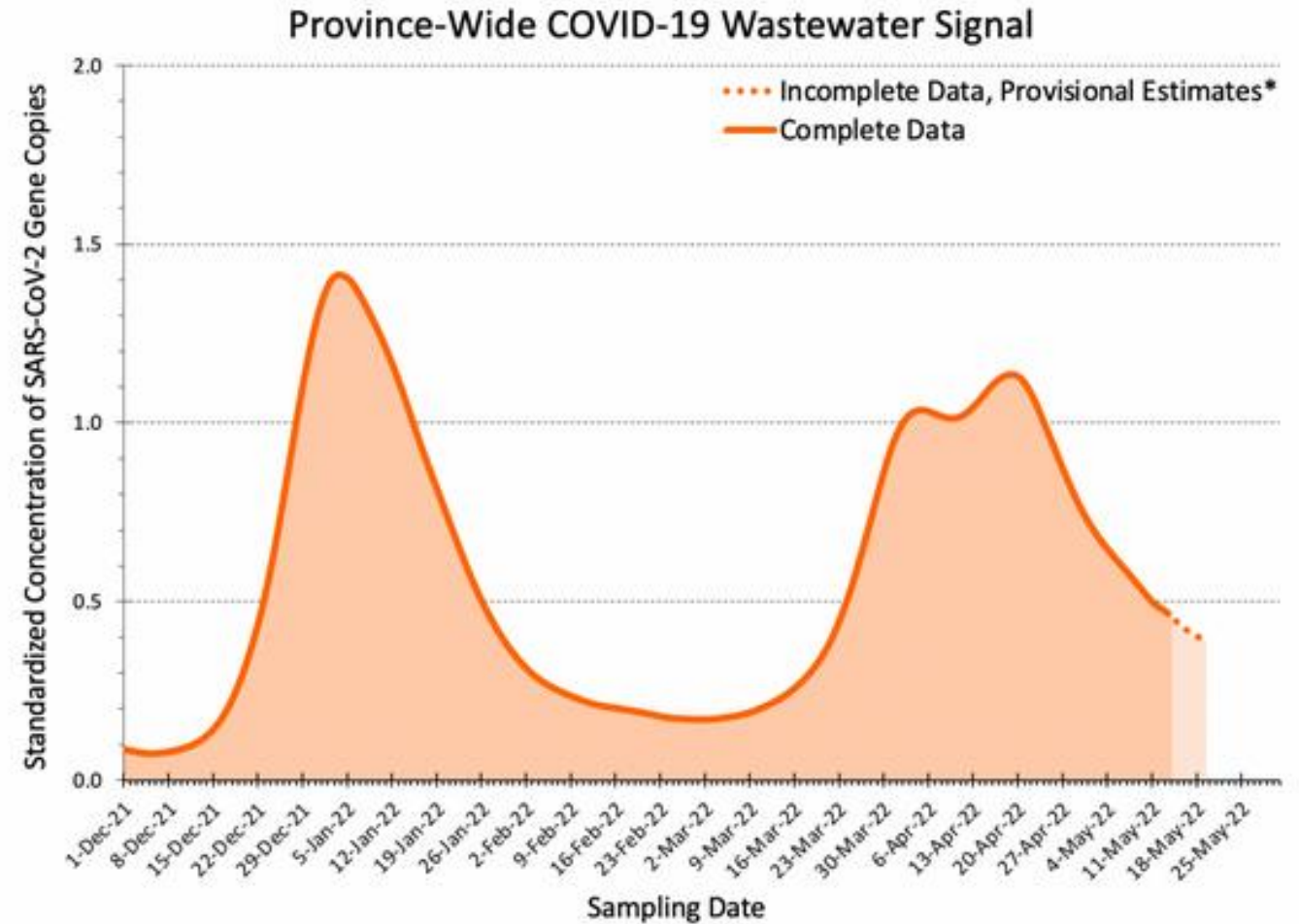
Daily confirmed COVID-19 outbreaks in Ontario - April 1, 2022 to May 24, 2022



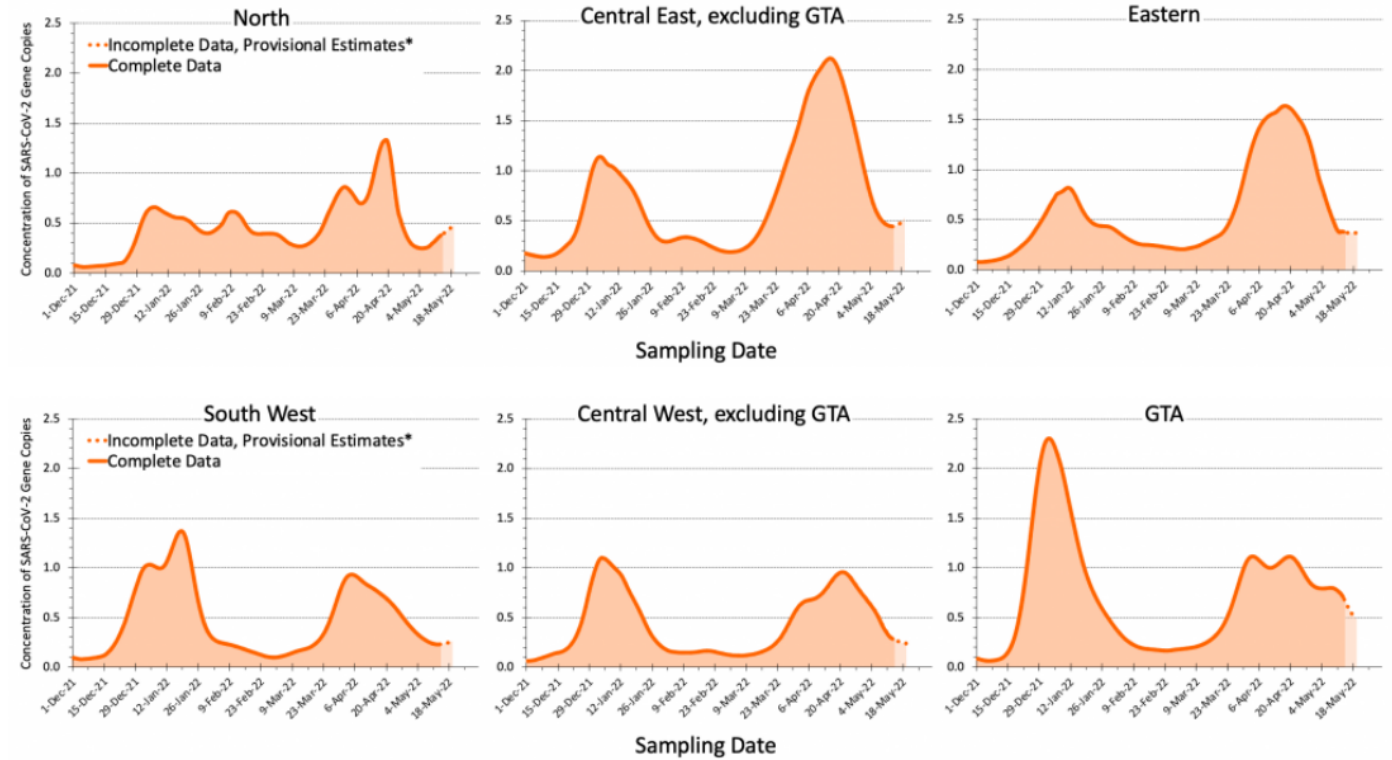
Ontario Provincial COVID-19 Test Positivity



SARS-COV-2 RNA in Ontario Wastewater



Ontario Wastewater Testing – May 18, 2022



Current Ontario Predictors



Outbreak numbers



Test positivity



Wastewater detection



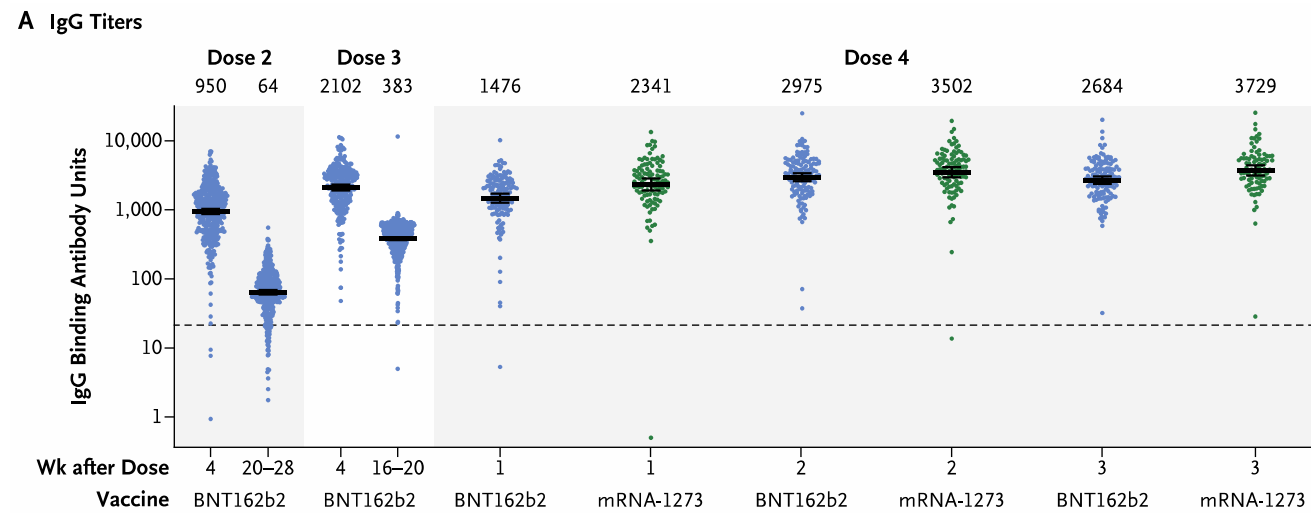
Vaccination



COVID-19 Vaccine – 4th Dose

Efficacy of a 4th Dose of COVID-19 mRNA Vaccine against Omicron – Healthy HCWs

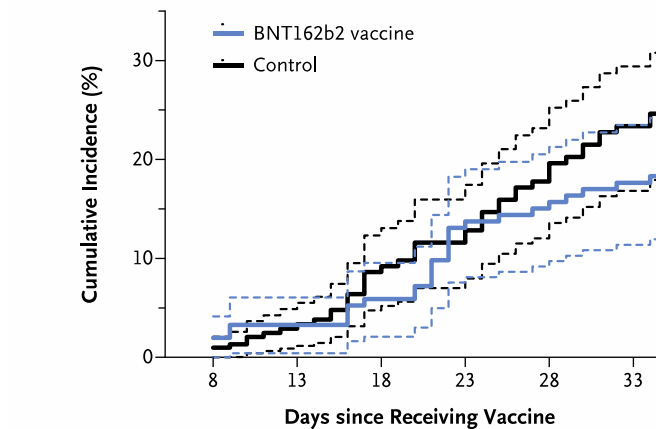
- Israeli study in 1,050 HCWs assessing a 4th dose of either Pfizer–BioNTech or Moderna given 4 months after a 3rd dose
- VE to prevent any infection was:
 - 30% (95%CI -9-55) for Pfizer and
 - 11% (95%CI -43-44) for Moderna



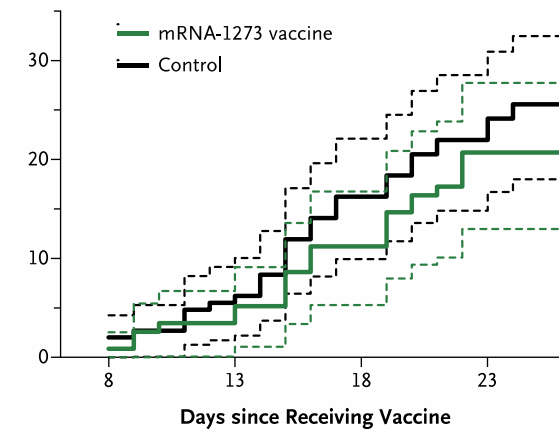
Efficacy of a 4th Dose of COVID-19 mRNA Vaccine against Omicron – Healthy HCWs

- VE for prevention of symptomatic infection was higher at 43% for Pfizer and 31% for Moderna
- Almost all infected HCWs who received a 4th dose reported negligible symptoms
- A 4th dose of mRNA vaccine is immunogenic, safe, and efficacious primarily against symptomatic disease

C Efficacy against SARS-CoV-2 Infection

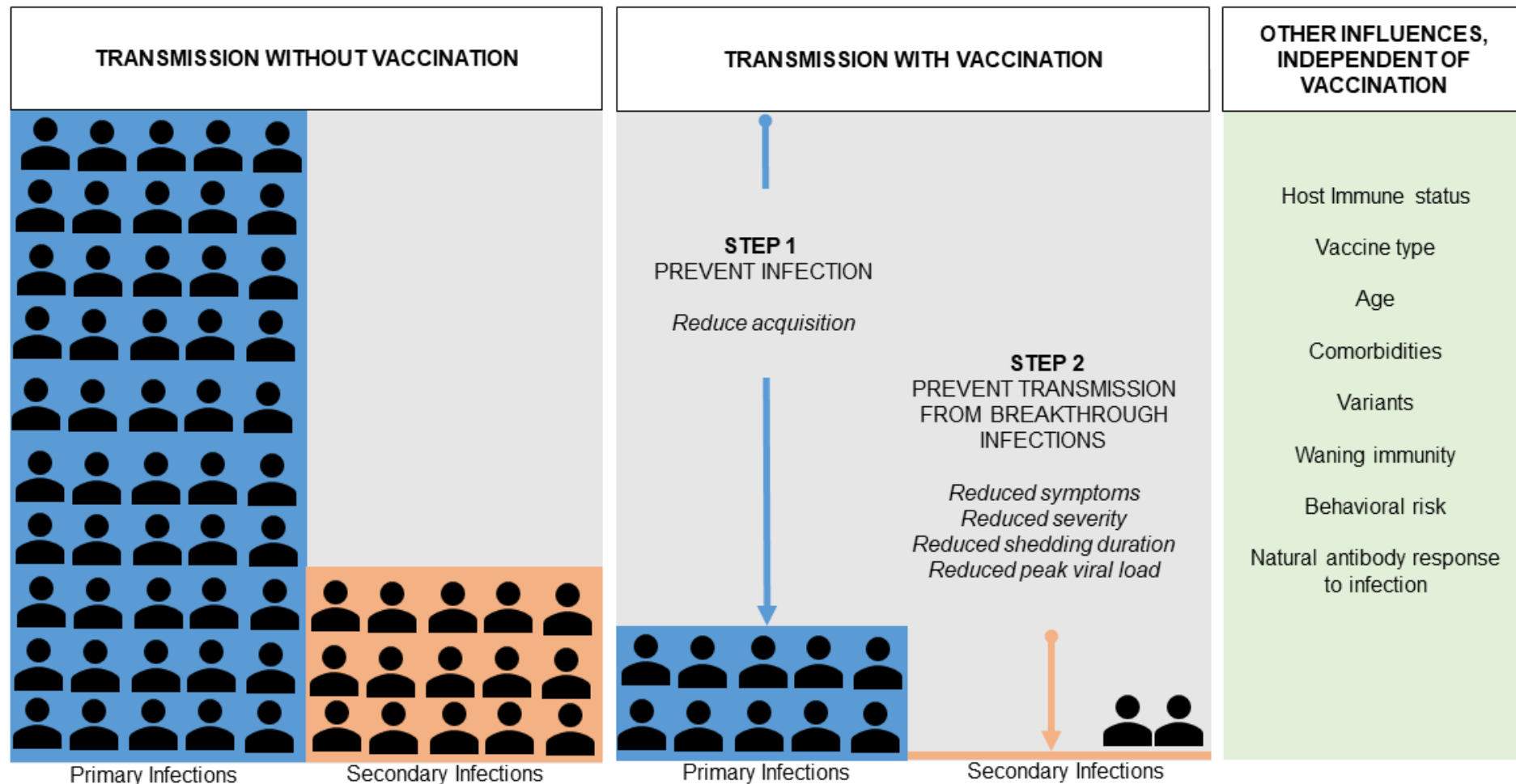


No. at Risk		8	13	18	23	28	33
BNT162b2 vaccine	151	148	144	132	130	126	
Control	300	213	153	141	130	122	



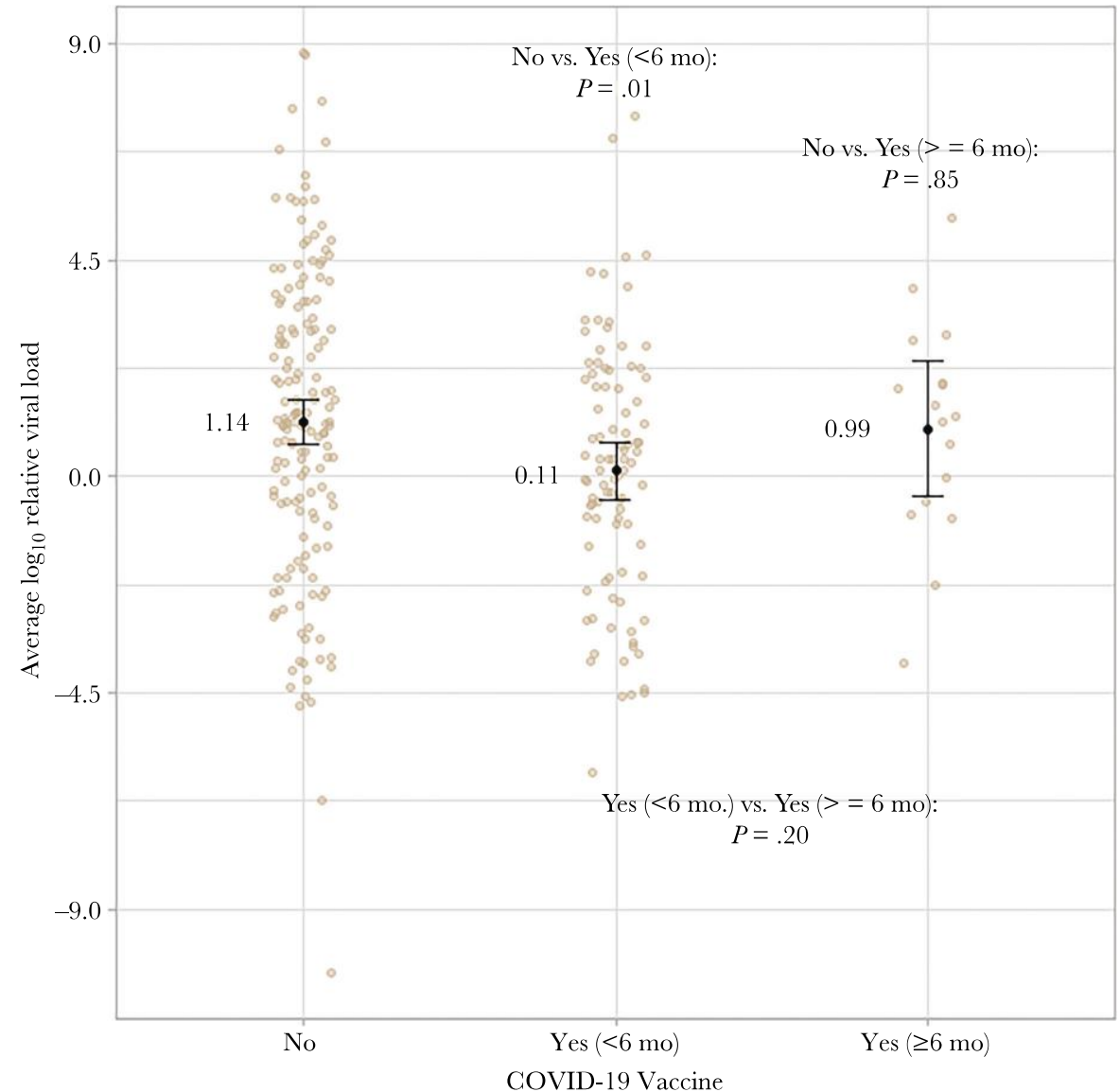
No. at Risk		8	13	18	23
mRNA-1273 vaccine	115	111	103	92	
Control	150	138	124	112	

Vaccination Reduces Transmission



SARS-CoV-2 Viral load value by COVID-19 Vaccination status over time

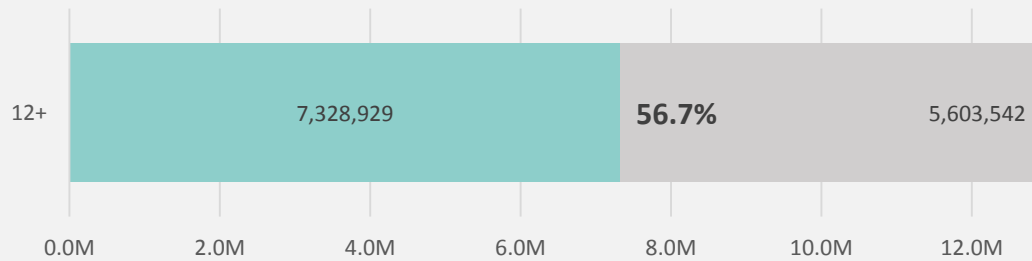
- The beige dots reflect each observation in the study sample
- The error bars reflect average \log_{10} viral load values and associated 95% confidence intervals
- Random jittering was applied along the horizontal axis for visual clarity



Third Doses | Overall progress

As of May 8, 2022

Third doses to people 12+



% people 12+ with dose 3

56.7%

New Dose 3 last 7 days

17,590

People 12+ with 3 doses

7,328,929

Percentage point Increase last 7 days

0.1%

Daily Dose 3 (7-day avg)

2,513

People 12+ remaining

5,603,542

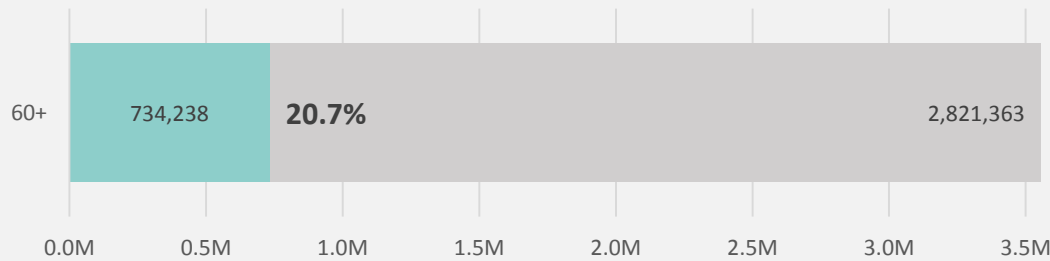
Third doses | by age group

Age Group	Number of people	% Dose 3	Percentage point Increase last 7 days	New Dose 3 last 7 days	Daily Dose 3 (7-day avg)	People remaining
70+	1,594,852	89.1%	0.2	2,953	422	195,544
50to69	2,671,297	70.2%	0.1	4,601	657	1,135,973
18to49	2,909,823	45.7%	0.1	8,338	1,191	3,463,640
12to17	152,957	15.9%	0.2	1,698	243	808,385

Fourth Doses | Overall progress

As of May 8, 2022

Fourth doses to people 60+



% people 60+ with dose 4

20.7%

New Dose 4 last 7 days

123,246

People 60+ with 4 doses

734,238

Percentage point Increase last 7 days

3.5%

Daily Dose 4 (7-day avg)

17,607

People 60+ remaining

2,821,363

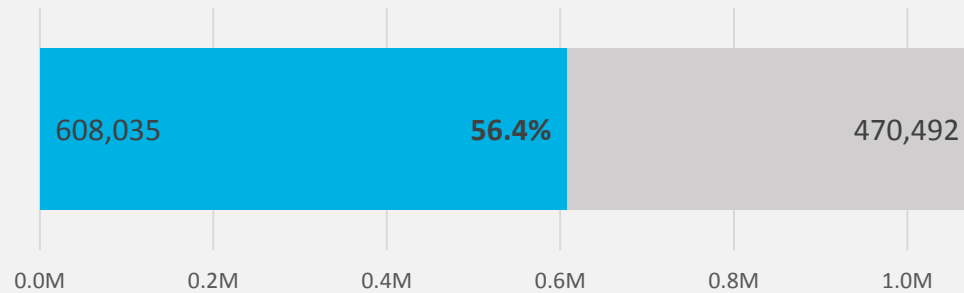
Fourth doses | by age group

Age Group	Fourth Doses	% Dose 4	Percentage point Increase last 7 days	New Dose 4 last 7 days	Daily Dose 4 (7-day avg)	People remaining
80+	239,361	36.5%	4.5	29,547	4,221	416,474
70to79	288,166	25.4%	4.7	53,230	7,604	846,395
60to69	206,711	11.7%	2.3	40,469	5,781	1,558,494

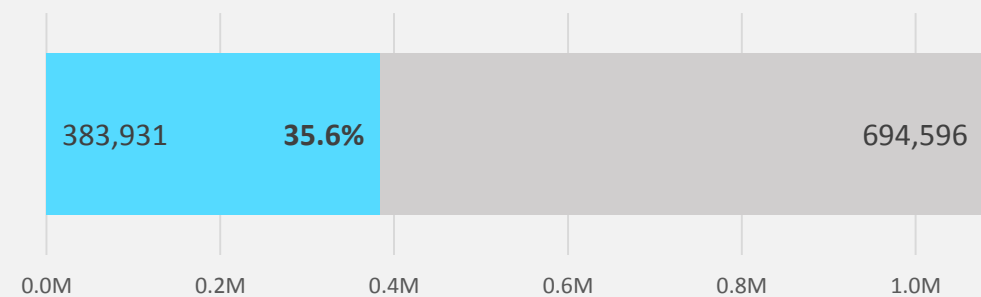
Children 5 to 11 | First & Second dose progress

As of May 8, 2022

Provincial 1st Dose Progress age 5-11



Provincial 2nd Dose Progress age 5-11



% people 5 to 11 with at least 1 dose

56.4%

New Dose 1 last 7 days

1,079

People 5 to 11 with at least one dose

608,035

Percentage point Increase last 7 days

0.1%

Daily Dose 1 (7-day avg)

154

People 5 to 11 remaining

470,492

% people 5 to 11 with 2 doses

35.6%

New Dose 2 last 7 days

2,828

People 5 to 11 with 2 doses

383,931

Percentage point Increase last 7 days

0.3%

Daily Dose 2 (7-day avg)

404

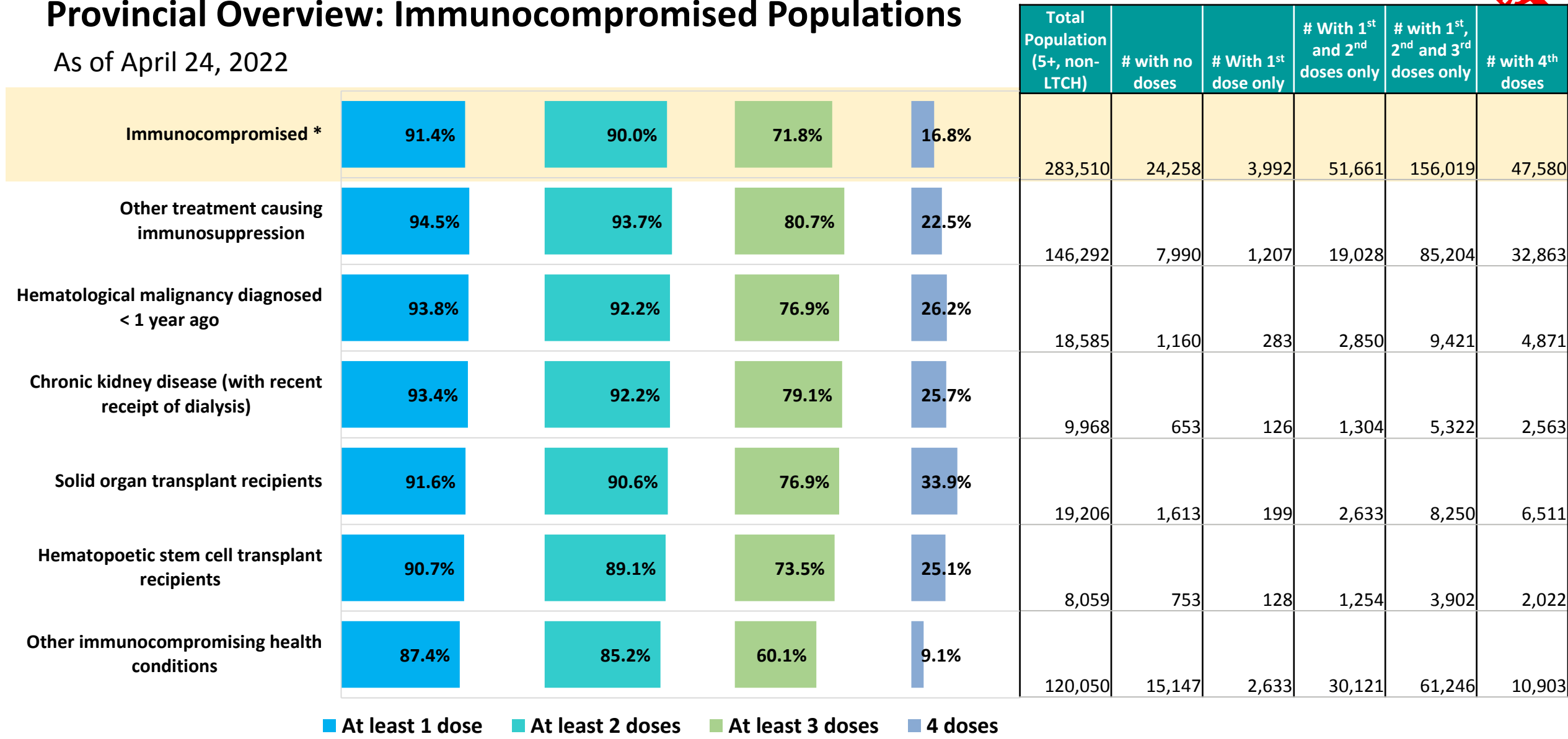
People 5 to 11 remaining

694,596

Provincial Overview: Immunocompromised Populations

As of April 24, 2022

DR



Note:

Immunocompromised * category is an aggregation of the 6 groups below it: *Other treatment causing immunosuppression, Hematological Malignancy, Chronic Kidney Disease (with recent receipt of dialysis), Solid Organ Transplant, Hematopoietic Stem Cell Transplant, and Other immunocompromising health conditions*

Data Sources:

Chung H, Fung K, Ishiguro L, Paterson M, et al. Characteristics of COVID-19 diagnostic test recipients, Applied Health Research (AHRQ) # 2021 0950 080 000. Toronto: Institute for Clinical Evaluative Sciences; 2020.





“ Do I need a COVID booster? When should I get it? ”

How many vaccine doses do I need?

Knowing how many doses of a COVID vaccine to get can be confusing. The number of doses you need depends on your age, whether you have a weakened immune system** and whether you live in a setting where you are at higher risk of getting COVID.

In general, experts recommend:

- » All children 5+ should get at least 2 doses;
- » Teens at higher risk of getting COVID or of getting seriously ill from COVID should get at least 3 doses;
- » All adults 18+ should get at least 3 doses;
- » Adults 80+ and seniors living in congregate settings should get at least 4 doses;
- » People who have a weakened immune system should get an extra dose.

Experts have also said that:

- » 3 doses can be considered for all teens;
- » 4 doses can be considered for First Nations, Inuit and Métis adults;
- » 4 doses can be considered for adults 70–79.

Recommendations change as we learn more. Use the charts on the next page to figure out how many doses you can get in Ontario.



COVID vaccine recommendations for people who do not have a weakened immune system**

	Initial doses		First booster	Second booster
	1st dose	2nd dose	3rd dose	4th dose
5 - 11	✓	✓		
12 - 17	✓	✓	✓*	
18+ AND living in a group setting	✓	✓	✓	✓*
18+ and First Nations, Inuit or Métis	✓	✓	✓	✓*
18+ and live with someone who is First Nations, Inuit or Métis	✓	✓	✓	✓*
18 - 59	✓	✓	✓	
60 - 79	✓	✓	✓	✓*
80+	✓	✓	✓	✓

Age

“

Do I need a COVID booster? When should I get it?

”



COVID vaccine recommendations for people who have a weakened immune system**

	Initial doses			First booster	Second booster
	1st dose	2nd dose	3rd dose	4th dose	5th dose
5 - 11	✓	✓	✓		
12 - 17	✓	✓	✓	✓	
18+ AND living in a group setting	✓	✓	✓	✓	✓*
18+ and First Nations, Inuit or Métis	✓	✓	✓	✓	✓*
18+ and live with someone who is First Nations, Inuit or Métis	✓	✓	✓	✓	✓*
60 - 79	✓	✓	✓	✓	✓*
80+	✓	✓	✓	✓	✓

“ **Do I need a COVID booster? When should I get it?** ”



Monkeypox 2022 Redux

Gerald A Evans, MD FRCPC

Professor & Chair, Division of Infectious Diseases

Queen's University/Kingston Health Sciences Centre

A magnifying glass with a black handle and frame is positioned over a piece of light-colored paper. The word "HISTORY" is written in blue ink on the paper, and the magnifying glass is focused on it, making the letters appear larger and sharper. The background is a plain, light-colored surface.

HISTORY

Monkeypox

- Discovered in monkeys in a Danish research laboratory in 1958
- The first human case was identified in a child in the Democratic Republic of the Congo (DRC) in 1970
 - Since then monkeypox has been reported in 11 countries in Central and West Africa
- The DRC, Cameroon, Central African Republic and Nigeria recently experienced an outbreak involving more than 1,200 cumulative cases between Dec 2021 - May 2022, with at least 57 recorded deaths
- A 2003 outbreak in the U.S. is the only previous time monkeypox infections in humans have been documented outside of Africa
 - This outbreak of monkeypox occurred when a shipment of rodents from Ghana in west Africa, infected prairie dogs that were sold as pets
 - There were 47 confirmed or probable cases of reported from six states

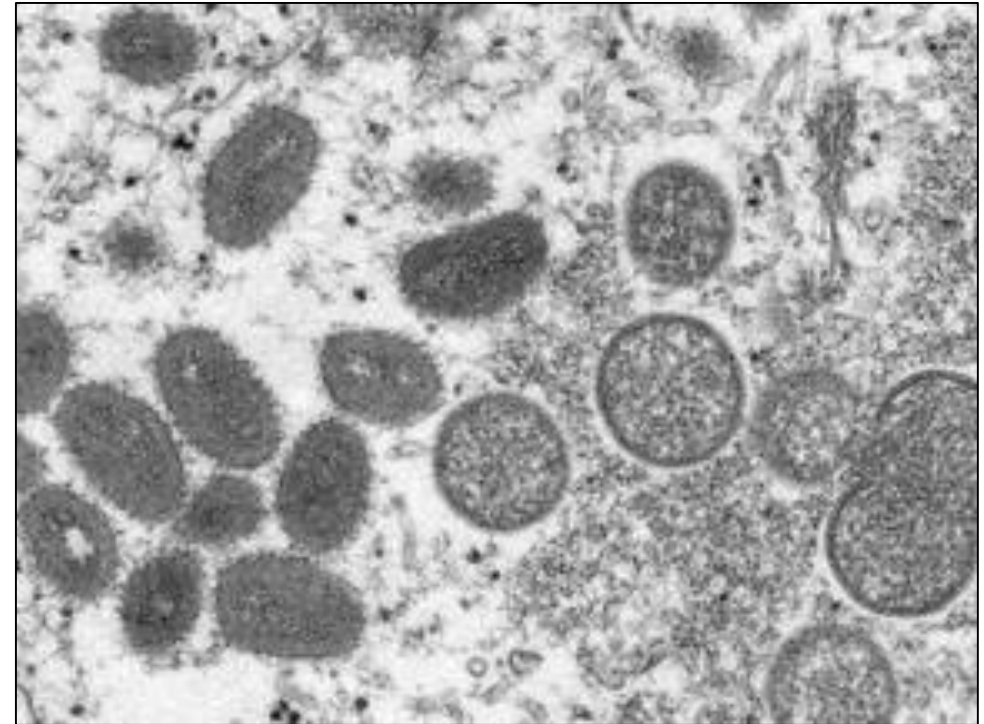
Monkeypox Headlines in 2003

- Monkey-pox count at 37 in three Midwestern states -
Seattle Times Tuesday, June 10, 2003
- RISING DEMAND FOR EXOTIC PETS BREEDS DANGER !!!! -
National Enquirer, June 2003



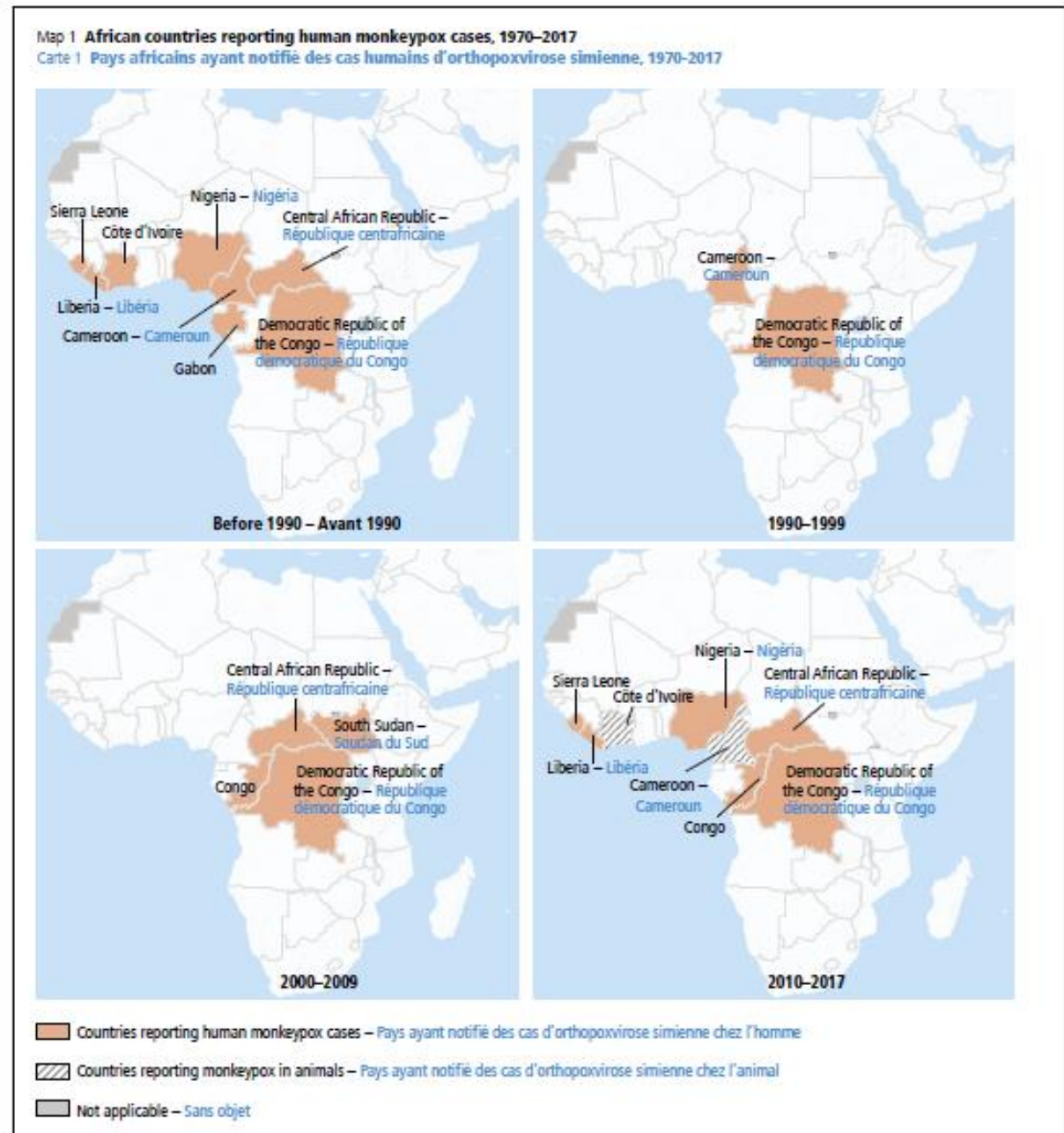
Monkeypox – The Agent

- Monkeypox is a viral zoonotic disease caused by the monkeypox virus
- The monkeypox virus is a member of the family *Poxviridae* and the genus *Orthopoxvirus*, which includes variola virus (smallpox), and vaccinia virus (cowpox, used in the smallpox vaccine) making monkeypox related
 - While the reservoir host of monkeypox is still uncertain, it's thought that African rodents play a role in transmission
- Of the two clades of monkeypox referred to as the West African clade and Congo Basin clade, the former has a case fatality rate of up to 3.6% compared to the latter's 10.6%
 - Variola major, the severe form of smallpox, had a case fatality rate of 30%.



1. Mature, oval-shaped monkeypox virions, on left
2. Spherical immature virions, on right

African countries reporting human monkeypox cases 2010–2017



(Reproduced by permission of the World Health Organization, Geneva, Switzerland)

Monkeypox 2022

- As of May 26, 322 laboratory-confirmed cases, 35 suspected cases and 5 probable cases of monkeypox have been reported in 21 countries outside of Central and West Africa
- These non-endemic countries are chiefly European, including UK, two Middle Eastern and one South American nation plus Australia, Canada and the U.S.

Country	Confirmed	Probable	Suspected	Total	Deaths
Spain	84	0	0	84	0
United Kingdom	82	1	1	84	0
Portugal	58	0	0	58	0
Canada	25	2	30	57	0
Germany	12	0	1	13	0
Netherlands	12	0	0	12	0
Italy	9	0	0	9	0
United States of America	9	0	0	9	0
France	7	0	1	8	0
Belgium	6	1	0	7	0
Czech Republic	5	1	0	6	0
Slovenia	2	0	0	2	0
Australia	2	0	0	2	0
Switzerland	2	0	0	2	0
Sweden	2	0	0	2	0
Finland	1	0	0	1	0
Denmark	1	0	0	1	0
Israel	1	0	1	2	0
Austria	1	0	0	1	0
United Arab Emirates	1	0	0	1	0
Argentina	0	0	1	1	0
Total	322	5	35	362	0

Monkey Pox Transmission

- Monkeypox is not as easily spread between humans as was smallpox
 - Human-to-human transmission is thought to primarily occur through direct contact with body fluids or lesions
- Other means of transmission include:
 - Respiratory droplets/aerosols
 - Indirect contact with lesion material through contaminated clothing or bedding, also known as fomites
- Animal-to-human transmission may occur by bite or scratch, bush meat preparation, direct contact with body fluids or lesion material, or indirect contact with lesion material, such as through contaminated bedding

Monkeypox Isolation and IPAC Precautions

Isolation

- Private room or ideally, Airborne infection isolation room (AIIR) preferred
- Dedicate medical equipment and remove all non-essential items from the room
- Cover patient's skin lesions with sheet or gown
- Post appropriate isolation signage (Contact & Aerosol precautions)

PPE

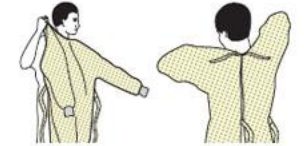
- Fit-tested & seal-checked N95 or equivalent respirator, hand hygiene, gown, gloves, and eye protection
- Post personnel at door to ensure PPE is donned and doffed appropriately
 - Doff and dispose of all PPE before leaving isolation room.

SEQUENCE FOR PUTTING ON PERSONAL PROTECTIVE EQUIPMENT (PPE)

The type of PPE used will vary based on the level of precautions required, such as standard and contact, droplet or airborne infection isolation precautions. The procedure for putting on and removing PPE should be tailored to the specific type of PPE.

1. GOWN

- Fully cover torso from neck to knees, arms to end of wrists, and wrap around the back
- Fasten in back of neck and waist



2. MASK OR RESPIRATOR

- Secure ties or elastic bands at middle of head and neck
- Fit flexible band to nose bridge
- Fit snug to face and below chin
- Fit-check respirator



3. GOGGLES OR FACE SHIELD

- Place over face and eyes and adjust to fit



4. GLOVES

- Extend to cover wrist of isolation gown



USE SAFE WORK PRACTICES TO PROTECT YOURSELF AND LIMIT THE SPREAD OF CONTAMINATION

- Keep hands away from face
- Limit surfaces touched
- Change gloves when torn or heavily contaminated
- Perform hand hygiene



Monkeypox Signs & Symptoms

- The incubation period from exposure to first symptoms is typically between 6-13 days, though it can range from 5-21 days
- The illness typically lasts for 2–4 weeks
- The infection itself can be divided into 2 stages:
 - 1. An invasive stage**, with systemic symptoms similar to the flu
 - Invasive stage symptoms are generally non-specific and include:
 - Fever, intense headache, lymphadenopathy, myalgias and fatigue
 - 2. A rash stage** characterized by skin eruptions
 - The rash that erupts during the 2nd stage is centrifugal, unlike varicella, which is centripetal, and evolves from macules & papules to vesicles and pustules



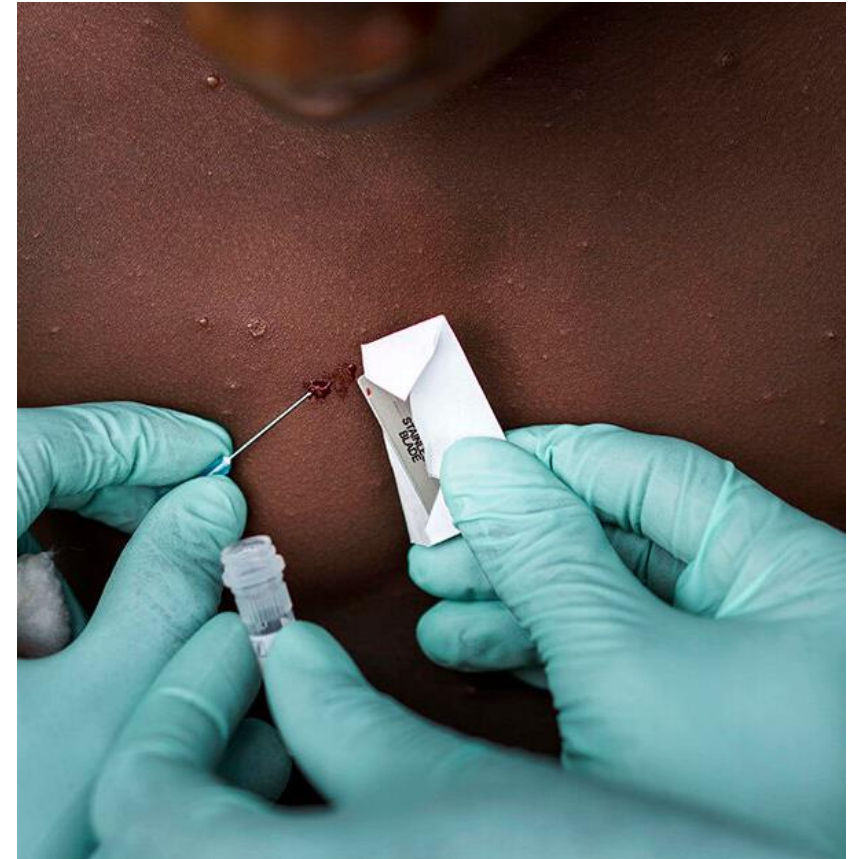
Monkeypox – Laboratory Testing (Ontario)

- 1** Contact PHO Customer Service (416-235-6556/1-877-604-4567) or after hours the on-call Duty Officer (416-605-3113) to consult prior to sample collection and shipment. PHO laboratory will provide the submitter with further direction regarding optimal sample collection methods and special transport requirements for monkeypox.
- 2** PHO will notify the patient's local public health unit (PHU) of any suspected monkeypox infection pending testing as per **CMOH order 77.6**.
- 3** If other tests are requested, submit additional specimens as the specimens submitted for monkeypox virus testing will not be processed for additional tests. **Note: all other tests ordered for a patient being investigated for monkeypox, including those already received at PHO, will be put on hold until monkeypox virus testing is completed.**
- 4** Swab samples can be collected as a dry swab or added to a minimum volume of viral transport media (e.g. 1ml) to avoid excessive dilution of the sample. In situations where this collection method is not possible, utilization of currently available **virus culture collection kits** is accepted.
- 5** All specimens from a patient being investigated for monkeypox, **including specimens submitted for other tests**, should indicate on the requisition that this patient is suspected of having monkeypox.

Monkeypox – Laboratory Diagnosis

Diagnostic specimens for testing by stage of illness:

- Invasive stage: tonsillar tissue swab, nasopharyngeal swab, acute serum and whole blood
- Rash stage: sample >1 lesion from different locations on the body and different looking lesions
 - If macules & papules: tonsillar tissue swab, lesion biopsy, acute serum and whole blood
 - If vesicles or pustules: Lesion fluid, roof, or biopsy, electron microscopy grid, acute serum and whole blood
 - Scabs or crusts: lesion scab or crust, acute serum and whole blood
- Post rash: Convalescent serum



Monkeypox – Risk Factors & Outcomes

- Earlier studies found prior vaccination against smallpox is about 85% effective in preventing monkeypox
 - Since vaccination of the general public against smallpox came to an end in the 1970s in Canada individuals <50 years of age may be more susceptible to monkeypox
- Severe cases have occurred more commonly among children, relating to factors such as the extent of exposure, the patient's health status and any health complications
- It can also be severe in pregnant people and persons with immune suppression

Management of Contacts

- Evaluate people accompanying patient for symptoms
- Give them a separate waiting area, if possible.
- Identify and log persons potentially exposed to patient: staff, other patients, visitor

Monkeypox – Treatment & Prevention

Treatment

- No current treatment for monkeypox specifically, but the smallpox vaccine, or Vaccinia immune globulin (VIG) has been used along with experimental antivirals
 - No Canadian approved antivirals specific to monkeypox
 - *In vitro* and animal studies of cidofovir and brincidofovir have shown activity against multiple poxviruses
- Tecovirimat (Tpoxx[®]), is FDA approved for treating smallpox in an oral and IV form and in the EU, tecovirimat is also indicated for monkeypox
 - It has been shown in animal studies to be effective in treating orthopoxvirus-induced disease, and human trials involving healthy subjects indicated the drug was safe and well tolerated with only minor side effects

Prevention

- A smallpox attenuated, live-virus vaccine Jynneos[®] (also known as Imvamune[®] or Imvanex[®]) is indicated for monkeypox
- Smallpox outbreaks were contained by “ring vaccination”, which involved identifying cases quickly, isolating close contacts, and vaccinating all contacts within 4 days of exposure, which usually prevents infection

Monkeypox
Bottom
Line



**KEEP
CALM
AND
DON'T
PANIC**

Monkeypox Virus

May 27, 2022

- As of May 26:
 - Globally:
 - 226 confirmed cases in 21 countries, including:
 - UK - 78 confirmed cases
 - Spain - 51 confirmed cases
 - Portugal - 37 confirmed cases
 - US - 9 confirmed cases
 - Canada:
 - 16 confirmed cases (QC)
 - 1 confirmed case (ON)

Confirmed Case

- Laboratory confirmation of infection:
- Detection of monkeypox virus DNA by polymerase chain reaction (PCR) from an appropriate clinical specimen, **OR**
- Isolation of monkeypox virus in culture from an appropriate clinical specimen

Probable Case

- A new onset rash in keeping with monkeypox illness¹, **AND**
- At least one (1) other acute sign or symptom of monkeypox illness², **AND**
- Meets at least one (1) of the following epidemiological criteria within 21 days of their symptom onset:
 - High-risk exposure³ to a probable or confirmed human case of monkeypox, **OR**
 - A history of travel to a region that has reported confirmed cases of monkeypox, **OR**
 - A relevant zoonotic exposure

Suspect Case

- A new onset rash in keeping with monkeypox illness ¹ **AND**
- At least one (1) other acute sign or symptom of monkeypox illness ², **AND**
- An alternative diagnosis cannot fully explain the illness.

- MPX Virus Testing is currently done at the National Microbiology Laboratory in Winnipeg.
- Testing turn-around times currently take 24-48 hours once received.
- PHO is currently advising that because of IPAC considerations, plus current requirements for packaging and transport of the specimens, specimen collection ideally occurs at a healthcare facility with negative pressure ventilation and laboratory capabilities.
- For further information:
 - [PHO Testing Information Sheet](#)
 - [PHO IPAC Recommendations for Monkeypox in Health Care Settings](#)

- CMOH Order under *HPPA* to report cases to Public Health Ontario
- Healthcare providers will be required to complete a [Case Report Form](#).
- Local Public Health Units will conduct case and contact management.

- **Case Management:** self-isolation at home is indicated until the end of the period of communicability for MPX (until lesion scabs have fallen off and new intact skin has formed beneath, typically 2 to 4 weeks).
- **Contact Management:**
 - Exposure risk assessment for contacts.
 - Close contacts will be advised to self-monitor for signs and symptoms for 21 days from last exposure.
 - Immediate self-isolation should any symptom(s) of MPX develop.
 - Contact the local PHU and healthcare provider to facilitate clinical assessment and consideration of testing.

Family Medicine Summit: Current Opportunities



- ❑ FMS 2023 Call for Abstracts: ontariofamilyphysicians.ca/fms
- ❑ Join the FMS Planning Committee: ontariofamilyphysicians.ca/education-practice-supports/conferences

Deadline for both is June 12, 2022

Questions?

Webinar recording and curated Q&A will be posted soon

<https://www.dfcu.utoronto.ca/covid-19-community-practice/past-sessions>

Our next Community of Practice: **TBD**

Contact us: ocfpcme@ocfp.on.ca

Visit: <https://www.ontariofamilyphysicians.ca/tools-resources/covid-19-resources>

The COVID-19 Community of Practice for Ontario Family Physicians is a one-credit-per-hour Group Learning program that has been certified for up to a total of 32 credits..

Post session survey will be emailed to you. Mainpro+ credits will be entered for you with the information you provided during registration.