# COVID-19 Community of Practice for Ontario Family Physicians

## April 5, 2024

**Dr. Gerald Evans**
**Dr. Daniel Warshafsky**
**Dr. Sid Feldman**

## *Infectious Disease and Updates to Osteoporosis Canada Guidelines*

Family & Community Medicine
UNIVERSITY OF TORONTO

Ontario College of
Family Physicians

# Infectious Disease and Updates to Osteoporosis Canada Guidelines

Moderator:

- Dr. Eleanor Colledge, CPD Program Director, University of Toronto and Family Physician, South East Toronto Family Health Team, Toronto, ON

Panelists:

- Dr. Gerald Evans, Kingston, ON
- Dr. Daniel Warshafsky, Toronto, ON
- Dr. Sid Feldman, Toronto, ON

Host:

- Dr. Mekalai Kumanan, Cambridge, 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 recognizes 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 respects 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.

# *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. Mekalai Kumanan (OCFP), Dr. Ali Damji (DFCM), Dr. Eleanor Colledge (DFCM), Dr. Harry O'Halloran, Julia Galbraith (OCFP), Pavethra Yogeswaran (OCFP), Marisa Schwartz (DFCM), Erin Plenert (DFCM)

Previous webinars & related resources:

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

## Dr. Gerald Evans – Panelist

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

## Dr. Sid Feldman – Panelist

Chief, Department of Family and Community Medicine, Baycrest Health Sciences; Associate Professor, Family and Community Medicine, University of Toronto

## Dr. Daniel Warshafsky – Panelist

Associate Chief Medical Officer of Health at the Office of the Chief Medical Officer of Health

## Dr. Mekalai Kumanan – Host

**Twitter: @MKumananMD**

President, Ontario College of Family Physicians
Family Physician, Two Rivers Family Health Team
Deputy Chief of Family Medicine, Cambridge, ON

# Speaker Disclosure

- Faculty Name: **Dr. Gerald Evans**
- Relationships with financial sponsors:
  - Grants/Research Support: N/A
  - Speakers Bureau/Honoraria: Moderna Australia
  - Membership on advisory boards: Ontario COVID-19 Science Advisory Table (NFP)
  - Others: N/A

- Faculty Name: **Dr. Sid Feldman**
- Relationships with financial sponsors:
  - Grants/Research Support: CIHR, Canadian Foundation for Healthcare Improvement, UofT Academic Health Sciences Innovation Funds
  - Speakers Bureau/Honoraria: Ontario College of Family Physicians, Ontario Osteoporosis Strategy
  - Membership on advisory boards: Osteoporosis Canada
  - Others: UofT DFCM & Baycrest Health Sciences (salary support), Baycrest Global Solutions (consulting)

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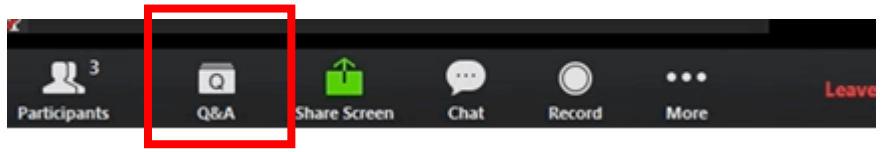
# Speaker Disclosure

- Faculty Name: **Dr. Mekalai Kumanan**
- Relationships with financial sponsors:
  - Grants/Research Support: N/A
  - Speakers Bureau/Honoraria: Ontario College of Family Physicians
  - Others: Deputy Chief of Family Medicine, Cambridge Memorial Hospital

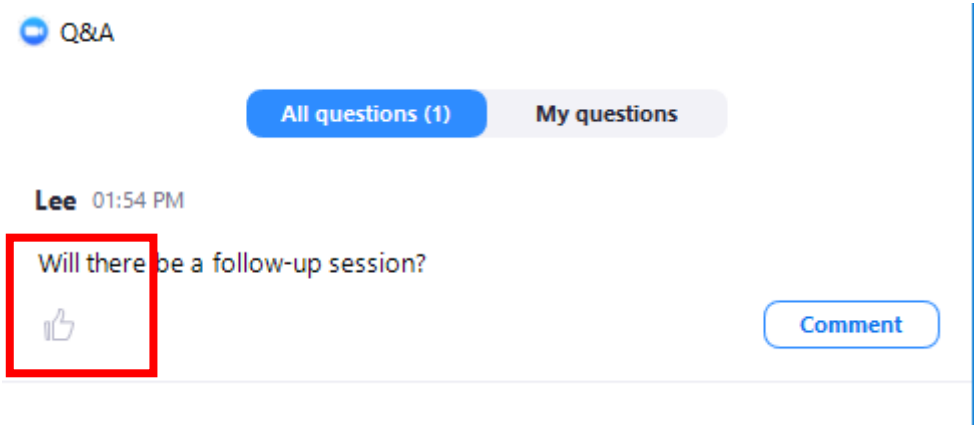
- Faculty Name: **Dr. Eleanor Colledge**
- Relationships with financial sponsors:
  - Grants/Research Support: N/A
  - Speakers Bureau/Honoraria: Ontario College of Family Physicians
  - Others: N/A

# How to Participate

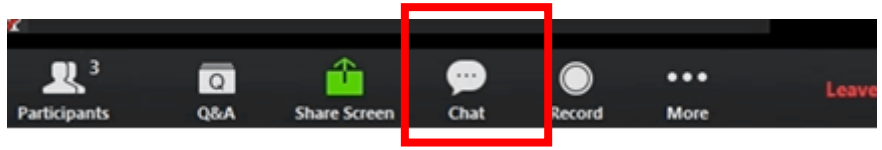
- All questions should be asked using the Q&A function at the bottom of your screen.




- Press the thumbs up button to upvote another guest's 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.



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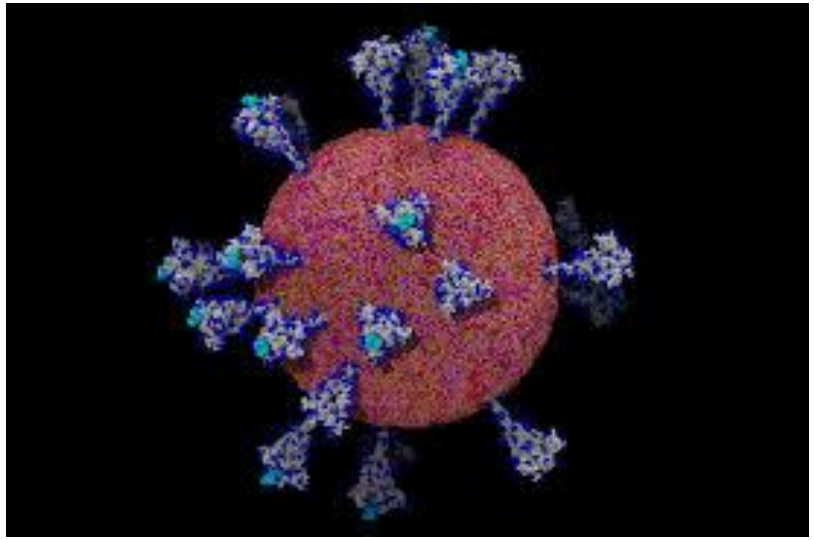
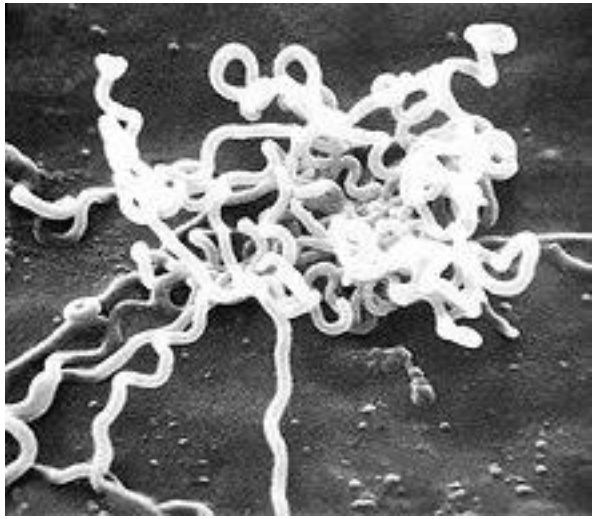
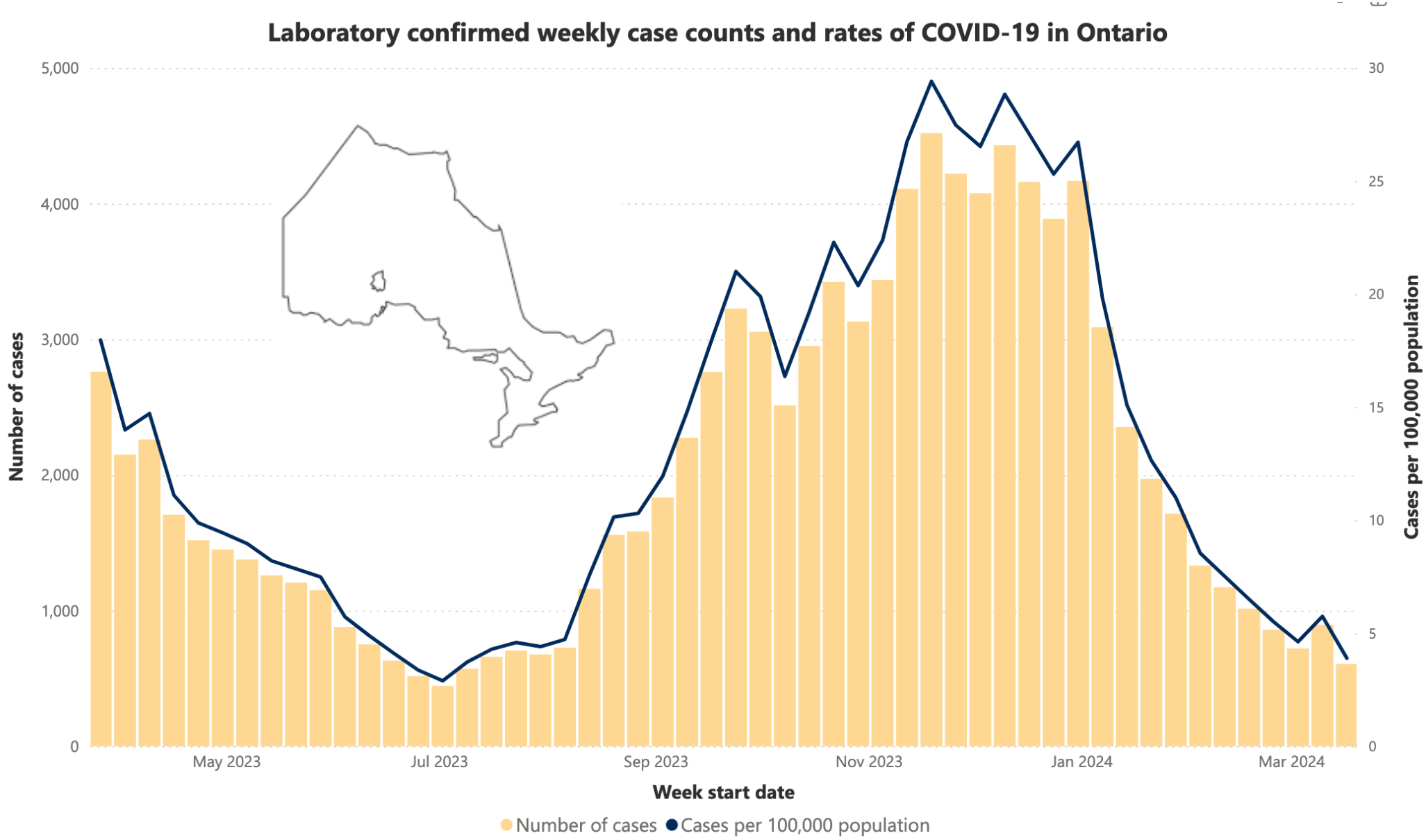
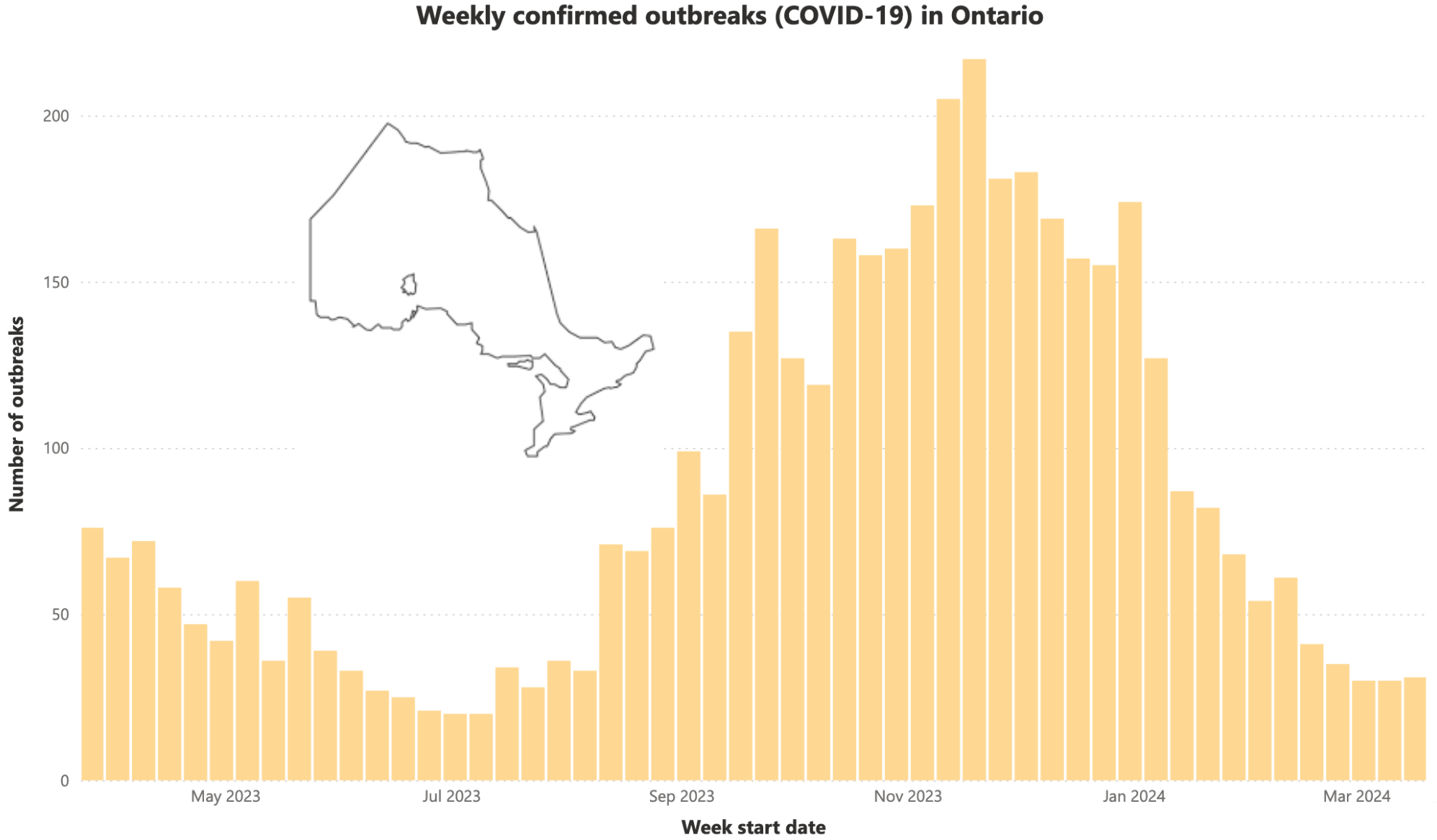
# COVID-19 Update

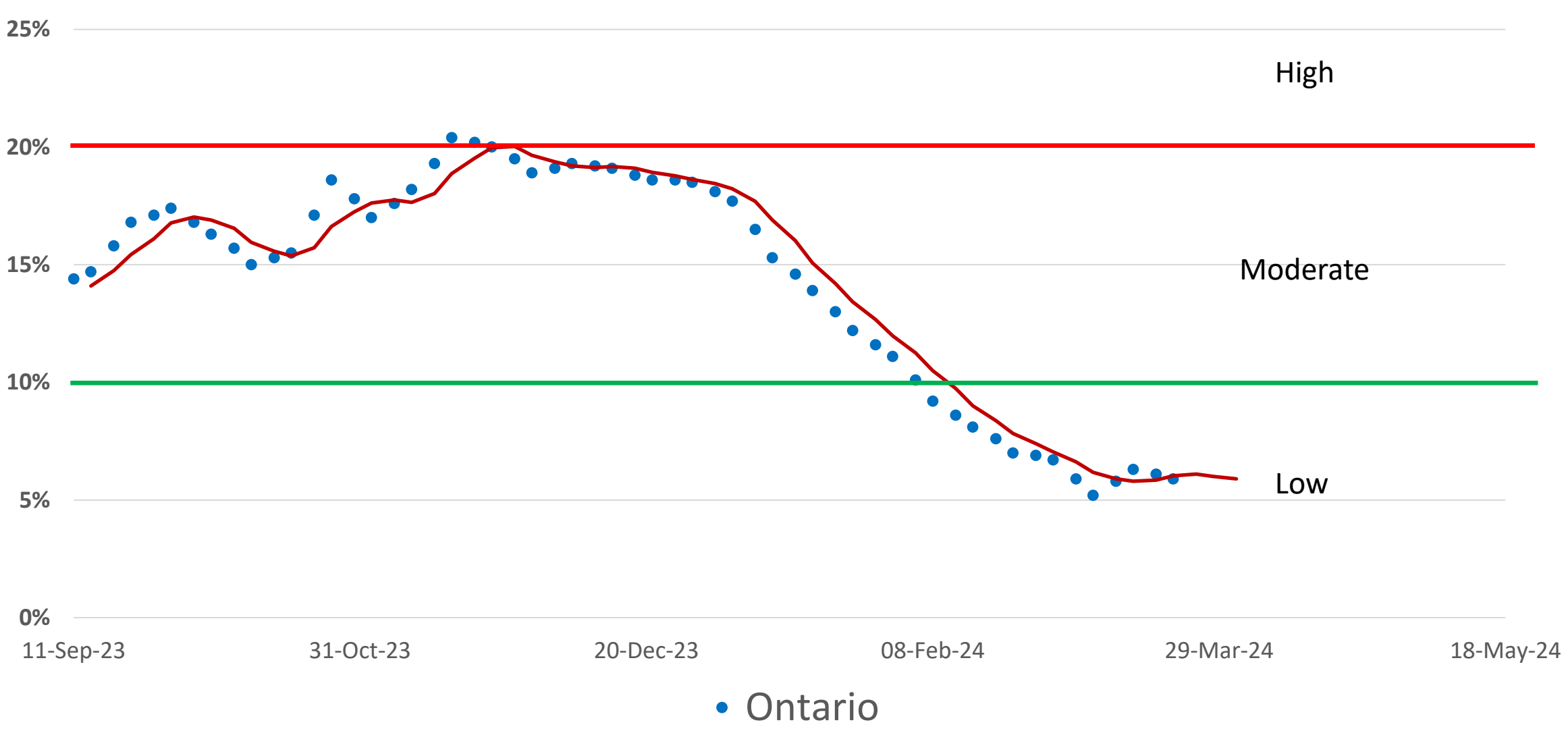
April 5, 2024



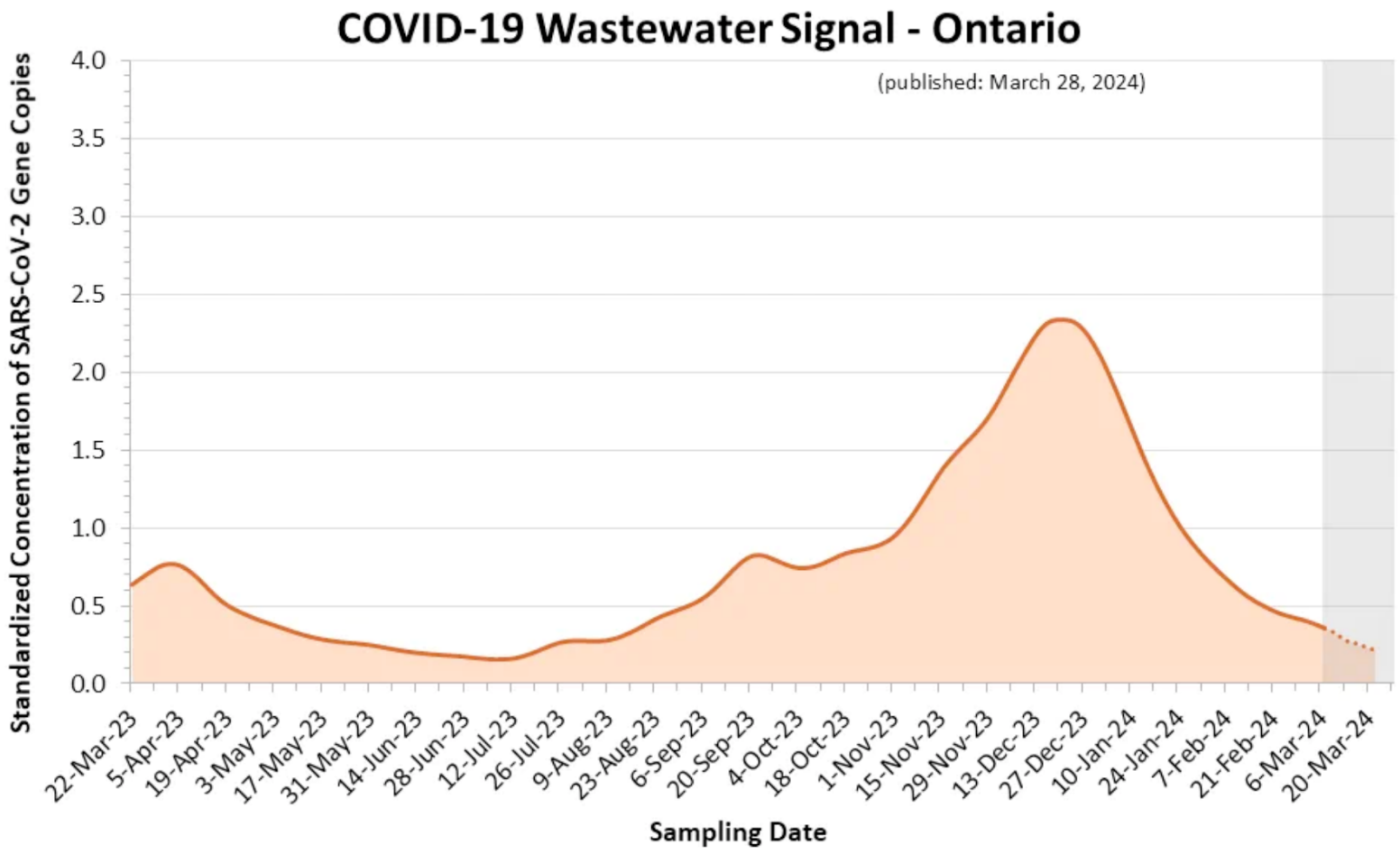



Laboratory confirmed weekly case counts and rates of COVID-19 in Ontario
5,000
4,000
3,000
2,000
1,000
0
Number of cases
30
25
20
15
10
5
0
Cases per 100,000 population
May 2023
Jul 2023
Sep 2023
Nov 2023
Jan 2024
Mar 2024
Week start date
Number of cases
Cases per 100,000 population


Weekly confirmed outbreaks (COVID-19) in Ontario
Number of outbreaks
200
150
100
50
0
May 2023
Jul 2023
Sep 2023
Nov 2023
Jan 2024
Mar 2024
Week start date

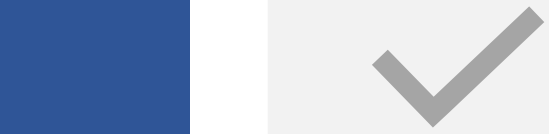

Ontario COVID-19 14-Day Moving Average of Test Positivity
Sep 2023 – present
25%
20%
15%
10%
5%
0%
High
Moderate
Low
11-Sep-23
31-Oct-23
20-Dec-23
08-Feb-24
29-Mar-24
18-May-24
Ontario

# SARS-CoV-2 RNA in Ontario Wastewater – March 28, 2024



# Current Status of Ontario Markers of COVID-19 Community Activity – April 5, 2024

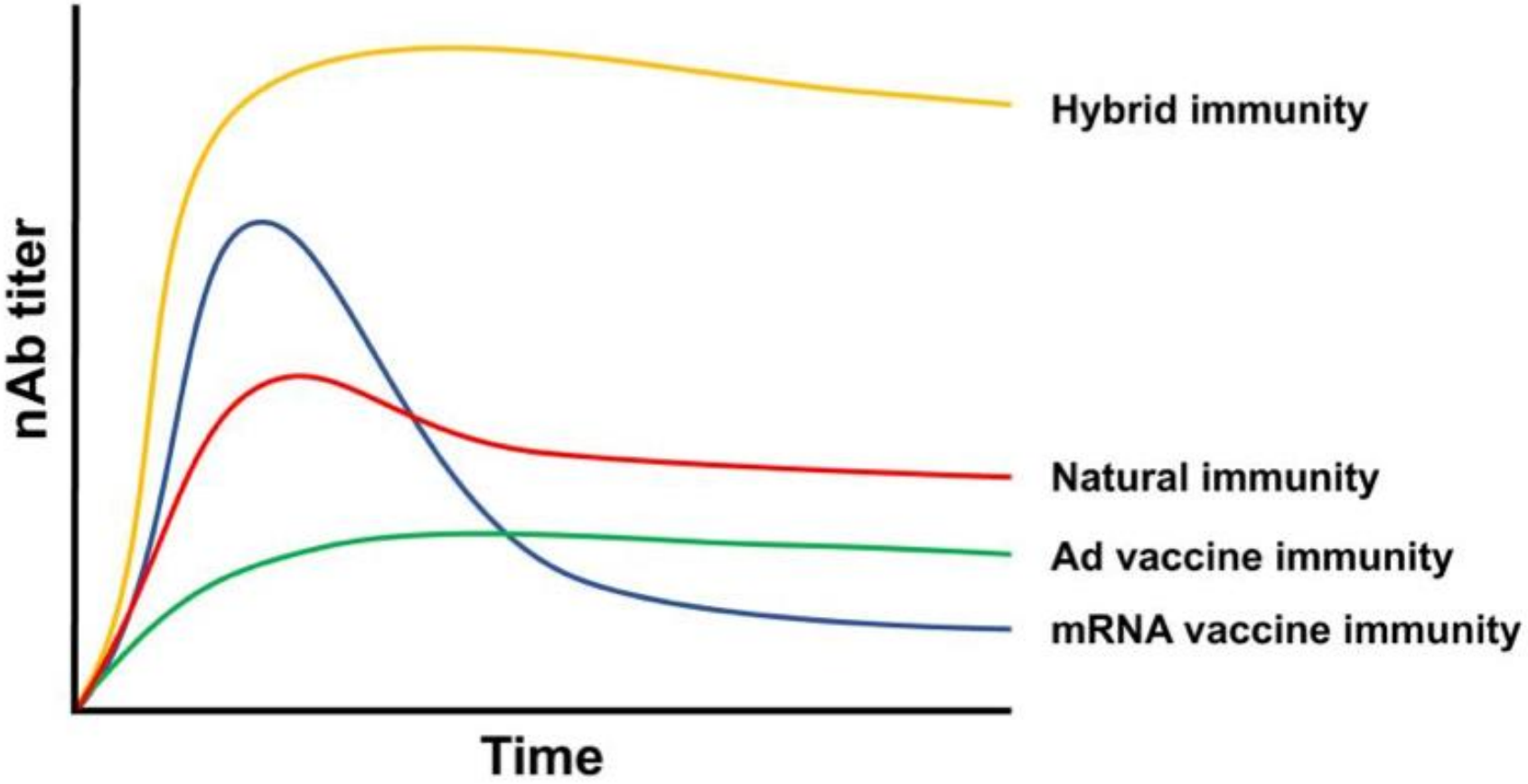
Outbreak numbers



Test positivity

Wastewater detection

# Magnitude and durability of nAb titers following SARS-CoV-2 infection, vaccination, and both




Source: N Lasrado, DH Barouch J Infect Dis 2023 https://doi.org/10.1093/infdis/jiad353

# VE of XBB Monovalent Vaccines – Sept 2023 to Feb 2024 from VISION Network

**TABLE 2. Effectiveness of updated 2023–2024 (monovalent XBB.1.5) COVID-19 vaccination against laboratory-confirmed COVID-19–associated hospitalization among immunocompromised adults aged ≥18 years — VISION, September 2023–February 2024**

| COVID-19 vaccination dosage pattern | Total | Positive SARS-CoV-2 test result, no. (%) | Median interval since last dose, days (IQR) | Unadjusted VE, %* (95% CI) | Adjusted VE, %† (95% CI) |
|---|---|---|---|---|---|
| No updated dose§ (Ref) | **11,990** | 1,197 (10) | 587 (381–766) | Ref | Ref |
| Received updated dose | **2,596** | 195 (8) | 56 (32–81) | 27 (14–37) | 36 (25–46) |
| 7–59 days earlier | **1,381** | 100 (7) | 34 (21–46) | 30 (13–43) | 38 (23–50) |
| 60–119 days earlier | **1,215** | 95 (8) | 83 (71–98) | 24 (5–38) | 34 (16–47) |

**Abbreviations:** Ref = referent group; VE = vaccine effectiveness; VISION = Virtual SARS-CoV-2, Influenza, and Other respiratory viruses Network.
* VE was calculated as (1 – odds ratio) × 100%, with odds ratios calculated using logistic regression.
† The odds ratio was adjusted for age, sex, race and ethnicity, geographic region, and calendar time (days since January 1, 2021).
§ The "no updated dose" group included all eligible persons who did not receive an updated COVID-19 vaccine dose, regardless of number of previous (i.e., original monovalent and bivalent) doses (if any) received.

Source: R Link-Gelles et al MMWR 2024 73(12): 271-6

# Effect of COVID Vaccines on Post-COVID Cardiac and Thromboembolic Complications

- Compared 10.17 million vaccinated and 10.39 million unvaccinated individuals from UK, Spain, & Estonia

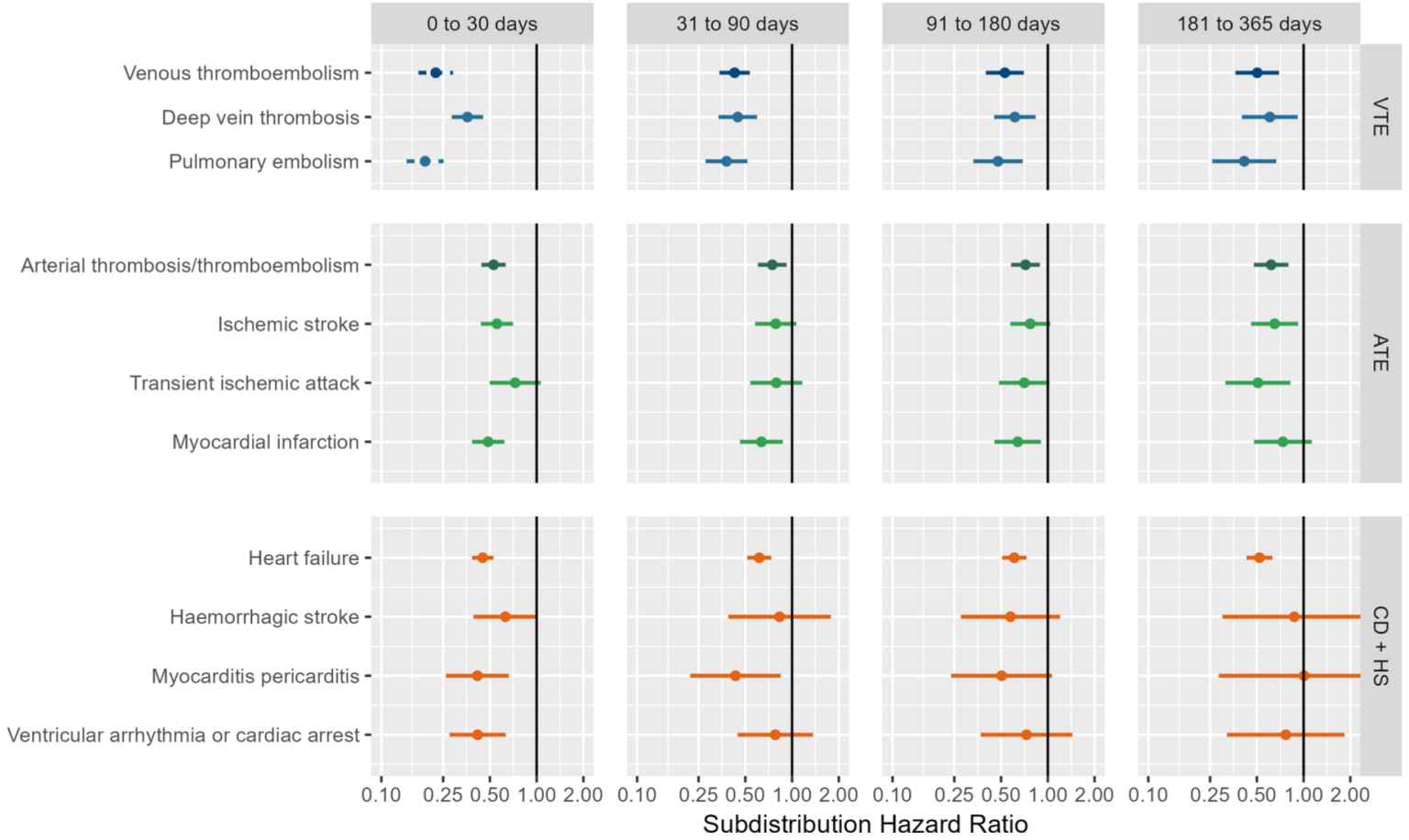


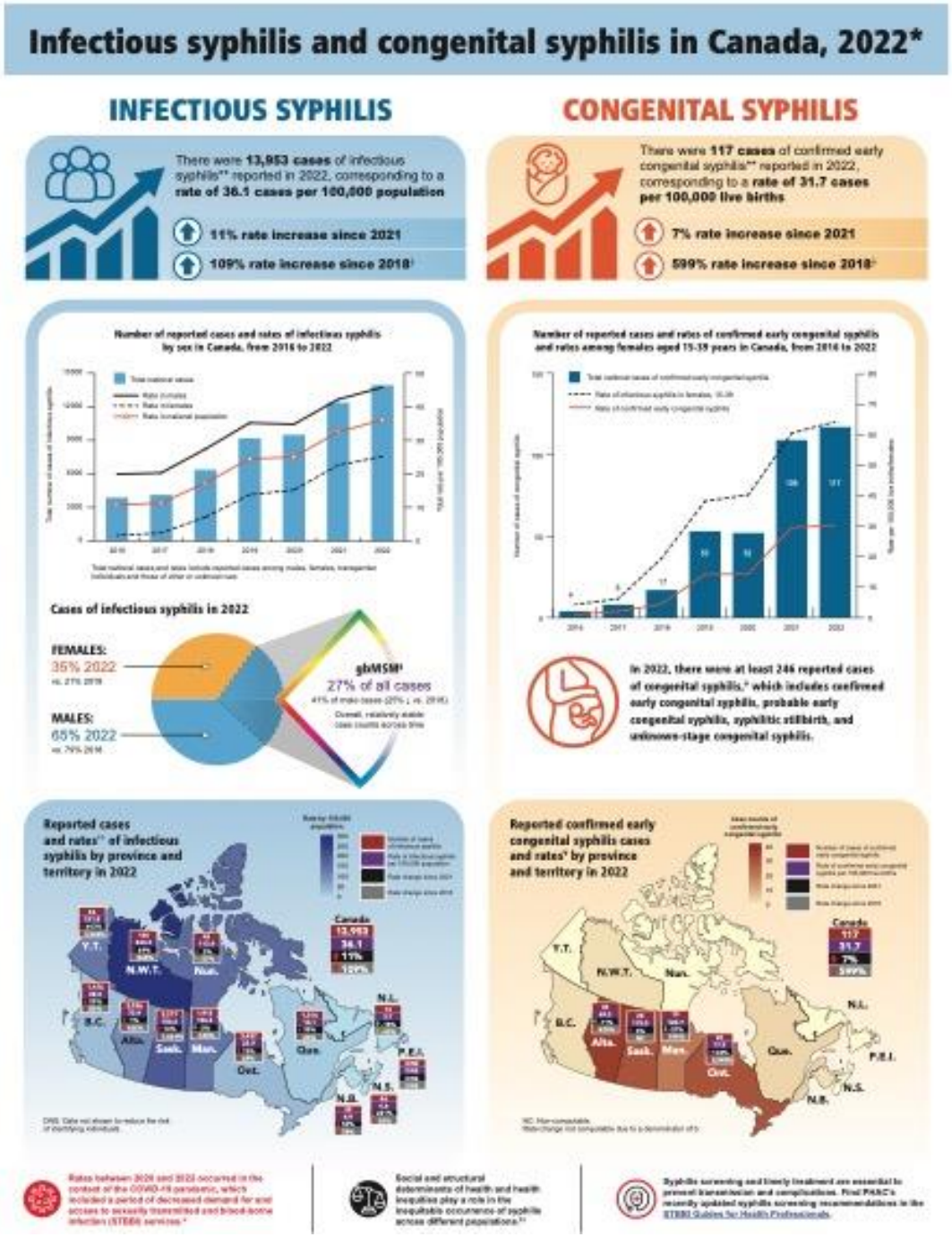

**Figure 2** Forest plots for the effect of COVID-19 vaccines on post-COVID-19 cardiac and thromboembolic complications; meta-analysis across cohorts and databases. Dashed line represents a level of heterogeneity $I^2$>0.4. ATE, arterial thrombosis/thromboembolism; CD+HS, cardiac diseases and haemorrhagic stroke; VTE, venous thromboembolism.

Source: N Mercadé-Besora et al Heart Epub ahead of print: doi:10.1136/ heartjnl-2023-323483

# Ontario COVID-19 XBB Vaccine Guidance – March 21, 2024

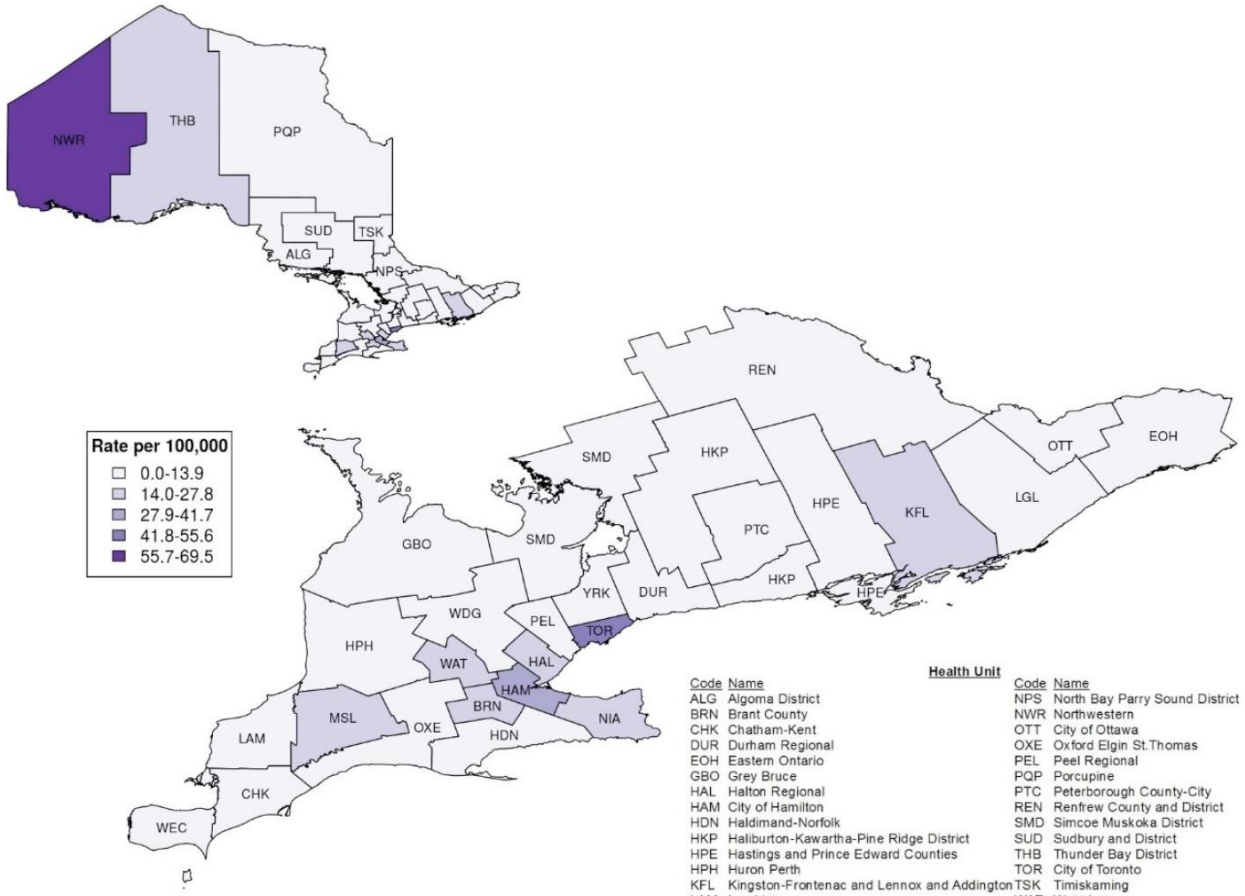
- Individuals 6 months to 4 years
  - If at high-risk severe illness, with additional dose at 8 weeks, if mod-severe IC
  - If unvaccinated, “may” receive vaccine to complete a series
- Individuals 5 years and older
  - If unvaccinated, “should” receive one dose of XBB vaccine
  - If mod-severe IC, should receive an additional dose
- As per NACI (January 12, 2024)
  - Those at increased risk of severe illness may receive an additional dose in Spring 2024
    - Adults 65 years of age and older
    - Adult residents of LTC and other congregate living settings for seniors
    - Individuals > 6 months of age who are moderately to severely immunocompromised
    - Individuals > 55 years of age who identify as First Nations, Inuit, or Metis and their non-Indigenous household members who are 55 years and older
- All other individuals are NOT currently recommended to receive a COVID-19 vaccine dose in Spring 2024

# Syphilis – What's old is new again…

# Syphilis in Ontario by PHU – 2021

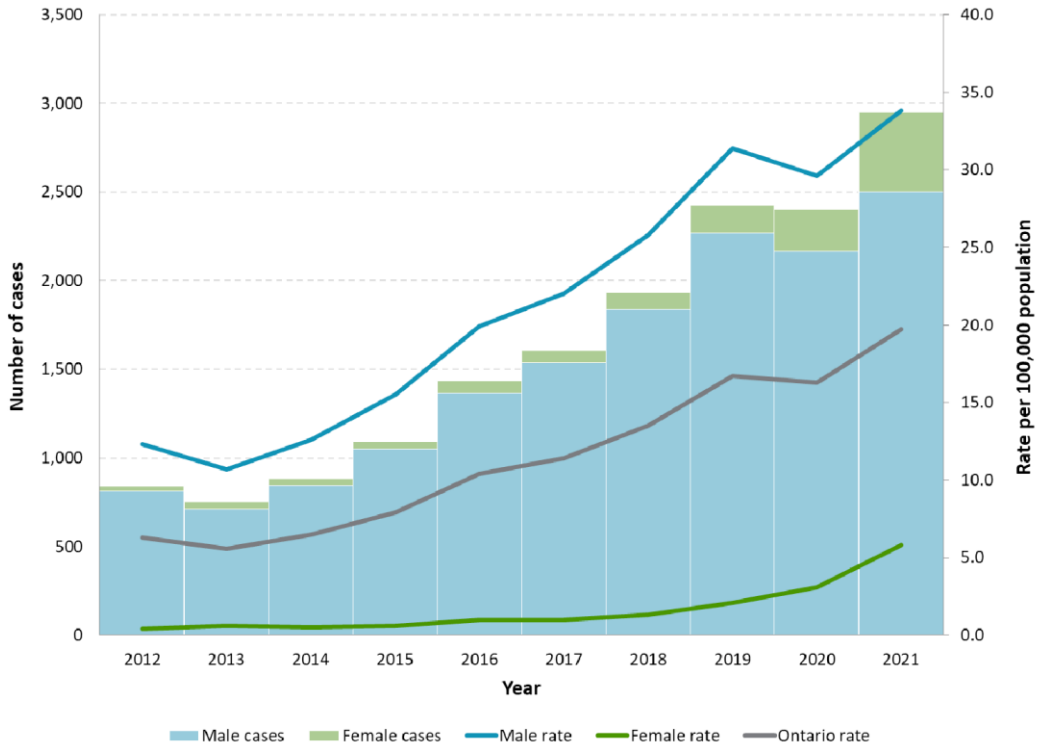
**Figure 4c. Infectious syphilis rates per 100,000 population by public health unit: Ontario, 2021**




| Health Unit | | | |
|---|---|---|---|
| Code | Name | Code | Name |
| ALG | Algoma District | NPS | North Bay Parry Sound District |
| BRN | Brant County | NWR | Northwestern |
| CHK | Chatham-Kent | OTT | City of Ottawa |
| DUR | Durham Regional | OXE | Oxford Elgin St.Thomas |
| EOH | Eastern Ontario | PEL | Peel Regional |
| GBO | Grey Bruce | PQP | Porcupine |
| HAL | Halton Regional | PTC | Peterborough County-City |
| HAM | City of Hamilton | REN | Renfrew County and District |
| HDN | Haldimand-Norfolk | SMD | Simcoe Muskoka District |
| HKP | Haliburton-Kawartha-Pine Ridge District | SUD | Sudbury and District |
| HPE | Hastings and Prince Edward Counties | THB | Thunder Bay District |
| HPH | Huron Perth | TOR | City of Toronto |
| KFL | Kingston-Frontenac and Lennox and Addington | TSK | Timiskaming |
| LAM | Lambton | WAT | Waterloo |
| LGL | Leeds-Grenville and Lanark District | WDG | Wellington-Dufferin-Guelph |
| MSL | Middlesex-London | WEC | Windsor-Essex County |
| NIA | Niagara Regional Area | YRK | York Regional |

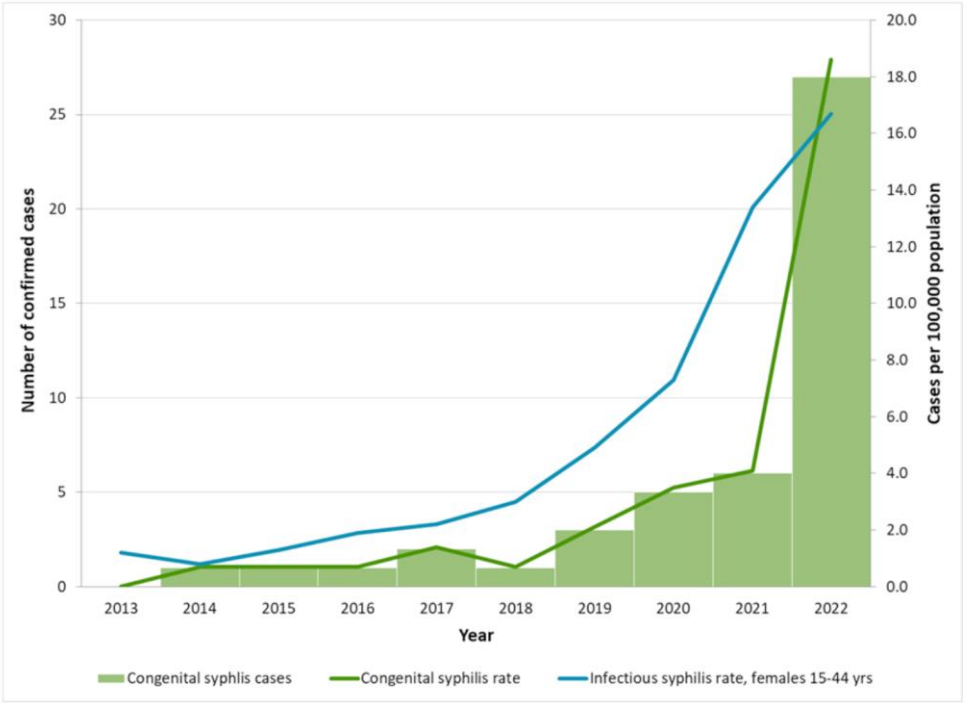
# Syphilis in Ontario – 2021-22

**Figure 1. Infectious syphilis cases and rates per 100,000 population by year and gender*: Ontario, 2012-2021**




Infectious

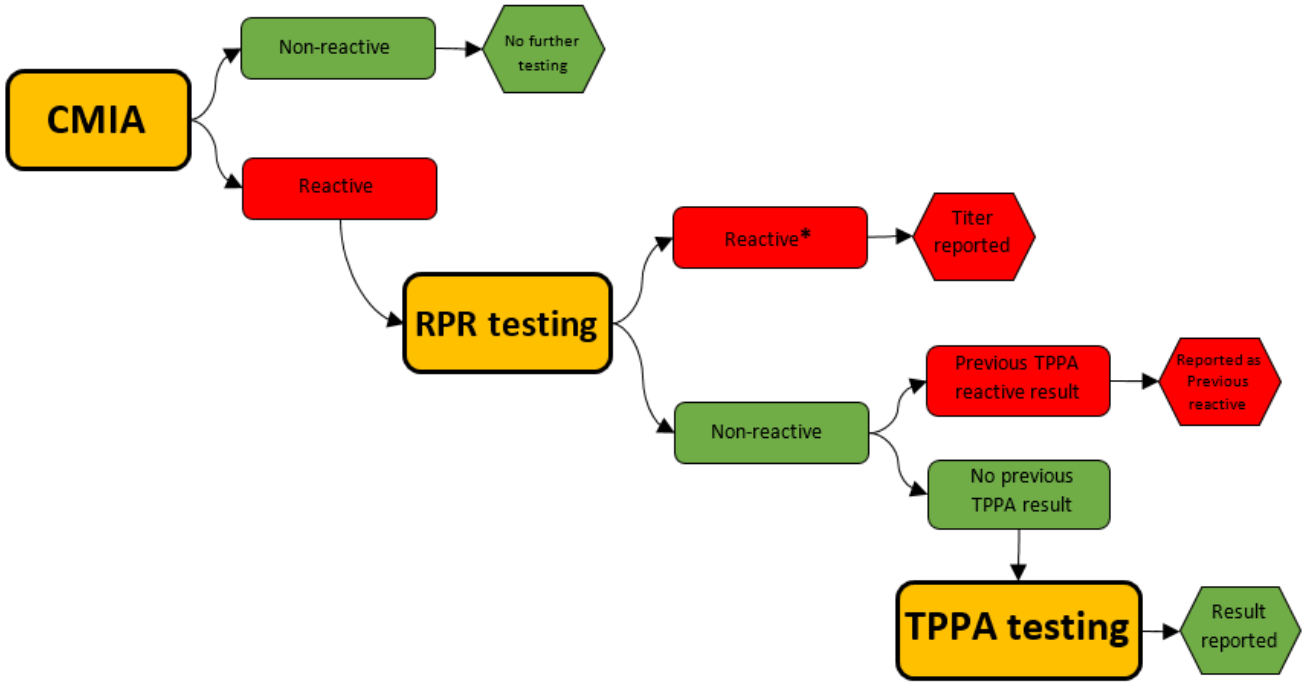
**Figure 2. Confirmed cases and rate per 100,000 population (≤2 years) of early congenital syphilis compared to the rate (per 100,000 population) of infectious syphilis among females 15-44 years of age: Ontario, 2013-2022**




Congenital

# Syphilis Testing in Ontario

- CMIA = Chemiluminescent Microparticle ImmunoAssay
  - A qualitative immunoassay that detects treponemal antibodies (IgG and IgM)
- RPR = VDRL
- TPPA
  - Specific syphilis confirmatory test




*For infants ≤18 months, TPPA testing is completed regardless of RPR result.

# Clinical Clues to the Stages of Syphilis

Infectious

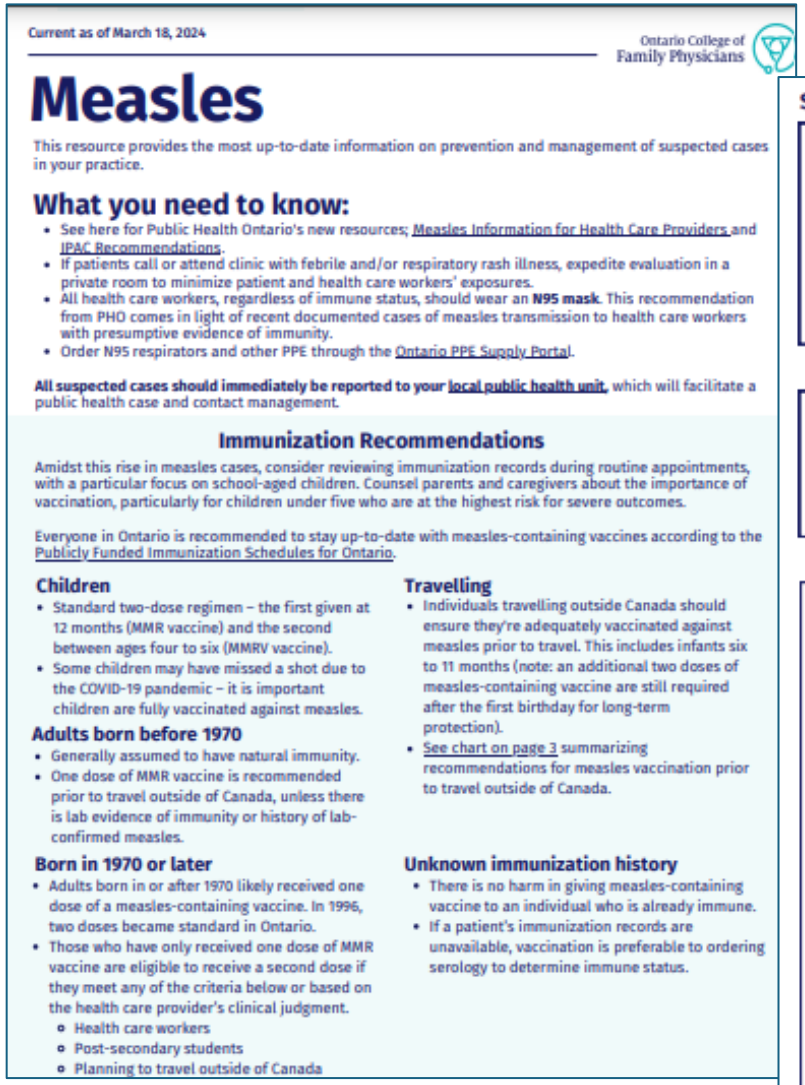
- Primary – Chancre
  - Not always painless
  - Look in non-genital regions
- Secondary – Rashes & alopecia
  - If an RPR ≥ 1:32, it's secondary syphilis
- Early latent
  - Usually asymptomatic
  - <1 year from initial infection

"Non-infectious"

- Late Latent syphilis
  - Asymptomatic
  - >1 year from initial infection
- Tertiary
  - Late benign/gummatous syphilis
  - Neurologic
  - Cardiovascular

# Resources to support your practice

## Measles



Current as of March 18, 2024

Ontario College of Family Physicians

# Measles

This resource provides the most up-to-date information on prevention and management of suspected cases in your practice.

## What you need to know:

- See here for Public Health Ontario's new resources; Measles Information for Health Care Providers and IPAC Recommendations.
- If patients call or attend clinic with febrile and/or respiratory rash illness, expedite evaluation in a private room to minimize patient and health care workers' exposures.
- All health care workers, regardless of immune status, should wear an **N95 mask**. This recommendation from PHO comes in light of recent documented cases of measles transmission to health care workers with presumptive evidence of immunity.
- Order N95 respirators and other PPE through the Ontario PPE Supply Portal.

**All suspected cases should immediately be reported to your local public health unit**, which will facilitate a public health case and contact management.

### Immunization Recommendations

Amidst this rise in measles cases, consider reviewing immunization records during routine appointments, with a particular focus on school-aged children. Counsel parents and caregivers about the importance of vaccination, particularly for children under five who are at the highest risk for severe outcomes.

Everyone in Ontario is recommended to stay up-to-date with measles-containing vaccines according to the Publicly Funded Immunization Schedules for Ontario.

#### Children

- Standard two-dose regimen – the first given at 12 months (MMR vaccine) and the second between ages four to six (MMRV vaccine).
- Some children may have missed a shot due to the COVID-19 pandemic – it is important children are fully vaccinated against measles.

#### Adults born before 1970

- Generally assumed to have natural immunity.
- One dose of MMR vaccine is recommended prior to travel outside of Canada, unless there is lab evidence of immunity or history of lab-confirmed measles.

#### Born in 1970 or later

- Adults born in or after 1970 likely received one dose of a measles-containing vaccine. In 1996, two doses became standard in Ontario.
- Those who have only received one dose of MMR vaccine are eligible to receive a second dose if they meet any of the criteria below or based on the health care provider's clinical judgment.
  - Health care workers
  - Post-secondary students
  - Planning to travel outside of Canada

#### Travelling

- Individuals travelling outside Canada should ensure they're adequately vaccinated against measles prior to travel. This includes infants six to 11 months (note: an additional two doses of measles-containing vaccine are still required after the first birthday for long-term protection).
- See chart on page 3 summarizing recommendations for measles vaccination prior to travel outside of Canada.

#### Unknown immunization history

- There is no harm in giving measles-containing vaccine to an individual who is already immune.
- If a patient's immunization records are unavailable, vaccination is preferable to ordering serology to determine immune status.

### Screen Patient by Asking: Do you have symptoms of measles?

Fever | Cough | Conjunctivitis | Runny Nose | Koplik spots | Rash

- The infectious period for measles is four days before rash onset until four days after rash onset.
- Measles can resemble other viruses, including Mpox, varicella, and hand, foot and mouth disease.
- Symptoms generally start around 10 days after being exposed but can start anywhere from seven to 21 days after exposure and typically last for one to two weeks.
- The characteristic red maculopapular rash typically appears after three to seven days of initial symptoms.
- Rash first appears on the face and spreads downwards over the body, lasting five to six days.

Yes

**Do you have risk factors for measles?**

Recent travel | No/unknown immunity | Links to a known outbreak or case

Yes

**Providing Care for Symptomatic Patients**

When patients call for appointments with symptoms of febrile and/or respiratory rash illnesses, consider measles in differential diagnoses, particularly in patients returning from travel.

- Routine practices and airborne precautions are recommended.
- Only health care workers with presumptive immunity should care for a patient suspected of measles (two doses of measles-containing vaccine or lab evidence of immunity).
- All health care workers and staff should wear an N95 mask, regardless of immune status.
- Health care workers should also conduct a personal care risk assessment (PCRA) to determine whether additional PPE is recommended (e.g., gloves, gown, eye protection).

**Patient flow**

- Where possible, schedule symptomatic patients separately from other patients—ideally at the end of the day since no other patients should be placed in the same room for two hours afterwards.
- Require symptomatic patients to wear medical masks.
- Promptly isolate symptomatic patients in a negative pressure room, if available, or single patient room with the door closed.

For more guidance, refer to PHO's new Interim IPAC Recommendations.

**Testing**

**Note: All suspect cases of measles should immediately be reported to your local public health unit. Do not wait for laboratory confirmation.**

**Collect samples for testing**

- To optimize test turnaround time, ensure use of valid (non-expired) collection kits (if you require specimen collection supplies for your clinic, order through PHO).
  - Collect PCR nasopharyngeal / throat swab **AND** urine as well as diagnostic serology.
- If you cannot collect samples in your office, provide the patient with a requisition and refer to a lab for testing.
- If you are referring a patient for further assessment or diagnostic testing, advise the patient to contact the health care facility prior to arrival (if possible) so appropriate IPAC precautions can be implemented.

https://ontariofamilyphysicians.ca/wp-content/uploads/2024/03/measles-Final-2.pdf

https://ontariofamilyphysicians.ca/supports-for-family-doctors/

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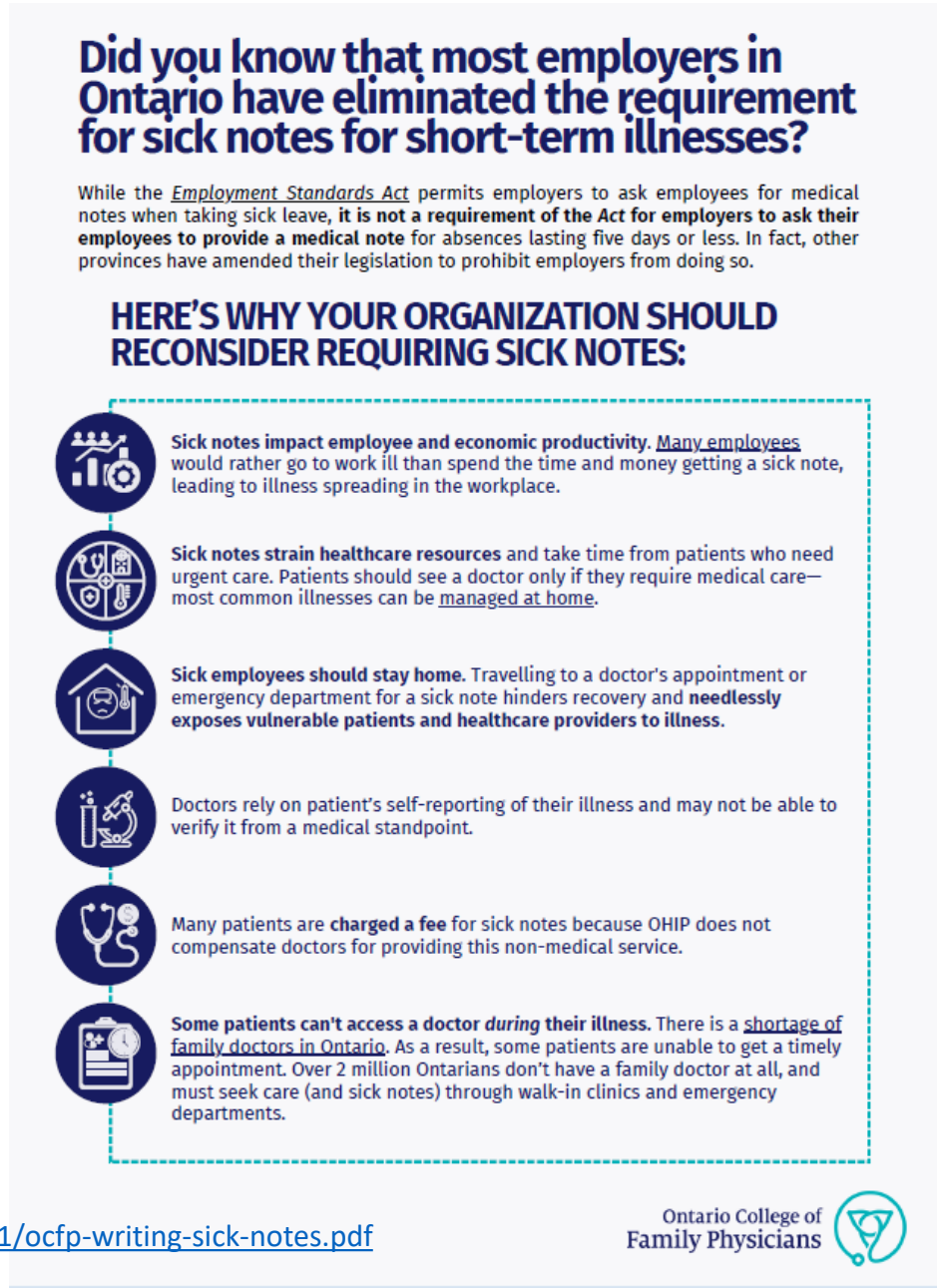
# Resources to support your practice

# Writing Sick Notes

**To help educate employers on changing their policies, the OCFP has created this resource for use in your EMRs and clinic workflows for sick notes.**



## Did you know that most employers in Ontario have eliminated the requirement for sick notes for short-term illnesses?

While the *Employment Standards Act* permits employers to ask employees for medical notes when taking sick leave, **it is not a requirement of the *Act* for employers to ask their employees to provide a medical note** for absences lasting five days or less. In fact, other provinces have amended their legislation to prohibit employers from doing so.

### HERE'S WHY YOUR ORGANIZATION SHOULD RECONSIDER REQUIRING SICK NOTES:

**Sick notes impact employee and economic productivity.** Many employees would rather go to work ill than spend the time and money getting a sick note, leading to illness spreading in the workplace.

**Sick notes strain healthcare resources** and take time from patients who need urgent care. Patients should see a doctor only if they require medical care—most common illnesses can be managed at home.

**Sick employees should stay home.** Travelling to a doctor's appointment or emergency department for a sick note hinders recovery and **needlessly exposes vulnerable patients and healthcare providers to illness.**

Doctors rely on patient's self-reporting of their illness and may not be able to verify it from a medical standpoint.

Many patients are **charged a fee** for sick notes because OHIP does not compensate doctors for providing this non-medical service.

**Some patients can't access a doctor *during* their illness.** There is a shortage of family doctors in Ontario. As a result, some patients are unable to get a timely appointment. Over 2 million Ontarians don't have a family doctor at all, and must seek care (and sick notes) through walk-in clinics and emergency departments.

Ontario College of Family Physicians

# *New*

EMR-Integrate Sick note form for TELUS PS suites, OSCAR Pro and Accuro QHR

https://ontariofamilyphysicians.ca/supports-for-family-doctors/

https://ontariofamilyphysicians.ca/wp-content/uploads/2024/01/ocfp-writing-sick-notes.pdf

Ontario College of Family Physicians

# Clinical practice guideline for management of osteoporosis and fracture prevention in Canada: 2023 update

**Sid Feldman** MD CCFP (COE) FCFP
Associate Professor and Head, Division of Care of the Elderly,
Department of Family and Community Medicine, Temerty Faculty of Medicine, University of Toronto
sfeldman@baycrest.org

Guideline CPD

# Clinical practice guideline for management of osteoporosis and fracture prevention in Canada: 2023 update

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https://www.cmaj.ca/content/195/39/E1333/tab-related-content

**WHO**

- Family physicians*
- Patient partners*
- Osteoporosis, exercise, and nutrition expert clinicians and researchers
- Pharmacists
- GRADE methodologist (McMaster University and World Health Organization)

**WHAT**

- Separate conflict of interest management committee
- Working groups in fracture risk assessment, nutrition, exercise, and pharmacotherapy
- Unrestricted funding from OC for methodologist and librarians for literature searches, otherwise voluntary, unpaid participation

*At least one on each working group and on steering committee
Family physicians additional consensus process

# Scope and focus:

- Intended to assist Canadian primary health care professionals in screening community-dwelling postmenopausal females and males, aged 50 years and older, for the presence of risk factors for osteoporosis (OP) and fractures
- Provide interventions to optimize skeletal health and fracture prevention
- The focus of the guideline recommendations for treatment is on people with primary (not secondary) osteoporosis

# GRADE: Interpreting the Recommendations

| Implications | Strong Recommendation "we recommend"… | Conditional Recommendation "we suggest"… |
|---|---|---|
| **for patients/residents** | Most individuals in this situation would want the recommended course of action, and only a small proportion would not. | The majority of individuals in this situation would want the suggested course of action, but many would not. |
| **for clinicians** | Most individuals should receive the intervention. | Clinicians recognize that different choices will be appropriate for each individual and that clinicians must help each individual arrive at a management decision consistent with his/her values and preferences. |

# OSTEOPOROSIS and RELATED FRACTURES in Canada

- In 2016-2017, **2.3M** Canadians aged 40+ were **living with diagnosed osteoporosis**
- **MALES are less likely** to receive any intervention

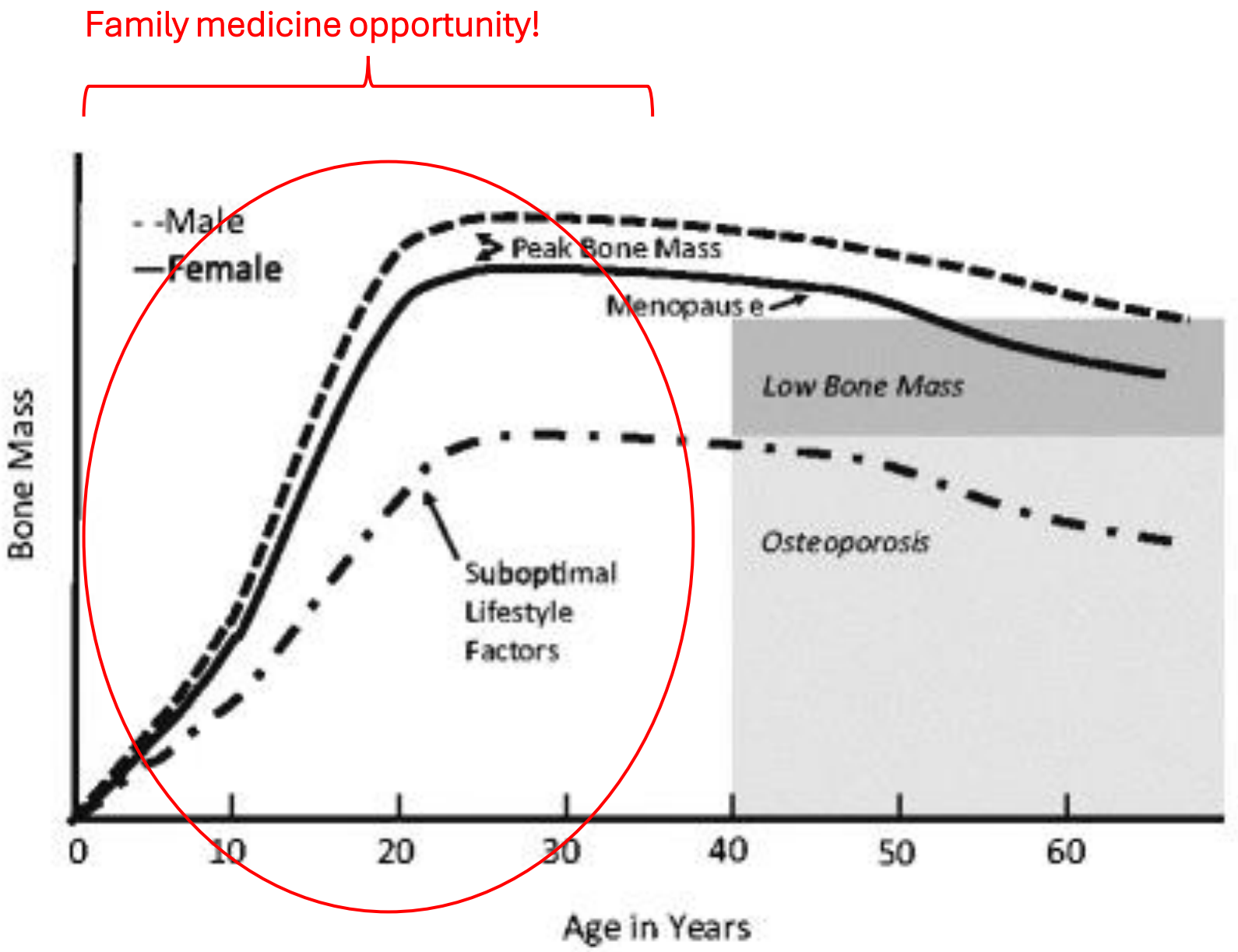
PRIMARY COMPLICATIONS

- In 2016-2017, there were **150 hip fractures** per **100,000** Canadians ages 40+
- More than **1 in 5 Canadians** with a hip fracture died of any cause the following year

Sex differences:

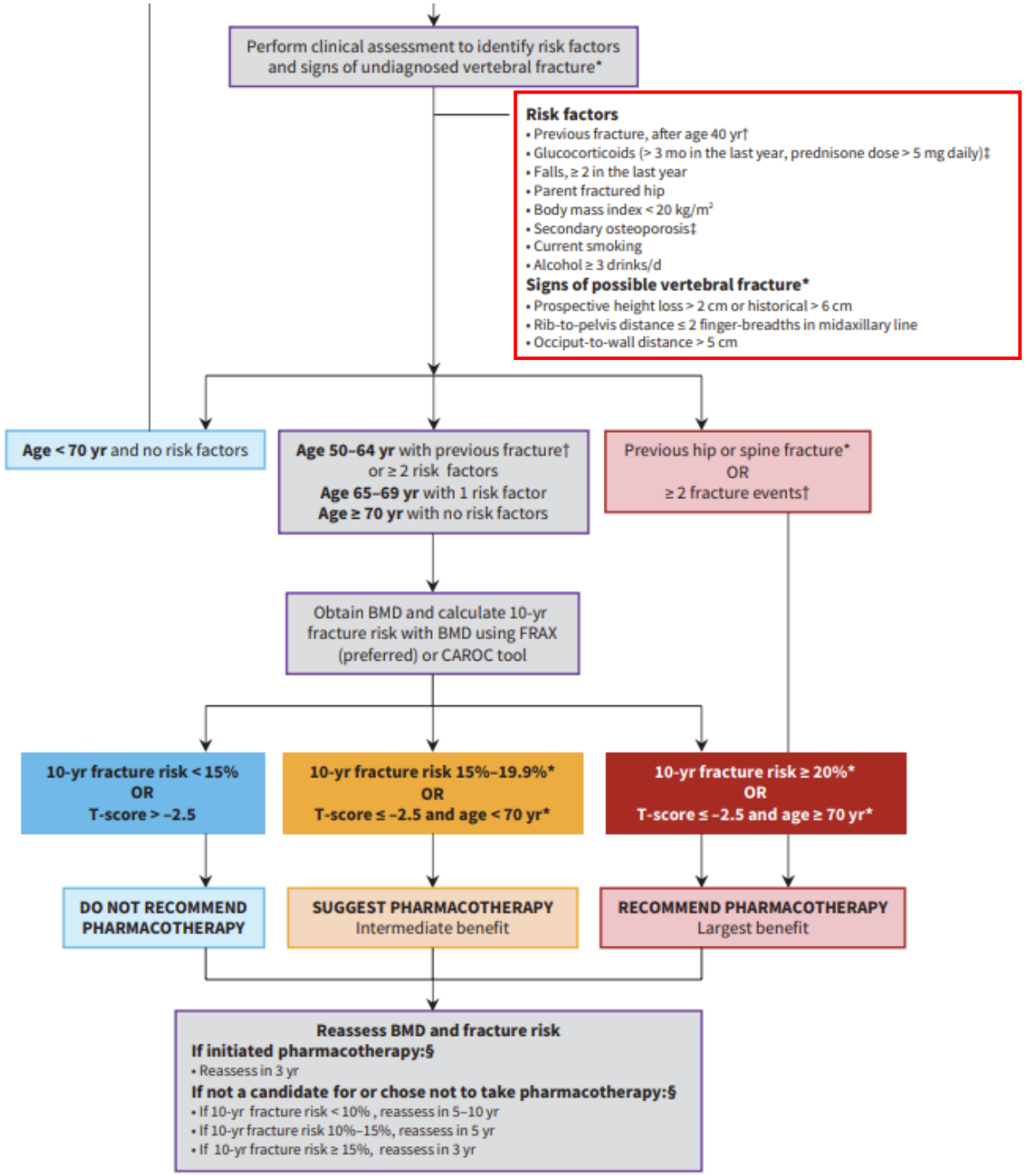
- **FEMALES were 2x more likely** to fracture their hip compared to males
- **MALES were 1.6x more likely** to die of any cause within a year of a fracture compared to females

# Peak Bone Mass




Weaver CM. The National Osteoporosis Foundation's position statement on peak bone mass development and lifestyle factors: a systematic review and implementation recommendations. Osteoporos Int. 2016 ;27(4):1281-1386. doi: 10.1007/s00198-015-3440-3.

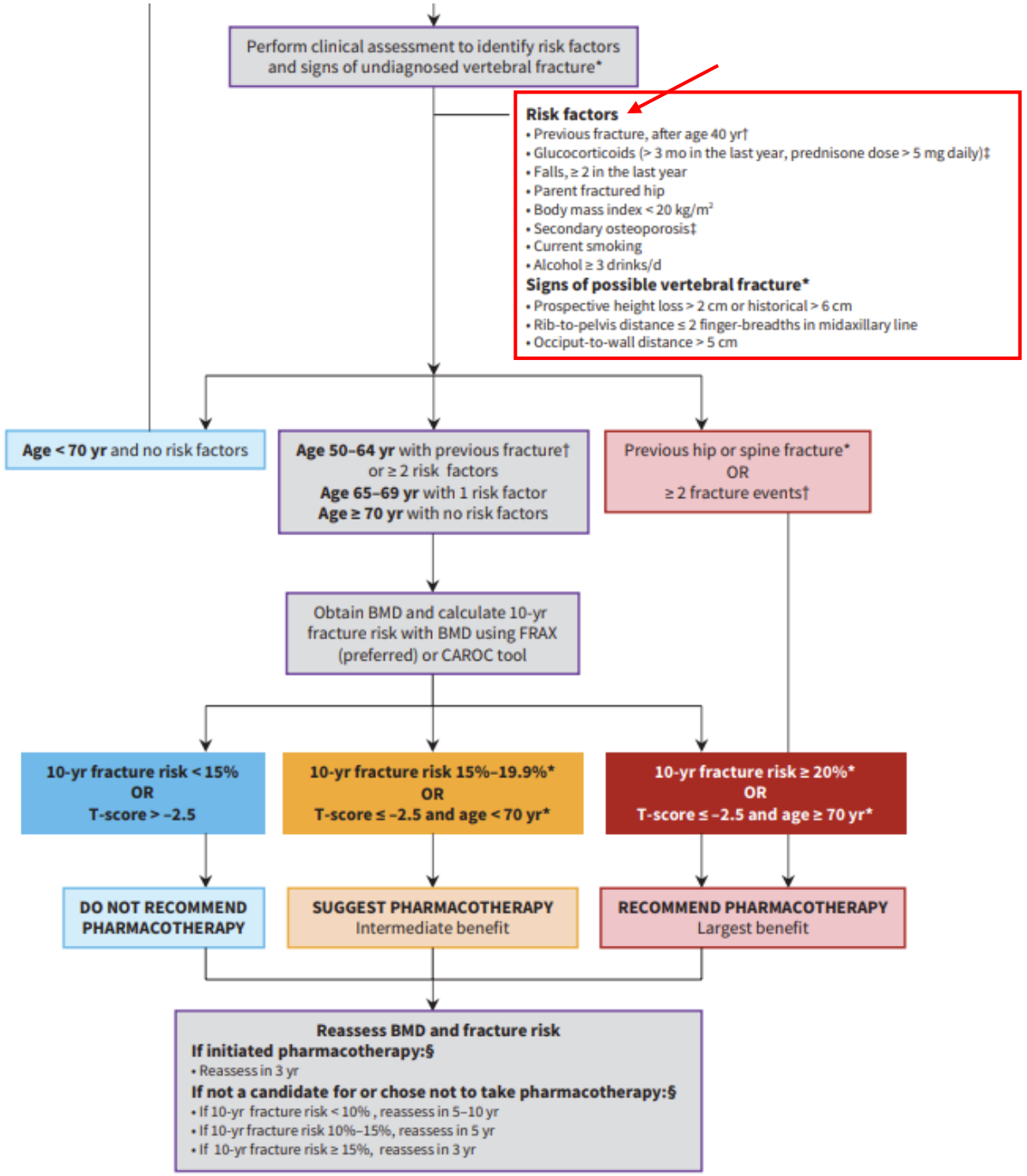
# Risk assessment




Suzanne N. Morin et al. CMAJ 2023;195:E1333-E1348

# Risk assessment

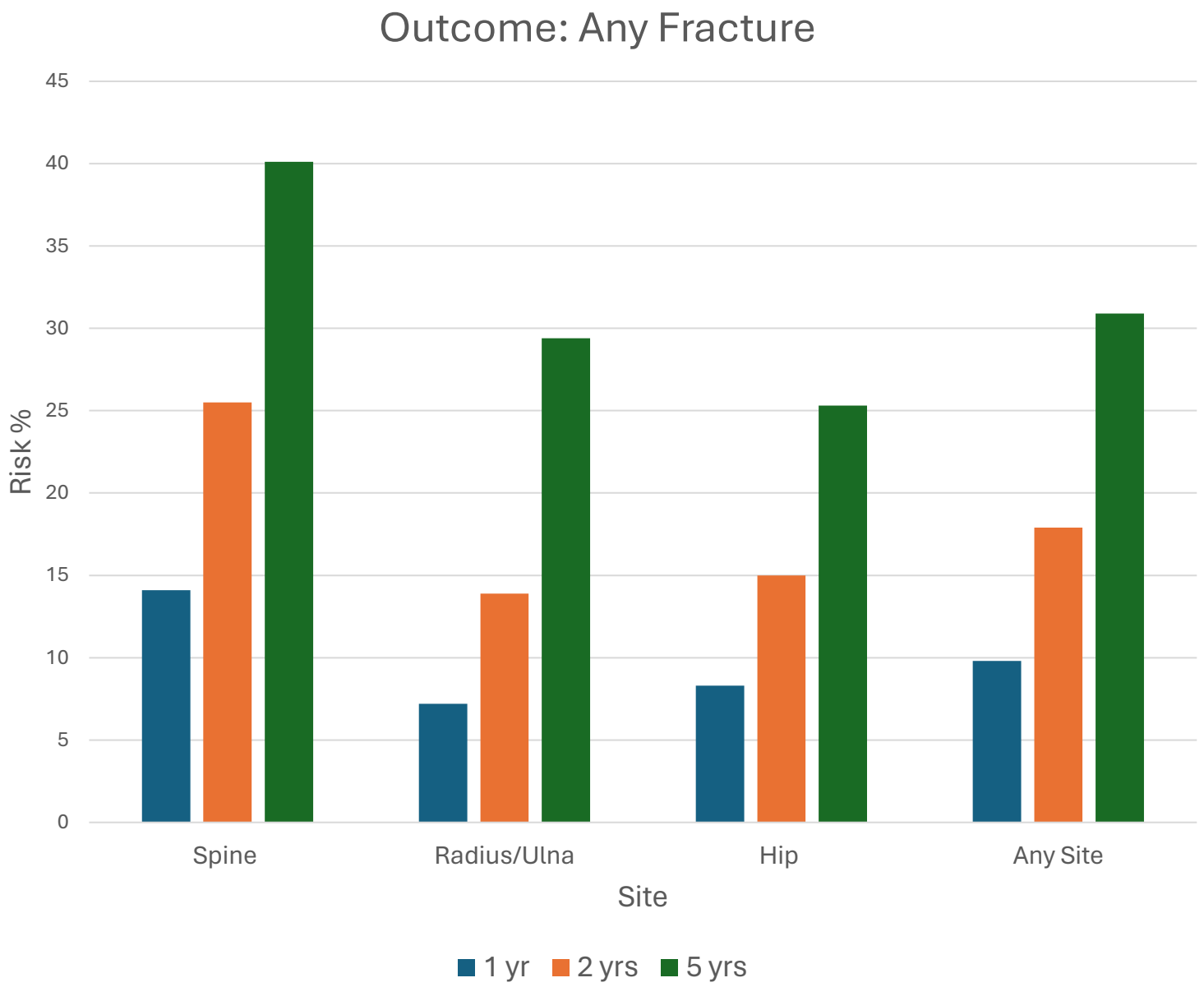
1. Identify risk factors:
   - Previous fracture after age 40
   - Glucocorticoids (> 3 months in last year, prednisone equivalent >5 mg daily)
   - ***Falls*** ≥2 in the last year
   - Parent fractured hip
   - BMI <20
   - Current smoking
   - EtOH ≥3 drinks/day
   - Secondary osteoporosis




Suzanne N. Morin et al. CMAJ 2023;195:E1333-E1348

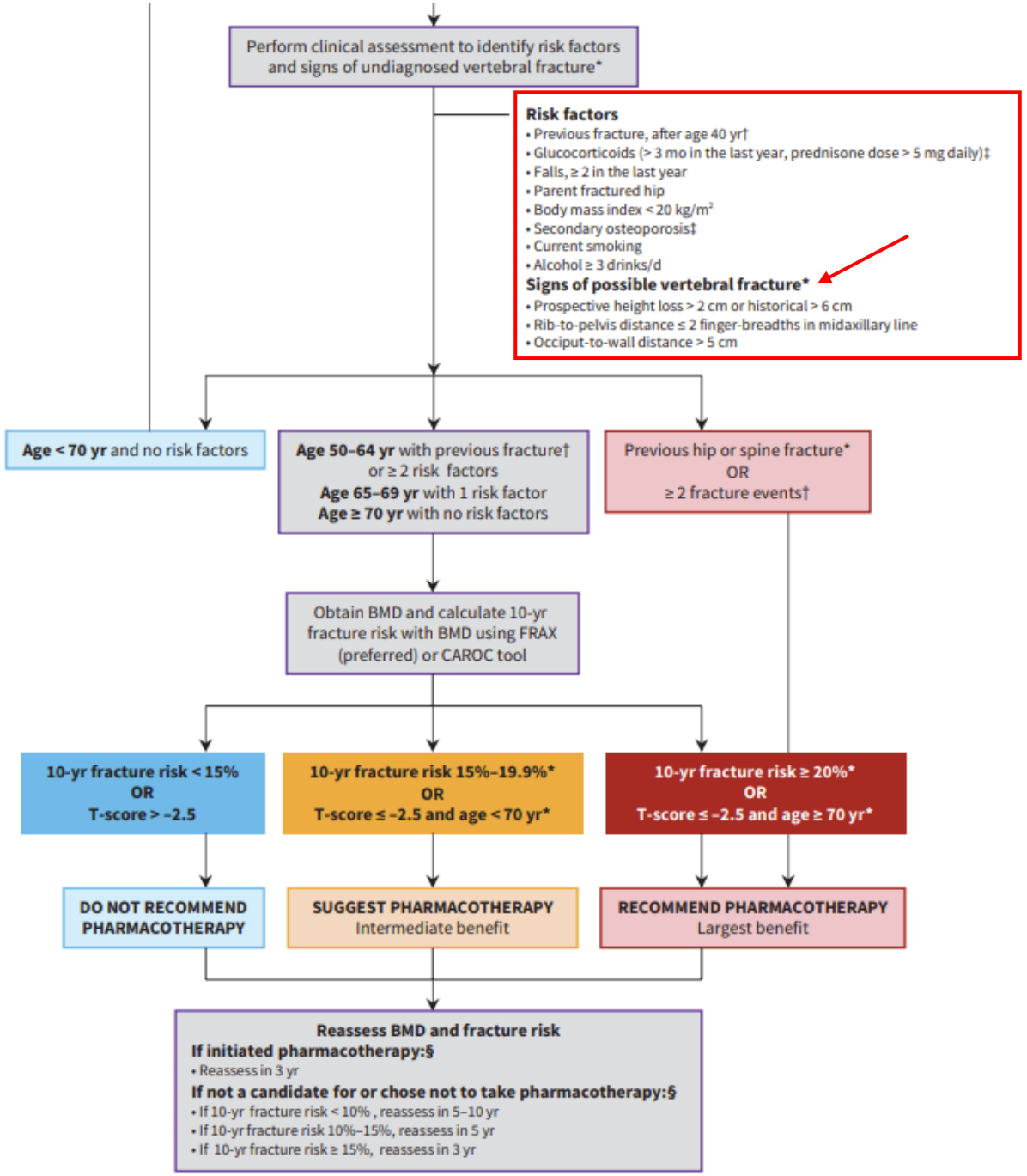
*Balasubramanian et al.*
*Osteoporosis Int 2019; 30:79-92.*

# Risk of subsequent fracture after prior fracture



# Risk assessment

2. Look for clinical signs of possible vertebral fracture

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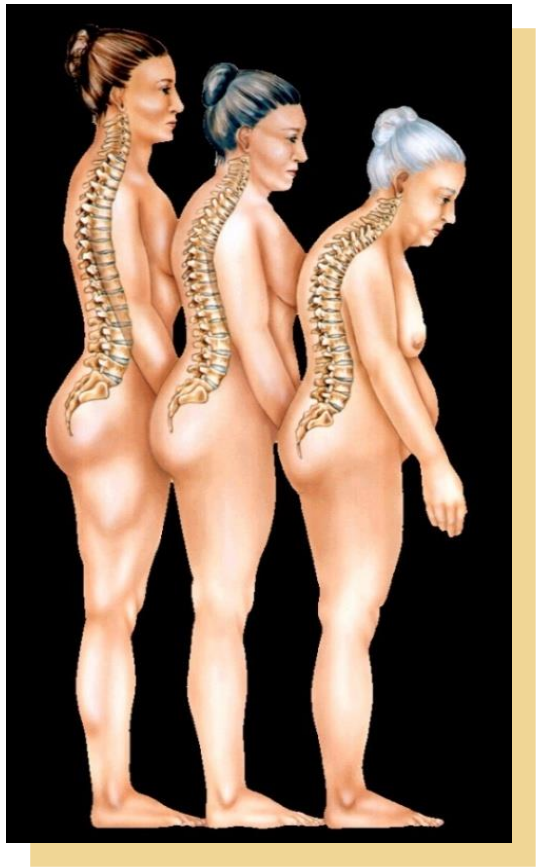
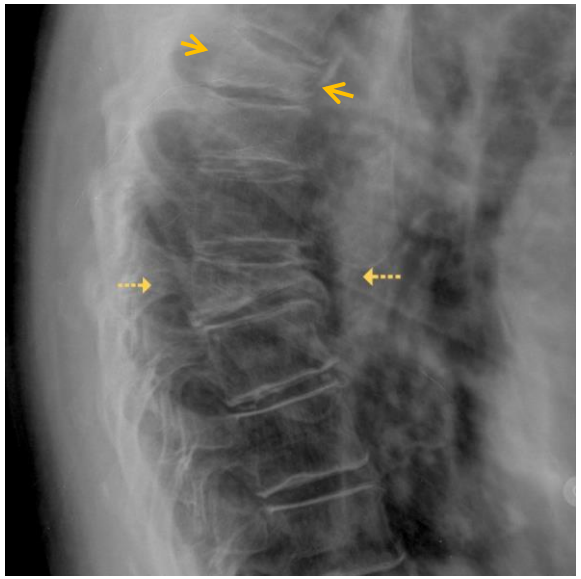
# Height loss:



- Increased risk of vertebral fracture
  - Historical height loss (> 6 cm)[1,2]
  - Measured height loss (> 2 cm)[3-5]
- Significant height loss should be investigated by a lateral thoracic and lumbar spine X-ray that includes T4-L4
- 2/3 of vertebral fractures are asymptomatic




1. Siminoski K, et al. Osteoporos Int 2006; 17(2):290-296.
2. Briot K, et al. CMAJ 2010; 182(6):558-562.
3. Moayyeri A, et al. J Bone Miner Res 2008; 23:425-432.
4. Siminoski K, et al. Osteoporos Int 2005; 16(4):403-410.
5. Kaptoge S, et al. J Bone Miner Res 2004; 19:1982-1993.

3. Selective use of BMD:

- **Age 50-64 yr** with previous fracture or ≥2 risk factors
- **Age 65-69 yr** with 1 risk factor
- **Age 70 yr** with no risk factors

4. BMD then ⟶ ***FRAX***

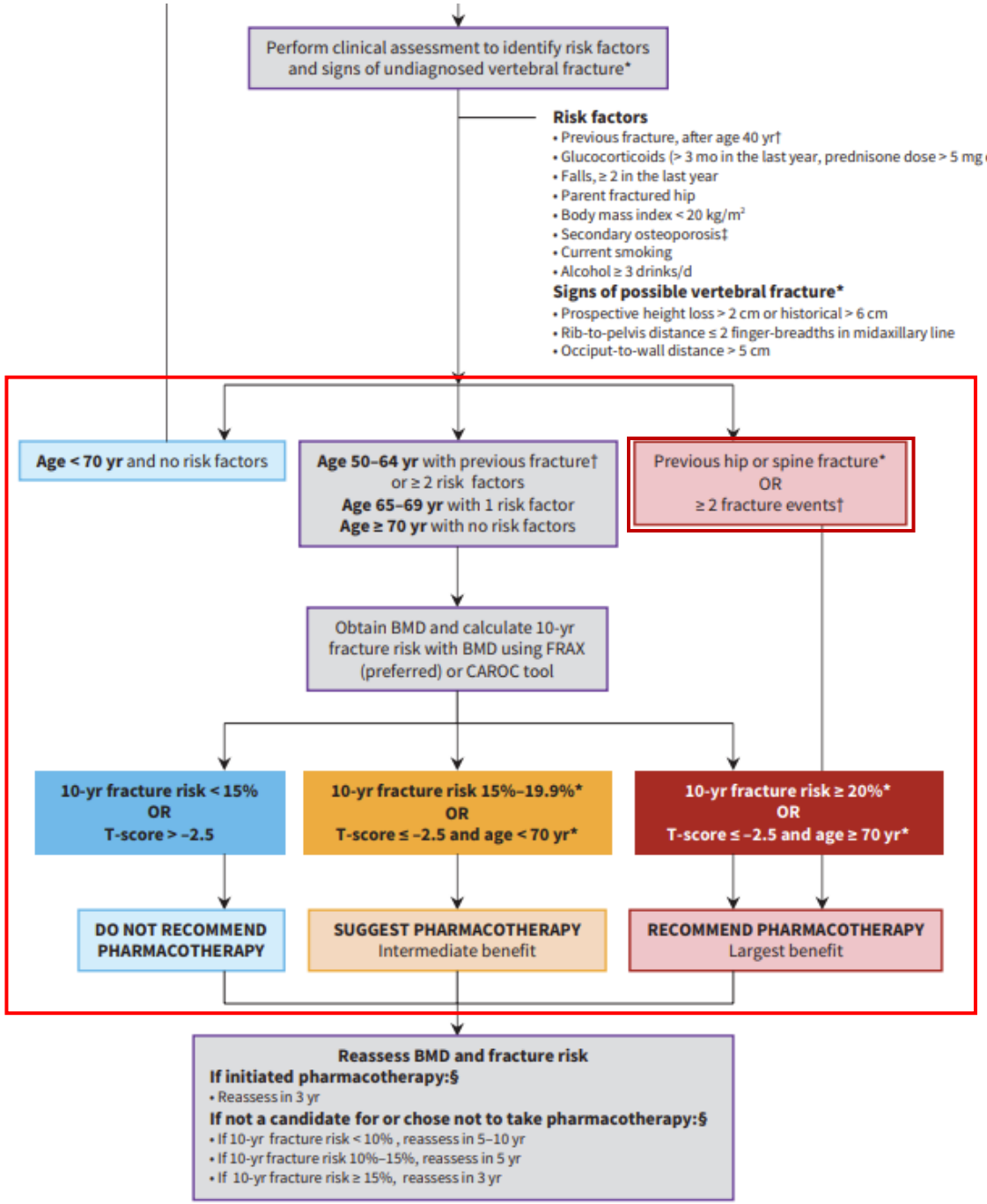
*5. Categorize:*

- ***Do not recommend*** *pharmacotherapy*
- ***Suggest*** *pharmacotherapy*
- ***Recommend*** *pharmacotherapy*

*Note: Previous hip, spine*, or ≥2 fracture events*

⟶ ***Recommend*** *pharmacotherapy*

* Consider vertebral imaging

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## CTFPHC Screening for primary prevention of fragility fractures

- Only females ≥ 65 years of age
- Risk assessment first with FRAX without BMD (falls not included in FRAX)
- BMD if interested in treatment
- 2nd FRAX with BMD
- Recommend no screening for males

## OC CPG for management of osteoporosis and fracture prevention in Canada: 2023 update

- Females and males age ≥ 50 with clinical risk factors, all at age 70
- Risk assessment first (clinical), including falls
- BMD based on risk (~10% threshold)
- Single FRAX with BMD
- Screening and treatment for males (lower GRADE level)
- Exercise, nutrition and pharmacotherapy recommendations

Canadian Task Force on Preventive Health Care

CMAJ May 08, 2023 195 (18) E639-E649; DOI: https://doi.org/10.1503/cmaj.221219

OSTEOPOROSIS

CMAJ | October 10, 2023 | Volume 195 | Issue 39

# Management: Nutrition

## CALCIUM

For people who meet the recommended dietary allowance for calcium with a variety of calcium-rich foods, we suggest no supplementation to prevent fractures.

Recommended Dietary Allowance (RDA)

**Men**

| | |
|---|---|
| 51-70 y | 1000 mg/day |
| >70 y | 1200 mg/day |

**Women**

| | |
|---|---|
| 51-70 y | 1200 mg/day |
| >70 y | 1200 mg/day |

Upper Limit: 2000 mg/day


Dairy, Fortified Plant Beverages, Fortified Orange Juice
Tofu (made with calcium), Salmon (with crushed bones)
~ 300 mg calcium

Many foods contain small amounts: nuts (almonds), greens, cooked beans

Calcium Calculator (OC website)

Images from Biorender

## VITAMIN D

We suggest following Health Canada's recommendation of vitamin D for bone health.

Recommended Dietary Allowance (RDA)

**Men & Women**

| | |
|---|---|
| 51-70 y | 600 IU/day |
| >70 y | 800 IU/day |

**Health Canada recommends 400 IU vitamin/day plus dietary sources over age 50 as few foods contain vitamin D.**

**Type of supplement?**
D3 (animal) or D2 (plant)
-> benefits from both sources

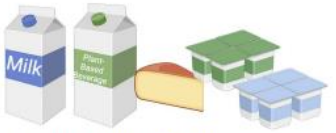
Upper Limit: 4000 IU/day

- Few foods contain vitamin D
- Don't rely on sunlight!

**Natural Sources**

Rainbow Trout, Salmon: >500 IU
Egg: 80 IU

**Fortified Foods & Beverages**

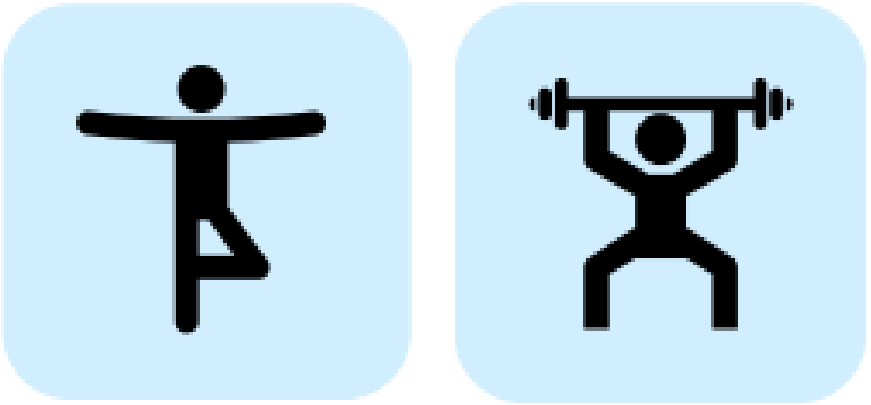



Cow's Milk: 200 IU
Fortified Plant Beverages: 200 IU
Variable levels:
-dairy yogurt & some cheeses
-plant based foods: yogurts, cheeses

Images from Biorender

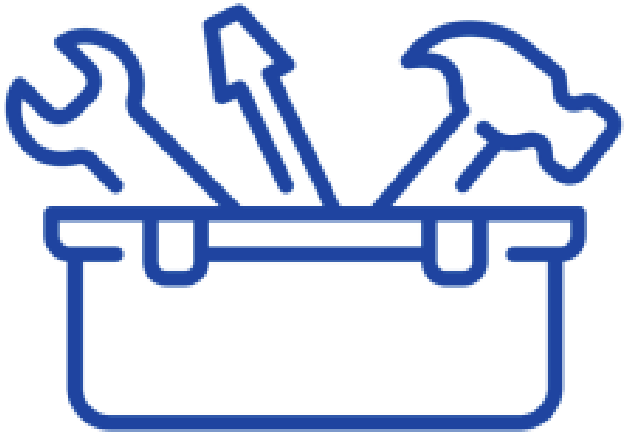
# Management: Exercise

- Recommend:
  - Balance and functional training ≥ twice weekly to reduce risk of falls
- Suggest:
  - *Progressive* resistance training
  - Other activities encouraged
  - May need to be modified in people at high risk of fracture
  - When available, seek advice from exercise professionals
- Sorry, walking is great, but doesn't reduce risk of falls



# What's in your toolbox?

Identify a variety resources in your community that you can refer people to.



- Osteoporosis Canada Too Fit To Fracture handouts and videos: https://osteoporosis.ca/exercise-recommendations/
- BoneFit™: https://bonefit.ca/bonefit-map-locator/
- Find a CSEP Certified Exercise Physiologist (CEP): https://csep.ca/membership-overview/directory/
- GLA:D™ Canada for arthritis: https://gladcanada.ca/how-to-participate-in-glad-canada/
- Otago Exercise Program for fall prevention (people at risk of falls): https://www.physio-pedia.com/Otago_Exercise_Programme
- Falls prevention exercise programs in community
- Tai Chi for fall prevention

# Approach to Pharmacotherapy

*Separate strength of recommendations for males and females based on certainty of evidence since males under-represented in clinical trials*

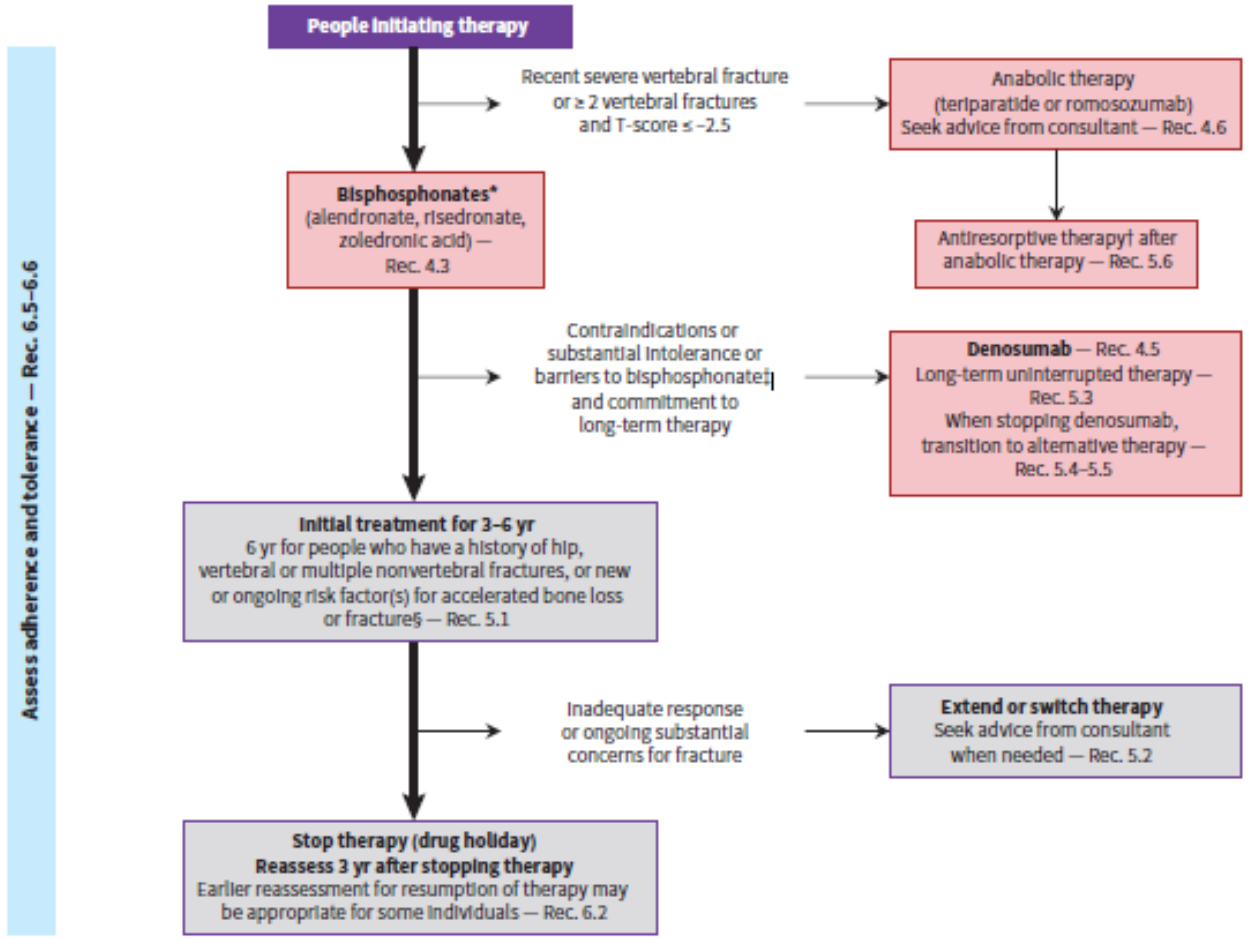



**Figure 2:** Approach to pharmacotherapy to prevent fractures. Note: Rec. = recommendation (see Tables 4, 6 and 7 for full recommendations). *Menopausal hormone therapy is a suggested alternative for females younger than 60 years or within 10 years after menopause who prioritize alleviation of substantial menopausal symptoms (Rec. 4.4). †Antiresorptive therapy includes bisphosphonates (alendronate, risedronate and zoledronic acid), denosumab, raloxifene and menopausal hormone therapy. ‡Raloxifene is suggested rather than no treatment for females who have contraindications or substantial intolerance to, or who choose not to take, other suggested therapies) (Rec. 4.7). §See Figure 1 for list of risk factors and Appendix 1, Supplementary Table 5, for causes of secondary osteoporosis.

**Suzanne N. Morin et al. CMAJ 2023;195:E1333-E1348**

# Approach to Pharmacotherapy

## Recent severe VF or ≥2 VF *and* T <-2.5:

- **Anabolic therapy**

**Recent fracture :**

- fracture occurring within the past 2 yr

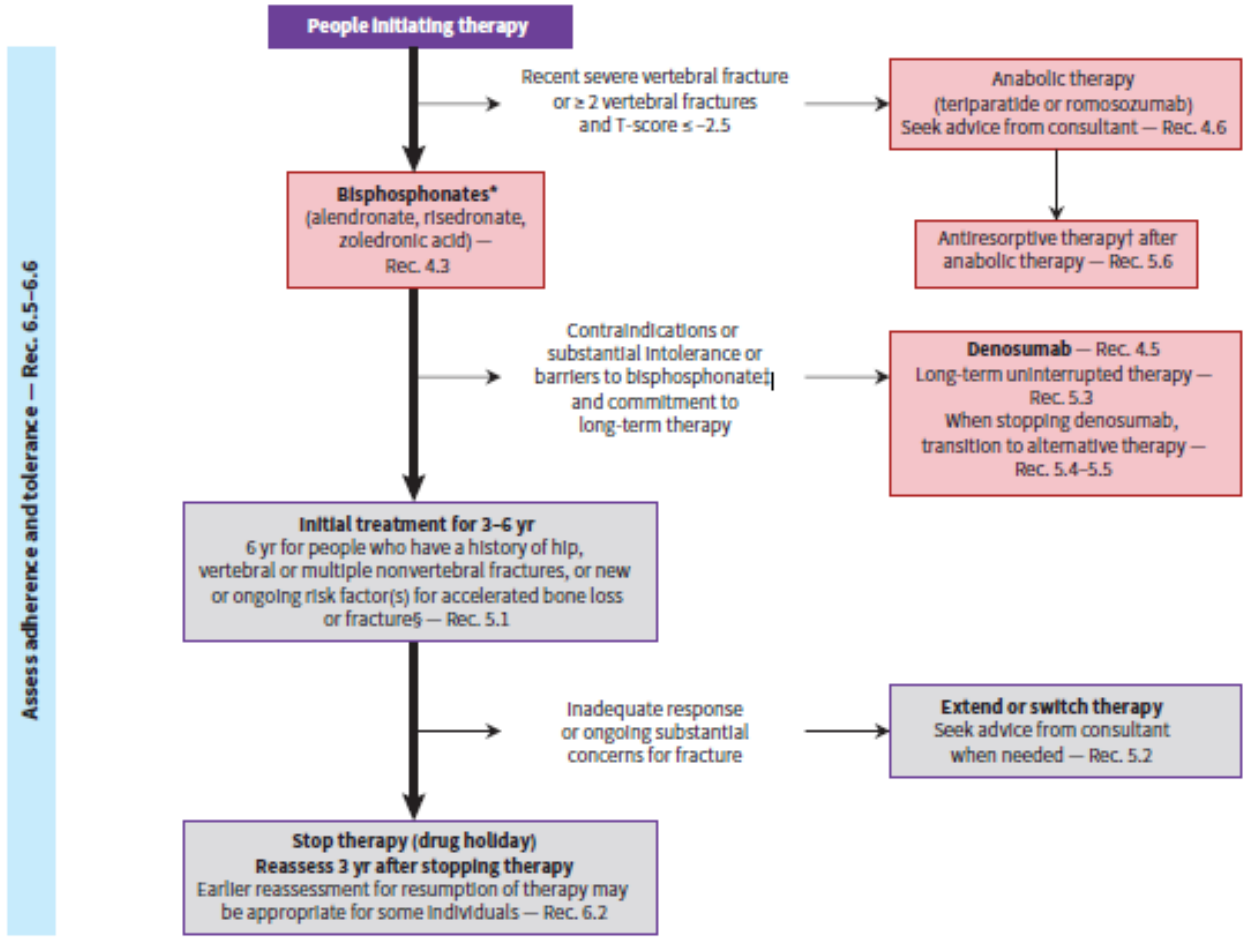
**Severe vertebral fracture:**

- vertebral body height loss of > 40%

**The choice of anabolic therapy may depend on affordability and feasibility of injection schedule.**

*Conditional recommendation*
*High-certainty evidence (females)*
*Moderate-certainty evidence (males)*

*Separate strength of recommendations for males and females based on certainty of evidence since males under-represented in clinical trials*

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# Approach to Pharmacotherapy

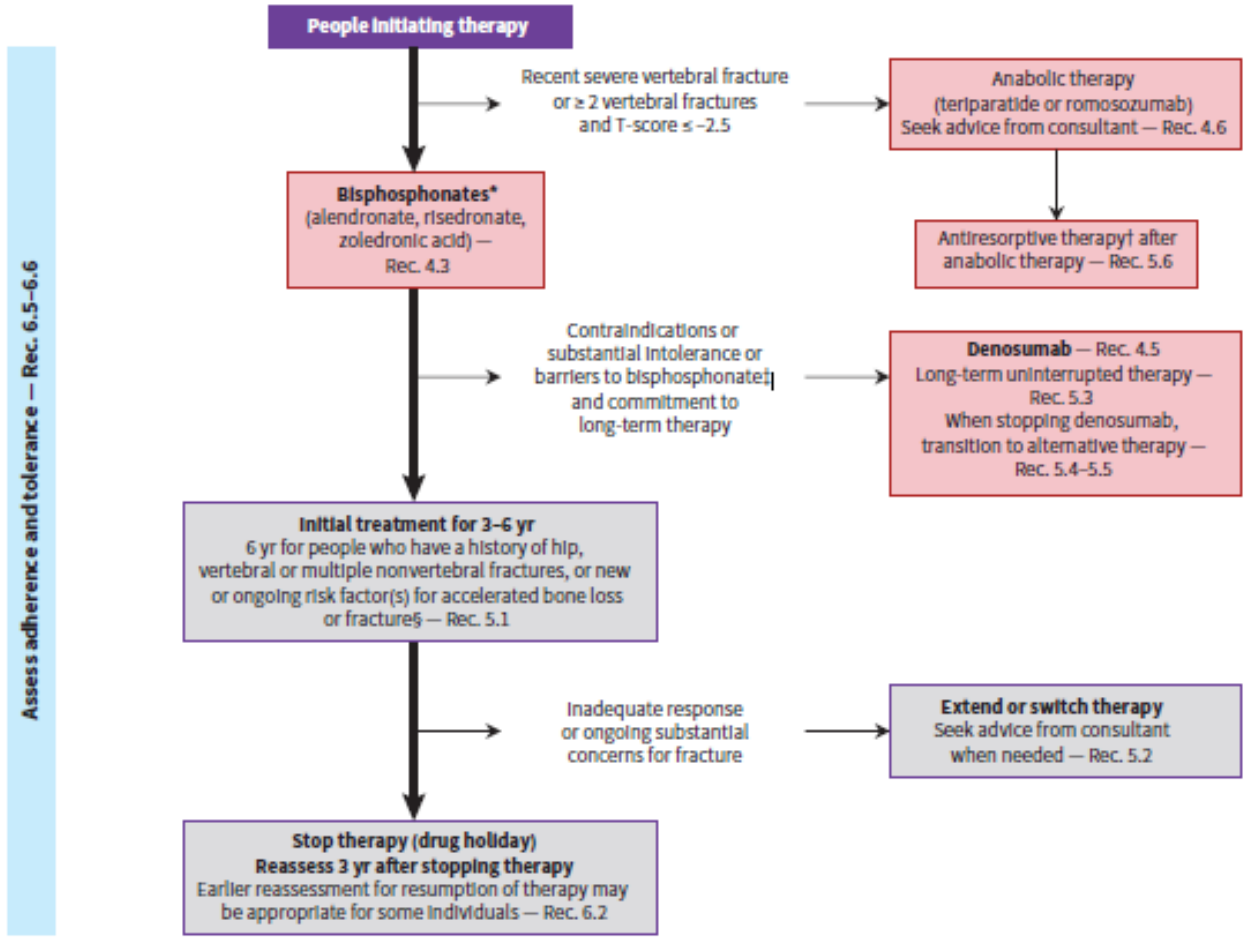
- **Bisphosphonates first line for most individuals**
- 3-6 years
- longer duration with history of hip, vertebral, or multiple nonvertebral fractures or ongoing risk factors for accelerated bone loss or fractures

*Strong recommendation*
*High-certainty evidence (females)*
*Moderate-certainty evidence (males)*

- Stop after 3-6 years of therapy and then reassess 3 years later (earlier reassessment may be appropriate for some individuals)

*Conditional recommendation*
*Low-certainty evidence*

*Separate strength of recommendations for males and females based on certainty of evidence since males under-represented in clinical trials*

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# Approach to Pharmacotherapy

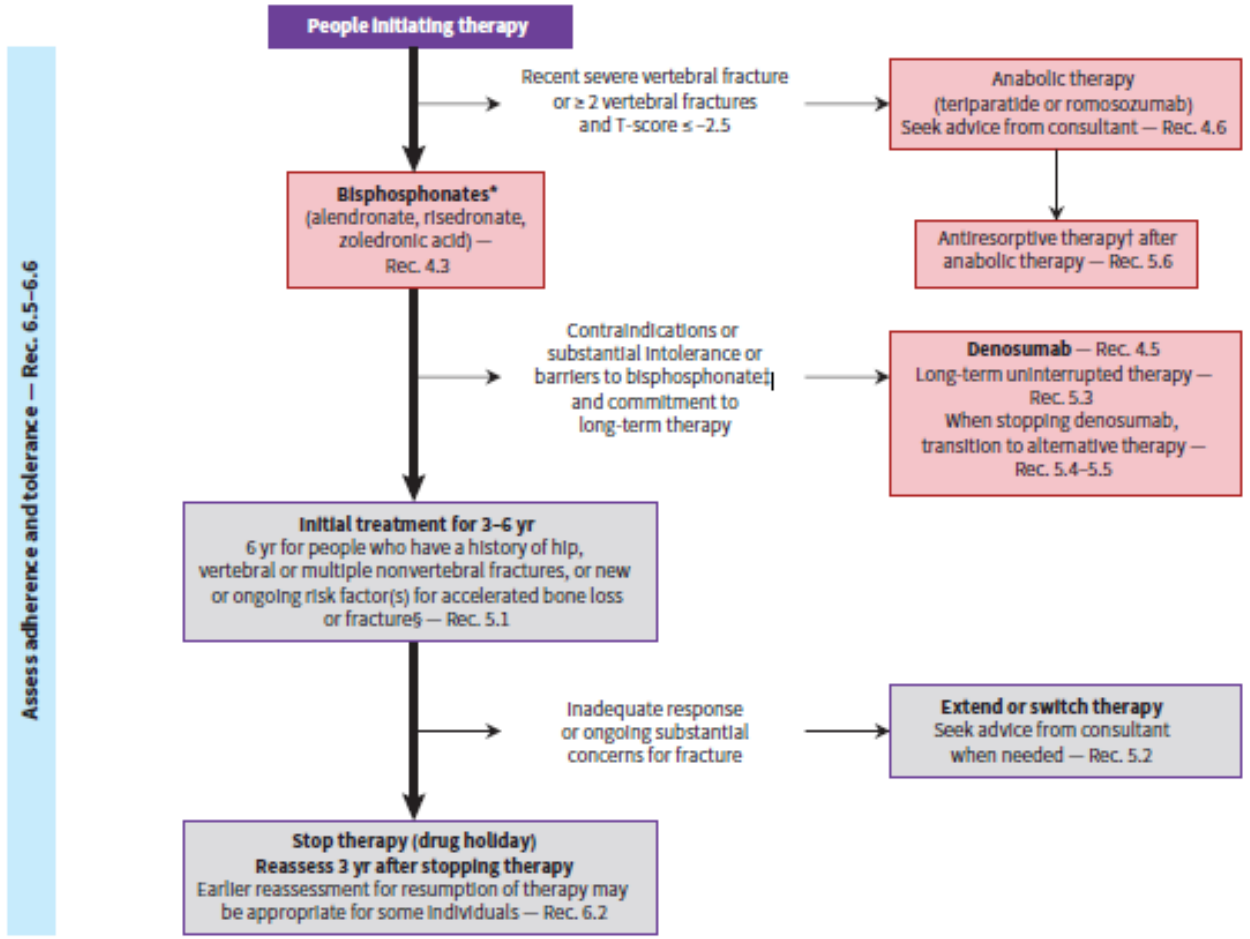
Contraindication or substantial intolerance or barriers to bisphosphonates and commitment to long-term therapy:

- **Denosumab**
  - Long-term uninterrupted therapy
  - When stopping denosumab, transition to alternative therapy

- *The injection schedule should* ***not be delayed by more than 1 mo*** *because of the risk of rapid bone loss and vertebral fractures.*
- *Duration of therapy may be assessed* ***after 6–10 yr*** *and may be dependent on previous bisphosphonate therapy and individualized risk for atypical femoral fracture and osteonecrosis of the jaw.*

*Conditional recommendation*
*High-certainty evidence (females)*
*Moderate-certainty evidence (males)*

*Separate strength of recommendations for males and females based on certainty of evidence since males under-represented in clinical trials*

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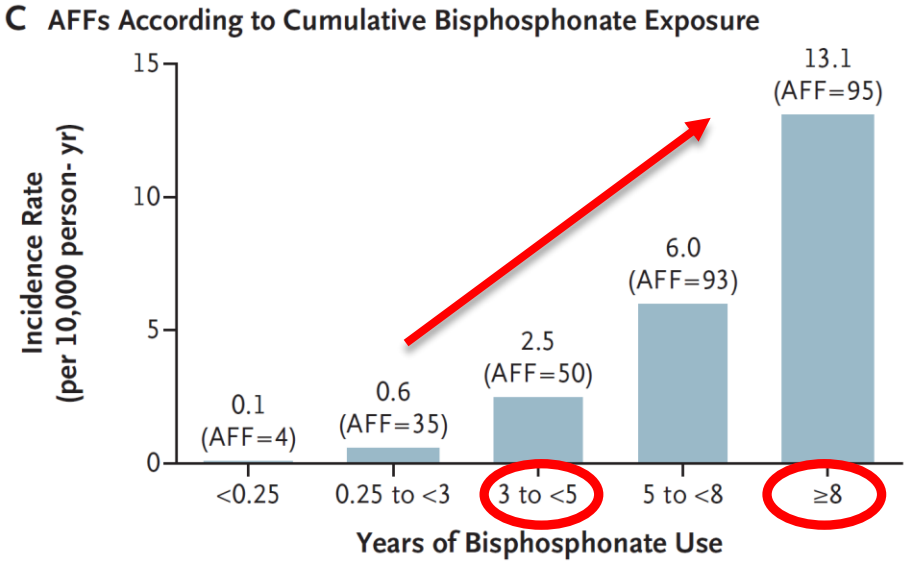
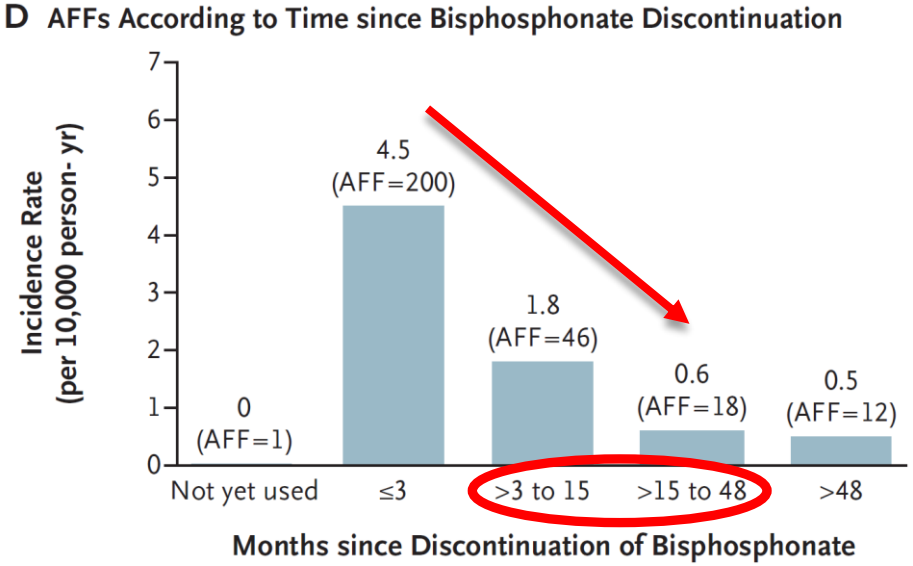
# Long-term Safety and Efficacy: Bisphosphonates

- ↑ AFF with longer duration
- ↑ ONJ with longer duration
- Anti-fracture efficacy plateau ~3-6 yrs
- Benefit to risk ratio wanes with longer duration
- **Concept of drug holiday**: supported by extension trials




Black et al, NEJM 2020
Eiken et al, OI 2017
Black et al, JAMA 2006

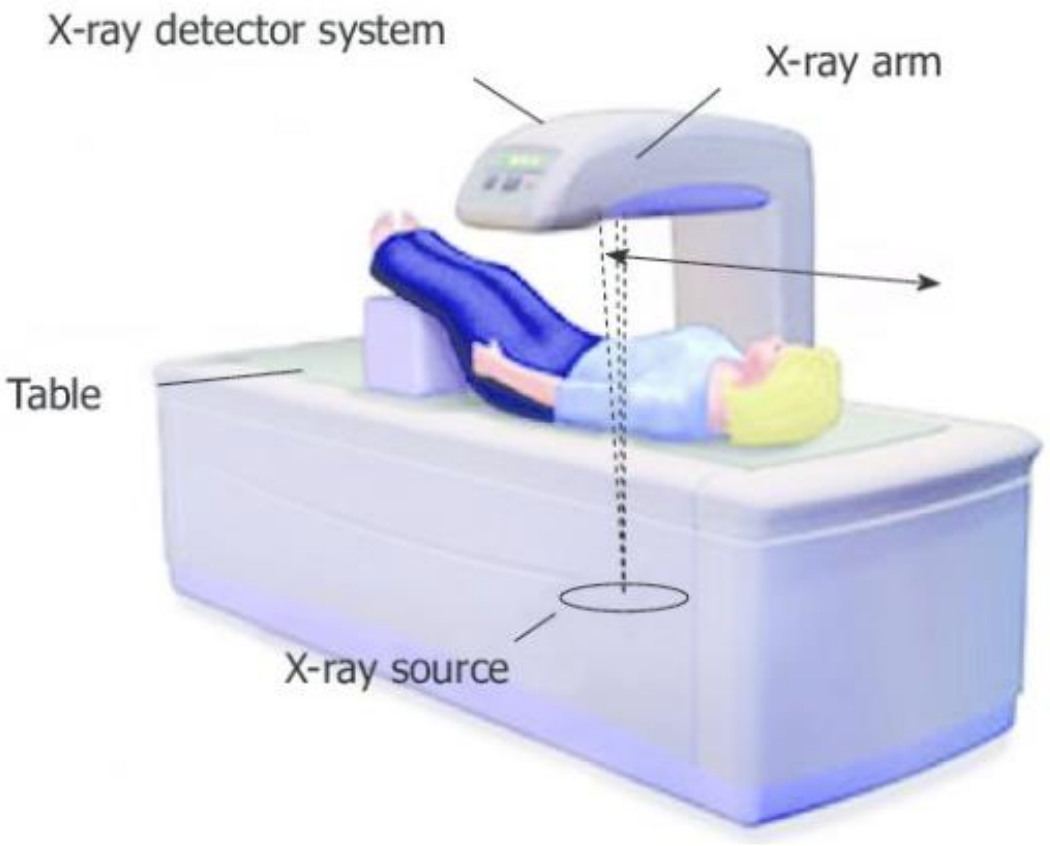
Black et al, JBMR 2012
Fink et al, Ann Intern Med 2019

# Long-term Safety and Efficacy: Denosumab

- Risks of AFF and ONJ relatively stable over 10 years
- BMD and anti-fracture benefits do not wane at 10 yrs
  - FREEDOM extension trial
- Benefit to risk ratio is favorable at 10 yrs
- However, unknown beyond 10 yrs
- No skeletal retention → no drug holiday
- If stopping, *need transition to another agent* (partial protection)

Bone et al, Lancet Diabetes Endocrinol, 2017
Fink et al, Ann Intern Med 2019

# Reassessment: Interval of bone density testing?




**Reassess BMD and fracture risk**

**If initiated pharmacotherapy:§**

- Reassess in 3 yr

**If not a candidate for or chose not to take pharmacotherapy:§**

- If 10-yr fracture risk < 10% , reassess in 5–10 yr
- If 10-yr fracture risk 10%–15%, reassess in 5 yr
- If 10-yr fracture risk ≥ 15%, reassess in 3 yr

*BMD in may be repeated at shorter interval if secondary causes, new fracture or new clinical risk factors associated with rapid bone loss*

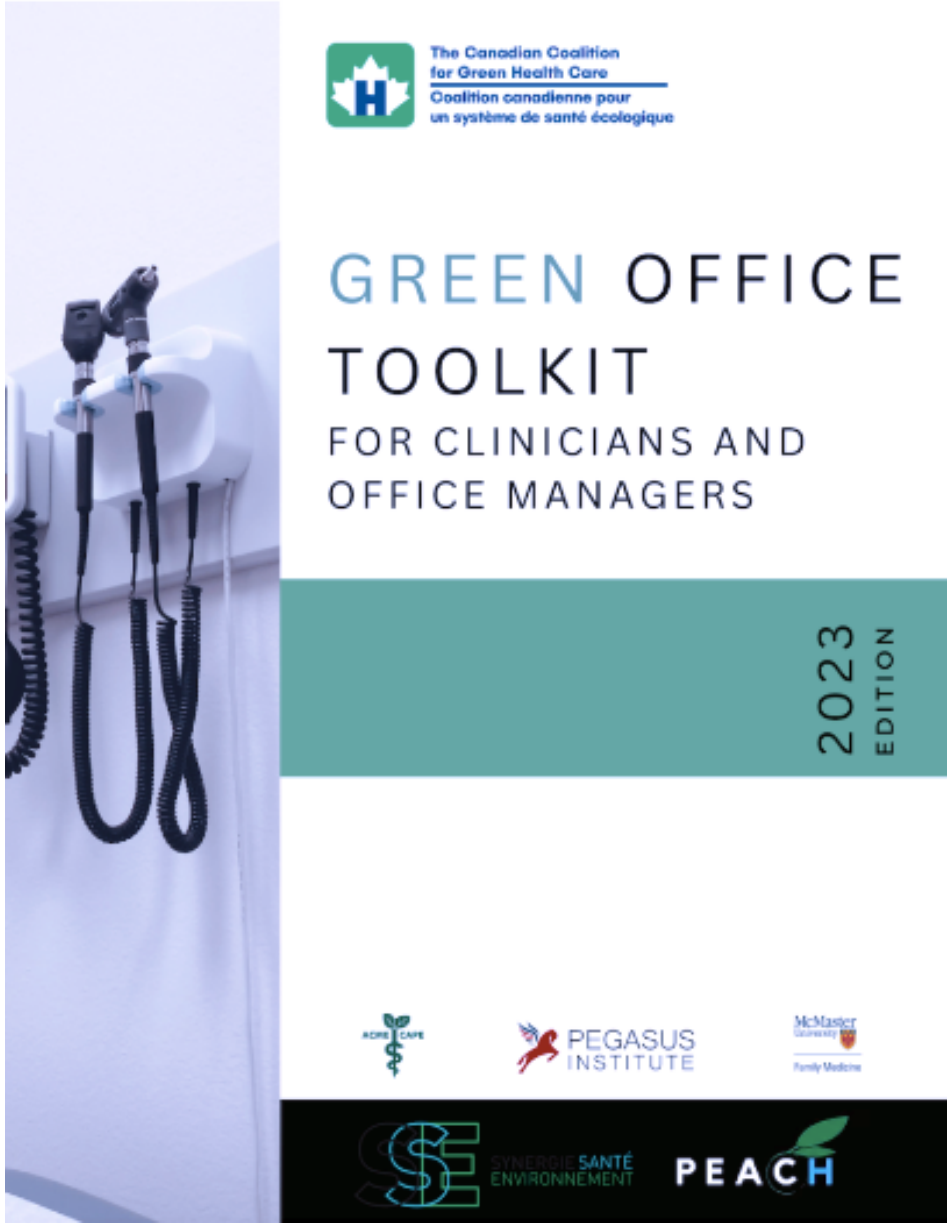
Conditional recommendation
Very low-certainty evidence

# Summary

- Falls: BAD
- Fractures: REALLY BAD
- Build bone early (Family Docs Rock!)
- Assess risk: CTFPHC or OC CPG 2023 (similarities and differences)
- Low risk: focus on fall prevention, strength and balance
- Treat high risk especially recent hip or spine fracture (like stroke)
- Bisphosphonates: can take a break (haha, Dad joke)
- Denosumab: no break, don’t stop, needs transition or risk incr. VF
- Males: Weaker evidence (not no evidence) and worse fracture outcomes-shared decision making

# Green Office Toolkit

- Worked with partners across Canada to developed this toolkit inspired by the original released in 2018.
- Designed to simplify and inspire the ‘greening’ of your health care practices and your office or building.
- Find practical, easy to implement, evidence-based and affordable ideas to make eco-friendly office improvements.




The Canadian Coalition for Green Health Care
Coalition canadienne pour un système de santé écologique

https://www.peachhealthontario.com/_files/ugd/f36758_2e3a34a5d5bf46fdb4cc975f0ad9205b.pdf

# CanTreatCOVID

Canadian Adaptive Platform Trial of Treatments for COVID in Community Settings

## Who can participate?

- Adults who **tested positive for COVID** with symptoms starting within the last 5 days and
- aged 18-49 years with one or more chronic condition(s) **OR** aged 50+ years regardless of health status

Compensation: Healthcare providers - $40 for referring potentially eligible participants
Patients - up to $120 while in the study

## Why participate?

- Close monitoring
- Personalized care
- Contribution to medical research
- Participate online or by phone call

1-888-888-3308 CanTreatCOVID.org info@CanTreatCOVID.org

CanTreatCOVID is led by Dr. Andrew Pinto and supported by CIHR IRSC Canadian Institutes of Health Research Instituts de recherche en santé du Canada Santé Canada Health Canada Public Health Agency of Canada Agence de la santé publique du Canada

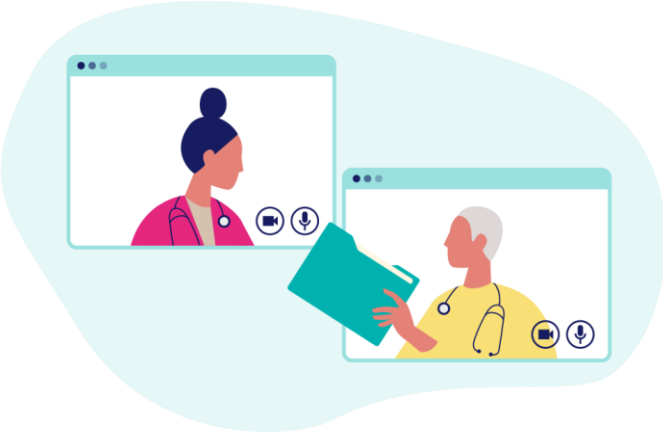
# OCFP supports for Mental Health, Addictions and Chronic Pain

Mental health, addictions and chronic pain are challenging conditions. Find information to support the care you give patients – in a way that also considers your wellbeing.

## Community of Practice

Join upcoming sessions:

- Managing alcohol use (April 17)
- Emerging therapeutics amidst fat-shaming (May 22)
- Gender affirming care (June 26)



## Peer Connect Mentorship

Join a series of small group learning sessions designed for family physicians to celebrate their successes and address the obstacles they encounter in their practice. The deadline to register for a small group is **Friday, April 12, 2024.**

Sign Up

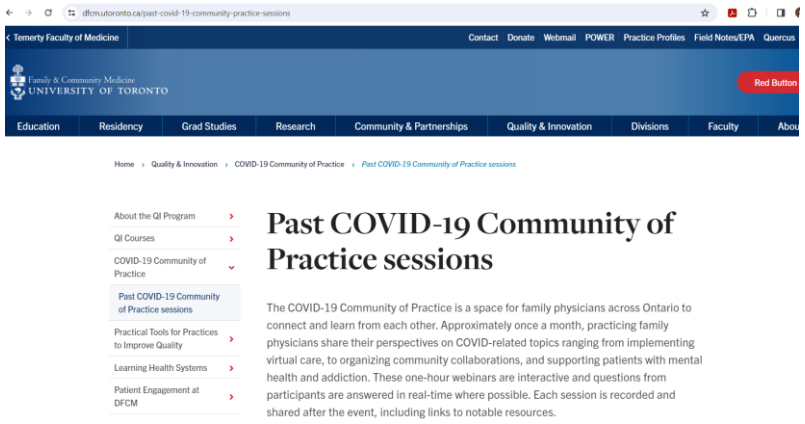
# RECENT SESSIONS

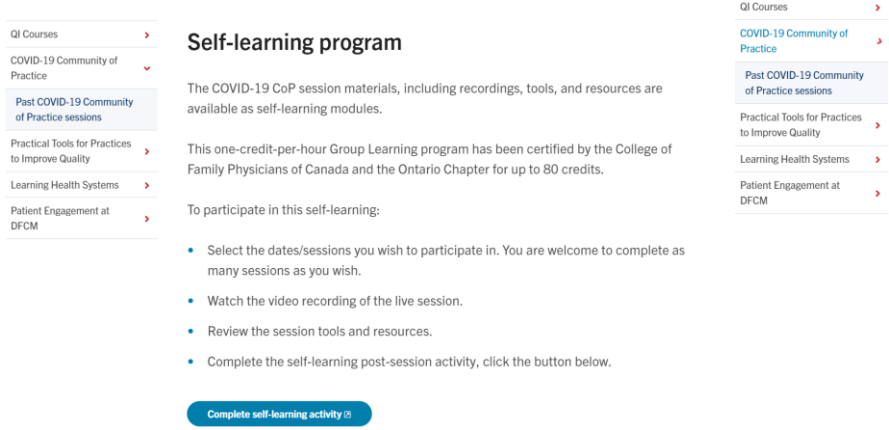
| | | |
|---|---|---|
| December 15 | **Winter virus season and Changes to breast cancer screening in Ontario** | Dr. Allison McGeer<br>Dr. Jonathan Isenberg<br>Dr. Anna M. Chiarelli<br>Maggie Keresteci |
| January 19 | **COVID-19 Updates and Managing Respiratory Illness in Kids** | Dr. Alon Vaisman<br>Dr. Tasha Stoltz |
| February 9 | **Long COVID and Lipid Guidelines** | Dr. Kieran Quinn<br>Dr. Michael Kolber |
| February 23 | **COVID-19 and Measles Updates, and Supporting Primary Care** | Dr. Megan Devlin<br>Dr. Elizabeth Muggah |
| March 22 | **Infectious Disease Updates and Management of Menopause** | Dr. Zain Chagla<br>Dr. Susan Goldstein<br>Dr. Daniel Warshafsky |

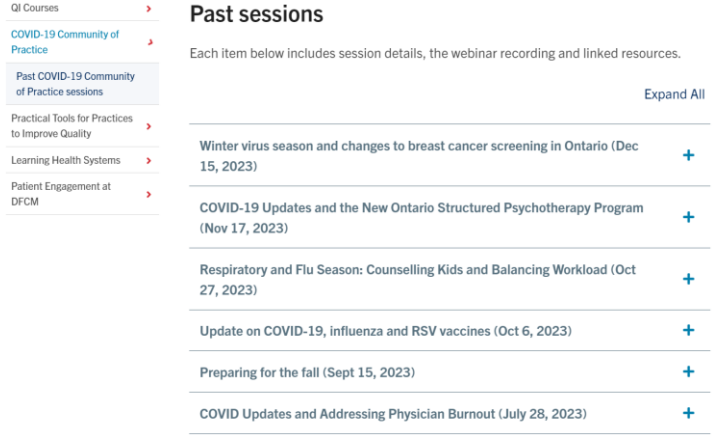
**Previous webinars & related resources:**
**https://www.dfcm.utoronto.ca/covid-19-community-practice/past-sessions**

# Accessing Previous Sessions and Self Learning

**Previous webinars & related resources**
**https://www.dfcm.utoronto.ca/covid-19-community-practice/past-sessions**



# Questions?

Webinar recording and curated Q&A will be posted soon
https://www.dfcm.utoronto.ca/covid-19-community-practice/past-sessions

Our next Community of Practice: April 26, 2024

*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.**

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