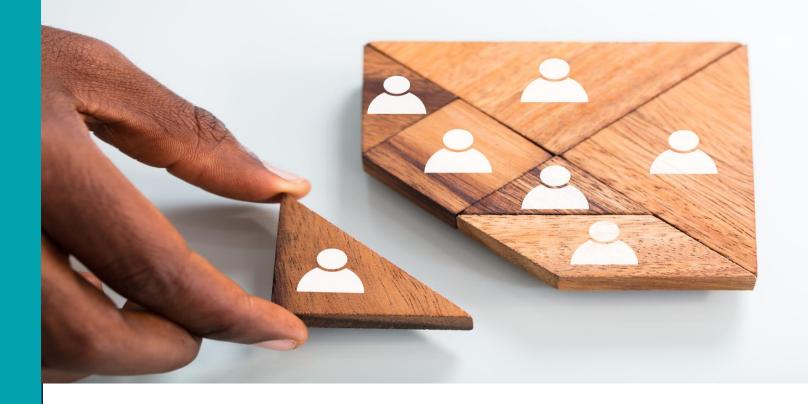
COVID-19 Community of Practice for Ontario Family Physicians

Feb 9, 2024

Dr. Kieran Quinn Dr. Michael Kolber



### Long COVID and Lipid Guidelines





### **Long COVID and Lipid Guidelines**

### Co-Moderators:

- Dr. Tara Kiran, Fidani Chair of Improvement and Innovation, University of Toronto and Family Physician, St. Michael's Academic Family Health Team, Toronto, ON
- Dr. Eleanor Colledge, CPD Program Director, University of Toronto and Family Physician, South East Toronto Family Health Team, Toronto, ON

### Panelists:

- Dr. Kieran Quinn, Toronto, ON
- Dr. Michael Kolber, Edmonton, AB

### 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.

# OurCare held 10 roundtables with members of equity-deserving groups across the country

Conversations were organized in collaboration with community partners and conducted in 8 languages. Here is some of what we heard:

- Racism and other forms of discrimination are common experiences
- Language barriers are a significant challenge to receiving high quality care
- We need to expand the healthcare workforce to reflect the diversity of communities
- Indigenous models of care are culturally determined and have always worked
- Empowering individuals and communities Is part of the solution



# Changing the way we work

### A community of practice for family physicians during COVID-19

At the conclusion of this <u>series</u> 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. Mekalai Kumanan (OCFP), Dr. Ali Damji (DFCM), Dr. Eleanor Colledge (DFCM) Dr. Harry O'Halloran, Mina Viscardi-Johnson (OCFP), 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. Kieran Quinn – Panelist

General Internal Medicine and Palliative Care Clinician-Scientist, Sinai Health; General Internal Medicine and Palliative Care, Assistant Professor, Department of Medicine, University of Toronto



**Dr. Michael Kolber – Panelist**Professor, Faculty of Medicine & Dentistry - Family Medicine



Dr. Mekalai Kumanan – Host

Department, University of Alberta

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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. Kieran Quinn**
- Relationships with financial sponsors:
  - Grants/Research Support: CIHR (grants funding research into Long COVID, co-lead of RECLAIM trial)
  - Speakers Bureau/Honoraria: Public Health Ontario (Assistant Scientific Director of OPHESAC), Ontario College of Family Physicians
  - Membership on advisory boards: N/A
  - Others: Owned stocks in Merck and BioNTech who manufactor COVID therapies DIVESTED DECEMBER 2023
- Faculty Name: Dr. Michael Kolber
- Relationships with financial sponsors:
  - Grants/Research Support: CIHR (BedMed Study)
  - Speakers Bureau/Honoraria: ACFP, Alberta Health, SRPC, AMA, MEME, AAPCE, PEER North, Peterborough Health, Ontario College of Family Physicians
  - Membership on advisory boards: N/A
  - Others: EMPRSS

### **Speaker Disclosure**

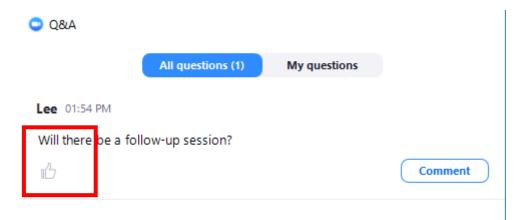
- Faculty Name: **Dr. Mekalai Kumanan**
- Relationships with financial sponsors:
  - Grants/Research Support: N/A
  - Speakers Bureau/Honoraria: Ontario College of Family Physicians
  - Others: Deputy Chief of Family Medicine, Cambridge Memorial Hospital
- Faculty Name: **Dr. Eleanor Colledge**
- Relationships with financial sponsors:
  - Grants/Research Support: N/A
  - Speakers Bureau/Honoraria: Ontario College of Family Physicians
  - Others: N/A
- Faculty Name: Dr. Tara Kiran
- Relationships with financial sponsors:
  - Speakers Bureau/Honoraria: St. Michael's Hospital, University of Toronto, Health Quality Ontario (HQO), Canadian Institutes for Health Research (CIHR). Ontario College of Family Physicians (OCFP), Ontario Medical Association (OMA), 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, McMaster University, Queen's University, North American Primary Care Research Group.
  - Grants/Research Support: Canadian Institute for Health Research, Ministry of Health and Long-Term Care, St. Michael's Hospital Foundation, St. Michael's Hospital Medical Services Association, Women's College Hospital Academic and Medical Services Group Innovation Fund, University of Toronto, Health Quality Ontario, Ontario Ministry of Health, Gilead Sciences Inc., Staples Canada, Max Bell Foundation.

### **How to Participate**

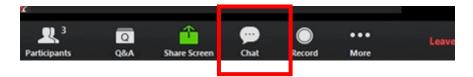
• All questions should be asked using the Q&A function at the bottom of your screen.



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. Kieran Quinn – Panelist

General Internal Medicine and Palliative Care Clinician-Scientist, Sinai Health; General Internal Medicine and Palliative Care, Assistant Professor, Department of Medicine, University of Toronto



**Dr. Michael Kolber – Panelist**Professor, Faculty of Medicine & Dentistry - Family Medicine



Dr. Mekalai Kumanan – Host

Department, University of Alberta

Twitter: @MKumananMD

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

# Improving care for Canadians living with long COVID

**Kieran Quinn MD PhD** 

Sinai Health System, University of Toronto

**February 9, 2024** 







# ~73% of Canadians have been infected with SARS-CoV-2

# **Current Definitions**



### **Post COVID-19 Condition**

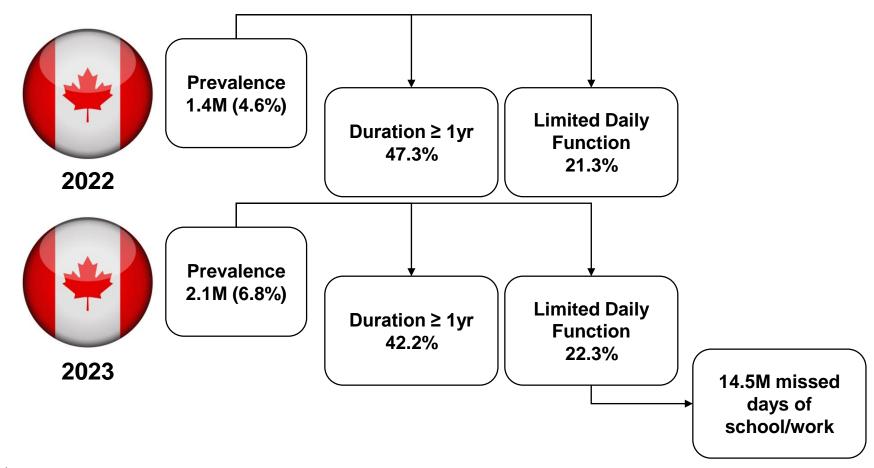
- Symptoms occurring ≥12 weeks after SARS-CoV-2 infection
- Lasting ≥8 weeks
- Not explained by an alternative diagnosis



### Post-Acute Sequelae of COVID (PASC)

- Health consequences ≥4 weeks after SARS-CoV-2 infection:
  - Symptoms
  - Inclusion of **additional chronic conditions** (e.g. heart failure, depression) associated with high future healthcare utilization (\*WHO does <u>not</u> include chronic conditions)

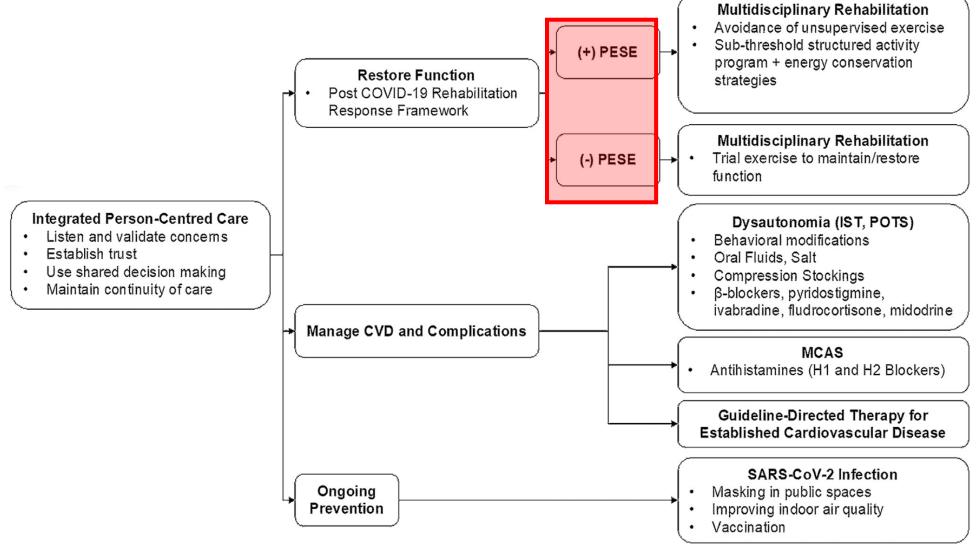
# Prevalence and Disability: Canadian COVID-19 Antibody Survey



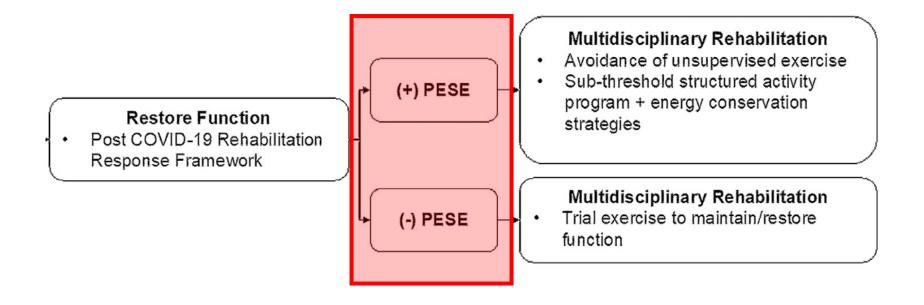
# Care Gaps (Access)

- Minority of Canadian adults consulted with a healthcare provider (47%)
- Family physicians and nurse practitioners continue to be their main contact (83%)
- 2 in 3 who needed healthcare services reported **not receiving treatment**, services or support for any of their symptoms.

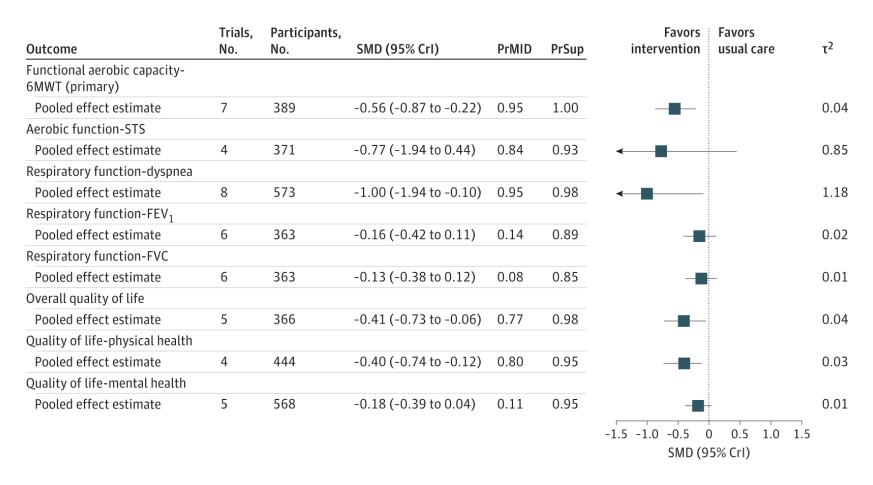
# **Treatment**



# **Treatment**



# Treatment (Rehab)



Potential signal of experiencing exercise-induced adverse events (OR 1.68; 95% Crl 0.32-9.94).

Pouliopoulou DV. JAMA Net Open 2023



# Physiotherapy In Toronto & Beyond

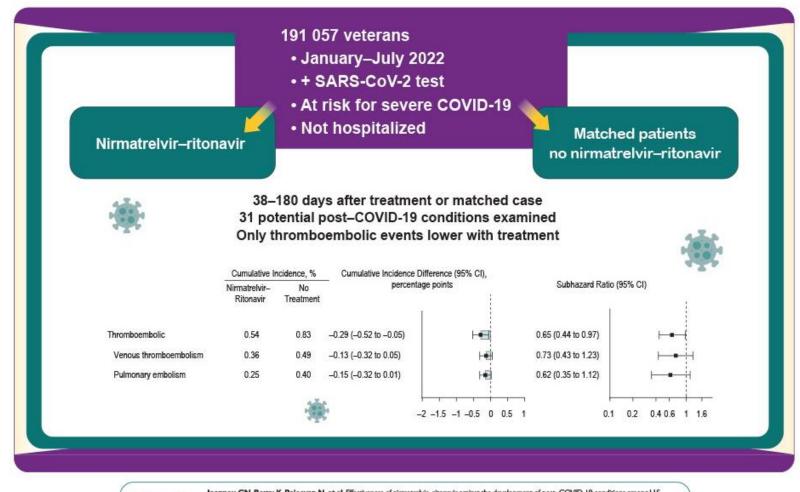
Cornerstone Physiotherapy is among Toronto's most trusted therapeutic health care providers. Our clinics are conveniently located in downtown Toronto, North York and Burlington.

**REQUEST AN APPOINTMENT** 

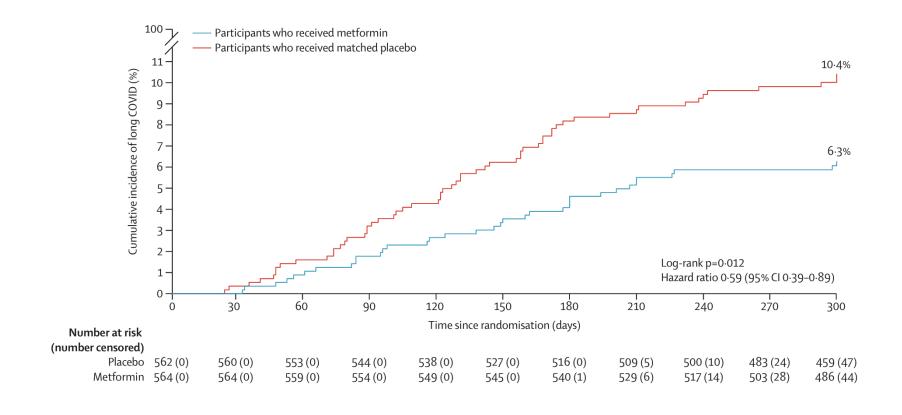
# Treatment (Low Dose Naltrexone)

"For people with symptoms of post-COVID-19 condition, do <u>not</u> use naltrexone outside of randomised trials with appropriate ethical approval."

# **Prevention (Paxlovid)**



# **Prevention (Metformin)**



# **Advice on Disability**

- Be confident in assigning a diagnosis of post COVID-19 condition
- Identify patient as disabled (unable to perform any combination of duties that regularly took at least 60% of their time at work)
- Question validity of assessment tools (suggest Post COVID Functional Scale)
- Quote other jurisdictions (USA)

# **Advice on Disability**

In the United States, long COVID is recognized as a disability under Titles II (state and local government) and III (public accommodations) of the Americans with Disabilities Act, Section 504 of the Rehabilitation Act of 1973 (Section 504), and Section 1557 of the Patient Protection and Affordable Care Act (Section 1557) when it substantially limits one or more major life activities.

# **Ongoing Research**



https://www.reclaimtrial.ca/



# **DEFEND**

paxlovi<u>**D**</u> <u>Effectiveness <u>F</u>or the pr<u>E</u>vention of lo<u>**N**g covi<u>**D**</u></u></u>



CanCOVID



https://cantreatcovid.org/

A double blind randomized trial of low-dose naltrexone for post-covid fatigue syndrome

Nacul, Luis | \$742,331 British Columbia B.C. Women's Hospital 2021 CIHR Operating O

# **Ongoing Research**



https://canpcc.ca/home/

### Ontario launches fee code for doctors treating long COVID and one researcher says 'it's a big deal'











Advocates say move is crucial first step to better understanding, treating and destigmatizing growing problem



- Diagnostic Code 081
- Enables identification and tracking of health services delivery at population level
- Supports physician-validated diagnosis with applications to disability support

# Resources

Title	Organization	Last updated
Clinical Summary of CMAJ Guidance (https://ontariofamilyphysicians.ca/wp-content/uploads/2023/09/long-covid-in-adults.pdf)	OCFP	January 2023
COVID-19 RecMap (https://covid19.recmap.org/)	Cochrane Canada	January 2024
Post COVID-19 Condition (https://tools.cep.health/tool/covid-19/#post-covid-19-condition)	Centre for Effective Practice (CEP)	January 2024
Clinical management of COVID-19: Living guideline (https://www.who.int/publications/i/item/WHO-2019-nCoV-clinical-2023.2)	World Health Organization (WHO)	August 2023
COVID-19 rapid guideline: managing the long-term effects of COVID-19 (https://www.nice.org.uk/guidance/ng188)	NICE Guideline, UK	January 2024

# Resources

Title	Organization	Last updated
Canadian Guidelines for Post COVID-19 Condition (https://canpcc.ca/home/)	McMaster and the Public Health Agency of Canada	January 2024
Long COVID Web (www.longcovidweb.ca)		Not indicated
Use of diagnostic code 081 for Post COVID-19 Condition (https://www.ontario.ca/document/ohip- infobulletins-2023/bulletin-230102-new-diagnostic- code-post-covid-19-condition)  For Patients	OHIP Info Bulletin	January 2023
Resources for patients and families. Long Covid- 19: Tips for Recovery (https://guides.hsict.library.utoronto.ca/c.php?g=71 6817&p=5171775)	UHN	December 2023
Living with Post-Covid-19 Symptoms (http://www.phsa.ca/health-info/post-covid-19-care-recovery)	BC Provincial Health Services Authority	Not indicated

# Summary

- Post COVID-19 condition is a common and disabling condition.
- Primary care remains the foundation, but a broader provincial strategy is needed to improve access and supports.
- Screen for post-exertional malaise/symptom exacerbation.
- Several pharmacologic treatments hold promise but their current use should be restricted to RCTs.

# Acknowledgements

- Pavlos Bobos
- Angela Cheung
- Simon Décary
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- Susie Goulding
- Doug Gross
- Grace Lam
- John Lapp

- Kelly O'Brien
- Fahad Razak
- Laura Rosella
- Beate Sander
- Amol Verma
- Nahrain Warda

# Post-COVID-19 Condition: Guidance for Primary Care



COMMON OF Post-COVID-19

# **SYMPTOMS**



### ASSESSMENT

- Past medical history
- Social determinants of health
- Physical examination and vital signs
- Date of positive PCR or rapid antigen test if available, or epidemiological link to a known case
- Timing, duration, nature, and severity of symptom(s)
- COVID-19 course(s) and severity, and treatment(s) or care received
- COVID-19 vaccination status, including booster doses



<u>&</u>

### MANAGEMENT

- Supported self-management
- Medications for symptom management
- Mental health support and treatment



- Functional status and quality of life
- Post-COVID-19 condition

**Assessment Tools** 

- Cognitive/neurological conditions
- Mental health conditions
- Other conditions

### **Functional Testing Tools**

- Exercise capacity (test with caution in people with post-exertional malaise [PEM])
- Balance and fall risk
- Other

### **Symptom-Directed Laboratory and Other Tests**

There are no routine tests for the post-COVID-19 condition. Tests should be ordered as indicated by symptoms and clinical judgment.

- Complete blood count
- C-reactive protein, erythrocyte
- sedimentation rate, ferritin
- Thyroid-stimulating hormone
- Chest x-ray





### Respiratory

- Dyspnea or increased respiratory effort



#### Cardiovascular

- Chest tightness or pain
- Palpitations and/or tachycardia



#### Generalized

- **Fatigue**
- Post-exertional malaise (PEM) and/or
- poor endurance
- Impaired daily function and mobility
- Menstrual cycle irregularities



### Cognitive/Neurological

- Insomnia and other sleep difficulties
- Cognitive changes (e.g., issues with memory, concentration, and executive function)
- Paresthesia ("pins and needles," numbness)
- Dizziness



### Musculoskeletal

- Joint pain
- Muscle pain



### **Mental Health**

- Anxiety
- Depression



### Gastrointestinal

- · Abdominal pain
- Diarrhea



Ear, Nose, and Throat

Loss of taste and/or smell



**Dermatological** 

Skin rashes



### **FOLLOW-UP VISITS AND MONITORING**

- · Follow up with patients every 2 to 3 months, depending on the patient's symptoms, condition, and illness progression
- · Patients who were critically ill may require more frequent follow-up
- Offer in-person or remote monitoring
- · Consider more specialized diagnostic testing for persistent or new respiratory, cardiac, or other concerns in consultation with specialists

Symptoms and function **NOT** improving

Consider referral to an interprofessional rehabilitation team



See next page for more information



# Resources



### 11 Different COVID-19 related BASE™ Managed Specialty Groups are available province-wide:

- COVID-19 & Infectious Diseases
- COVID-19 Vaccine Public Health
- COVID-19 Vaccine Allergy/Immunology
- COVID-19 and Respirology
- COVID-19 and Autoimmune Disorders
- COVID-19 and Pregnancy
- Post-COVID Condition Chronic Fatigue Syndrome, Environmental Health Group
- Post-COVID Condition Internal Medicine
- Post-COVID Condition Neurology
- Post-COVID Condition Physical Medicine & Rehabilitation
- Post-Covid Condition Respiratory Recovery Group

# Long COVID Web

A network of networks supporting and conducting research into Post-COVID Condition (PCC)

Vision: Canada without PCC

### Mission:

- 1) **Accelerate** the discovery and validation of Canadian-led science in PCC.
- 2) **Activate** a learning health system that prioritizes the needs of individuals with PCC.
- 3) **Identify** the best therapeutics and practices, and accelerate equitable access to PCC care.
- 4) Maintain rigorous surveillance of the impact of PCC.







## **Expansion of Interprofessional Primary Care Teams**

- The Ontario College of Family Physicians has been leading calls, with our partners for all family doctors, regardless of payment model, to have access to team support.
- In 2023, government announced an expression of interest process for the expansion of interprofessional primary care teams across Ontario with \$30 million in funding available. More than 300 proposals were put forward.
- Last week, the Ontario Government announced it is tripling its initial investment to support the expansion of interprofessional primary care teams across Ontario to \$90 million. An additional \$20 million will go to support existing teams to help meet operational costs.
- While there is much more work to do, this announcement is a positive step forward.

**Discover** 

peerevidence.ca

The PEER Simplified Lipid Guideline

2023 Update

A simplified approach to lipid management for busy family doctors!

Read the guideline today!















# PEER Simplified Guideline Principles

- By Primary Care for Primary Care
  - Evidence-based
  - Patient orientated outcomes
  - Simplified
- Focus on Primary Prevention, Shared Decision Making
- GRADE/Institute of Medicine
- Evidence team separate from guideline panel
- No financial COIs

### PEER simplified lipid guideline 2023 update

Prevention and management of cardiovascular disease in primary care

Michael R. Kolber MD MSc CCFP Scott Klarenbach MD MSc FRCPC Michael Cauchon MD CCFP FCFP Mike Cotterill MD CCFP
Loren Regier BA BSP Raelene D. Marceau MN PhD Norah Duggan MD CCFP FCFP Rebecca Whitley MD MSc CCFP
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Jen Potter MD CCFP Justin Weresch MD CCFP Adrienne I. Lindblad PharmD ACPR



### Lipid-lowering therapies for cardiovascular disease prevention and management in primary care

PEER umbrella systematic review of systematic reviews

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# What goes into Evidence-Based Guideline Update?

### **Medications**

8 Systematic Review of Systematic Reviews

2015 Simplified Lipid Guideline & Rapid Reviews

Carry forward a few recommendations

**Guideline Panel Questions** 

10 Rapid Reviews

PEER Simplified Lipid Guideline 2023 'Update'





# **Cholesterol Testing Recommendations**

- When reassessing CVD risk in patients not taking lipid-lowering therapy, we suggest reassessing lipids no more than every 5 years and preferably 10, unless risk factors change.
- We recommend **against** the use of repeat lipid testing and cholesterol targets after a patient begins lipid-lowering therapy.
- We suggest against adding CAC scores to CVD risk assessment.
- We recommend against using Lp(a) or apoB to determine a patient's CVD risk.



# What about ancillary tests to assess CVD risk?

- Risk Calculators are ~0.75 at prediction (Area-Under-the Curve AUC)
  - AUC Changes: Large ≥0.1, Moderate 0.05-0.1, Small 0.025-0.05, Very Small <0.025

### Lipoprotein (A)

- Adding to risk calculation AUC 0.0017 0.004
- Alone: RR 1.00-2.21

### **Apolipoprotein B**

- Adding to risk calculation AUC 0.002-0.02
- Alone: RR 1.03-2.87

### **Coronary Artery Ca+ Score**

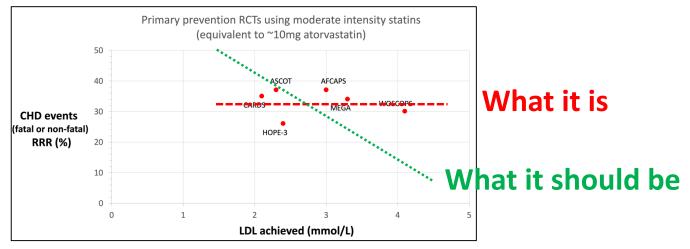
- Alone: AUC 0.70-0.77
- Adding to risk calculation: AUC 0.036-0.05 better
- RCTs coming

Adding Lp(a) Apo(B) or CAC to traditional risk factor calculators results in very small to small improvements in prediction



# Why Simplified Guidelines do not recommend treating to target

- 1. Statin RCTs: use fixed dose statins (fire and forget)
- Attained LDL levels are not associated with lower CHD



- 3. Some RCTs didn't even enroll for lipids:
  - ASCOT: enrolled hypertensives
  - Jupiter: enrolled on CRP



# Why Simplified Guidelines do not recommend treating to target

- 4. Other have similar recommendations: USPSTF<sup>1</sup>, Veterans<sup>2</sup>
- 5. Those that recommend targets acknowledge lack of evidence:
  - CCS 2021:<sup>3</sup> "no clear target to which LDL-C or non HDL-C or ApoB levels should be lowered is clearly identified in RCTs."
  - **ESC/EAS 2019:** "aware of the limitations ... of evidence and accepts that RCTs have not examined different LDL-C goals systematically..."
- 6. Hitting targets not possible for many:
  - ~50% not at LDL target on max statin therapy<sup>5</sup>
- 7. Basing treatment on risk (vs lipids) maximizes benefits
  - Patients with low LDL but higher risk not missed.



# Why Simplified Guidelines do not recommend treating to target

- 8. New RCT evidence (LODESTAR): first RCT directly comparing treat to target versus fixed dose statin. At 3 years:
  - MACE: 8.3% target, 8.5 fixed dose statin
  - Mortality: 2.5% each
- 9. Simple: less testing for patients, less labs for us, less cost (labs and temptation for escalating medications)

### **PEER Simplified Lipid Guideline 2023: Summary**

Simplified approach

**Shared decision making** 

Reduce unnecessary testing



Drug	Systematic Reviews	Patients
Bile Acid	(4 RCTs)	53-3,806
Sequestrants		
Ezetimibe	3	18,921-23,499
Fibrates	3	16,112-46,099
Niacin	5	34,294-39,195
Omega-3s (DHA+EPA)	7	65,819-149,051
EPA (e.g. icospent)	2	8,179-18,645
PCSK-9 inhibitors	26	6,281-97,910
Statins	30	625-192,977

# Medicines We included 76 Systematic Reviews (+4 RCTs)



# Outcomes for lipid lowering agents: Overall (1' + 2' prevention)

Intervention	MACE	All-cause mortality	
	Median RR (stat sign/N)	Median RR (stat sign/N)	
BAS	0.83 (0/3 RCT)	XX (0/3 RCT)	
Ezetimibe	0.93 (3/3 SR)	0.94 (0/2 SR)	
Fibrates	0.86 (2/2 SR)	0.98 (0/3 SR)	
Niacin	0.93 (0/2 SR)	1.04 (0/4 SR)	
Omega-3s (EPA+DHA)	0.98 (0/3 SR)	0.98 (0/2 SR)	
EPA only	0.78 (1/1 SR)	0.97 (0/2 SR)	
PCSK9 Inhibitors	0.84 (14/14 SR)	0.93 (1/17 SR)	
Statins	0.74 (6/6 SR )	0.91 (6/8 SR)	

du Canada



# Outcomes for lipid lowering agents

Intervent	ion	MACE All-cause mortality		ortality	
		Median RR (stat sig	Median RR (stat sign/N) Median RR (state		at sign/N)
BAS					·)
Ezetim		Primary Preve	entic	on	)
Fibrate		MACE	All-Cause		)
Niacin			Mortality		)
Omega	Statins	0.75 (6/6 SR )	0.91 (4/8 SR)		)
EPA on					)
PCSK9 In	hibitors	0.84 (14/14 SR) 0.93 (1/17 SF		7 SR)	
Statins		0.74 (6/6 SR )		0.91 (6/8	B SR)

du Canada

# Medication Recommendations

Statin Intensity			
Statin (mg) Low Moderate High			
Atorvastatin	5	10-20	40-80
Pravastatin	10-20	40-80	-
Rosuvastatin	2.5	5-10	20-40
Simvastatin	5-10	20-40	-

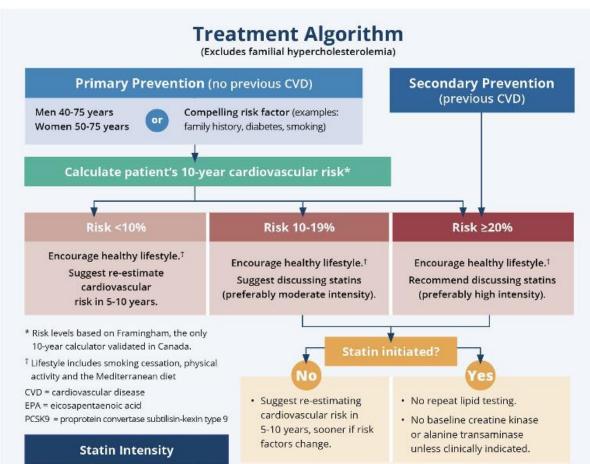
# Primary prevention patients

- 10-y CVD risk of > 20%, recommend discussing statins (high-intensity)
- 10-y CVD risk of 10-19%, suggest discussing statins (moderate-intensity)
- Recommend against non-statin drugs (monotherapy or combined with statins)

# Secondary prevention patients

- Recommend, discuss and encourage high-intensity statin.
- If additional CVD risk reduction desired, recommend discussing ezetimibe or PCSK9.
  - Due to potential harms (AFib, bleeding), consider icosapent after above.





Statin Intensity				
Statin (mg)	Low	Moderate	High	
Atorvastatin	5	10-20	40-80	
Pravastatin	10-20	40-80	-	
Rosuvastatin	2.5	5-10	20-40	
Simvastatin	5-10	20-40		

For secondary prevention, if additional cardiovascular risk reduction is desired beyond maximum statin dose:

- Recommend discussing ezetimibe or PCSK9 inhibitors.
- Due to adverse events, suggest EPA ethyl ester (icosapent) only after ezetimibe or PCSK9 inhibitor considered.

Benefit of Statin Therapy				
Sample Patient, CVD Risk over 10 years	Statin Option	Relative Risk Reduction	Absolute Risk Reduction	New 10 year Risk on Therapy
	Moderate Intensity	25%	5%	15%
20%	High Intensity	35%	796	13%



Everyone gets Lifestyle

Everyone gets Risk Estimated

Risk <10%, repeat in 5-10 yrs

Risk 10-19%, offer mod statin

Risk ≥20%, offer high statin

On statin: No further lipid test or CK or ALT unless indicated

Potency and benefits







### Lipid Lowering Agents

Drug	Prescribing Considerations	CVD Relative Risk Reduction	90-day cost¹
Statins	The only lipid lowering agent that decreases all-cause mortality.  Muscle symptoms in first year: 15% versus 14% placebo.  Do not worsen cognition or dementia.	25-35%	\$30-50
Ezetimibe	Mostly studied when added to statins in secondary prevention.     Well tolerated; 10mg daily.	7%	\$30-45
PCSK9 inhibitors	<ul> <li>Mostly studied when added to statins in secondary prevention.</li> <li>Injection site reactions: 3.5% versus 2.1% placebo.</li> <li>Subcutaneous injections q 2 weeks: Alirocumab 75-150mg or evolucumab 140mg.</li> </ul>	~15%	\$1500-2400
Fibrates	<ul> <li>Increase serum creatinine (2-11% more than placebo), pancreatitis (~0.1% more), altered liver function tests (~5% more); example: fenofibrate.</li> </ul>	0-14%*	\$60-150
EPA ethyl ester (icosapent)	<ul> <li>Mostly studied when added to statins.</li> <li>Atrial fibrillation (5.3% versus 3.9% placebo), serious bleeds (2.7% versus 2.1% placebo); 2g BID.</li> </ul>	~20%	\$1000

<sup>\* 0%</sup> if added to statins; up to 14% if not on a statin EPA = eicosapentaenoic acid; CVD = cardiovascular disease

1RxFiles PEER/ACFP Pricing Document

M

### Management of Muscle Symptoms Related to Statins

Out of 100 patients on statins, 15 report muscle symptoms, but only 1 is due to statins



If a patient does not tolerate a statin, discuss statin rechallenge

#### OPTIONS

Same statin at same dose

n at Lower dose se or intensity

Different Alternate statin day dosing If a patient is unable to tolerate or unwilling to try a re-challenge

#### PRIMARY PREVENTION

Suggest against non-statin lipid lowering therapy

#### SECONDARY PREVENTION

Suggest discussing ezetimibe, fibrate, PCSK9 inhibitor or EPA ethyl ester (icosapent)

### **FAQ & Helpful Resources**

#### Q: Why do PEER guidelines recommend against targeting LDL levels?

A: The vast majority of clinical trials have prescribed fixed statin doses based on CVD risk. Best evidence suggests both strategies (targeting LDL levels or using statins at proven doses) are similarly effective in reducing CVD risk. Targeting cholesterol levels is more complex than use of proven doses. A simplified approach of using proven doses reduces the burden of unnecessary testing for both patients and health professionals. Read more about this issue in the guideline.

#### O: Which cardiovascular decision aid should I use?

A: There are many cardiovascular risk calculators. The Framingham model has been validated in Canada. <u>The PEER Cardiovascular Decision Aid</u> (https://decisionaid.ca/cvd/), based on Framingham, has been created for this guideline.

### Q: How can I help patients with positive lifestyle changes?

A: Encourage smoking cessation. Providing exercise prescription and information about the Mediterranean diet may be helpful.



RXFILES EXERCISE PRESCRIPTION



Benefits, Adverse Effects and Costs and some evidence

Risk of muscle symptoms on statins and what to do

Frequently asked questions & QR code links to resources



# PEER Simplified Lipid guideline 2023 Summary

- Lipid measurement with CV risk assessment (5-10 years)
- Lifestyle for all: Physical activity, Mediterranean diet
- Target your Treatments: statins for primary and secondary prevention
- Secondary prevention: Ezetimibe, PCSK9 if wish for additional risk reduction
  - Icosapent only if others explored (due to AF and bleeding)
- Older adults:
  - 1' prevention: against lipid testing/assessment, routine statin initiation >75 years
  - Don't stop @ 75 years, just because age
  - 2' prevention: discuss benefits (even >75 years)
- Shared Decision Making: clinical decision aid: https://decisionaid.ca/cvd/



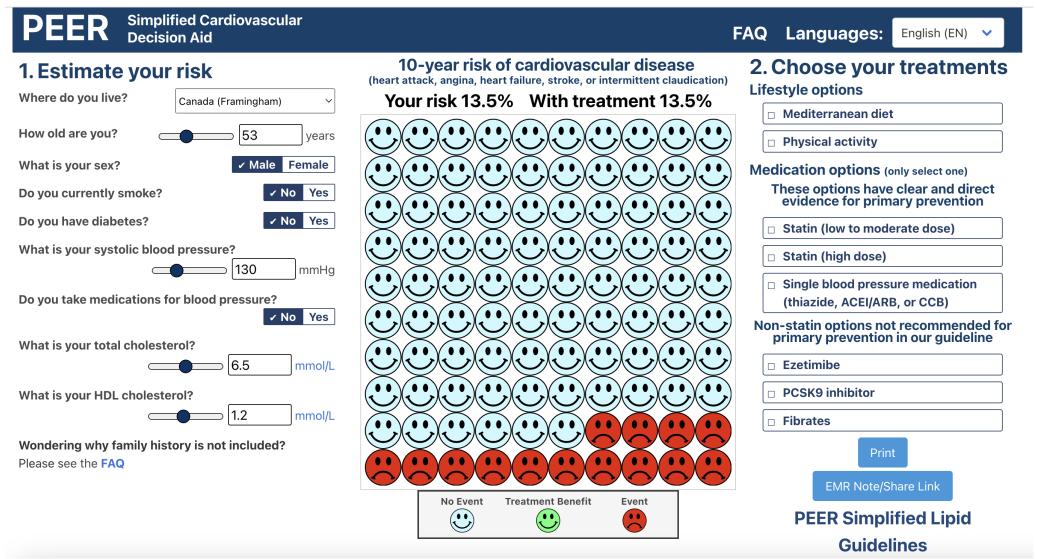


# Sign Up for the PEER Newsletter

Don't miss out on the latest from PEER. Get first access the latest PEER research and notified when PEER releases new guidelines and tools.

Enter peerevidence.ca/newsletter or scan QR Code to join.

# Updated PEER Simplified Decision Aid Shared Decision Making



### PEER Simplified Cardiovascular Decision Aid

FAQ Languages:

English (EN)

### ~

### 1. Estimate your risk

Where do you live? Canada (Framingham) How old are you? vears What is your sex? ✓ Male Female Do you currently smoke? ✓ No Yes ✓ No Yes Do you have diabetes? What is your systolic blood pressure? 130 mmHg Do you take medications for blood pressure? ✓ No Yes What is your total cholesterol?

6.5

1.2

mmol/L

mmol/L

What is your HDL cholesterol?

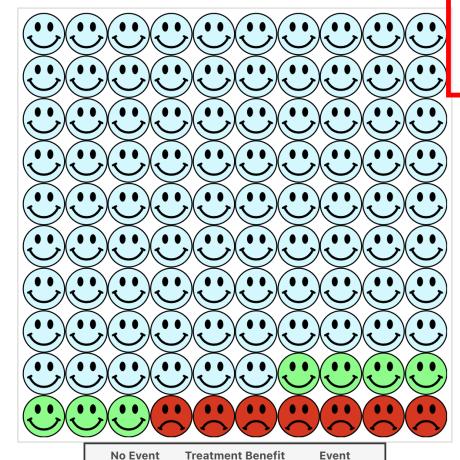
Wondering why family history is not included?

Please see the FAQ

### 10-year risk of cardiovascular disease

(heart attack, angina, heart failure, stroke, or intermittent claudication)

Your risk 13.5% With treatment 7.1%



### 2. Choose your treatments

Lifestyle options

Mediterranean diet resource

] Physical activity

Physical activity prescription

**MEGICATION OPTIONS** (only select one)

These options have clear and direct evidence for primary prevention

- ☐ Statin (low to moderate dose)
- ☐ Statin (high dose)
- □ Single blood pressure medication (thiazide, ACEI/ARB, or CCB)

Non-statin options not recommended for primary prevention in our guideline

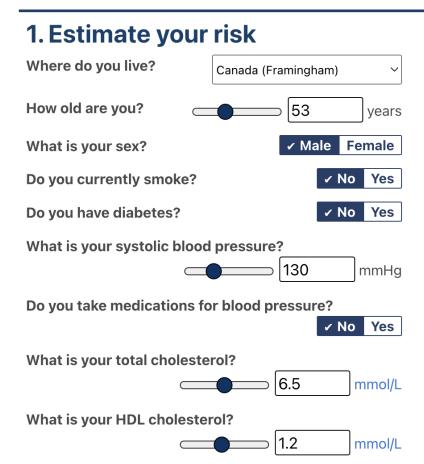
- Ezetimibe
- **□** PCSK9 inhibitor
- Fibrates

Print

**EMR Note/Share Link** 

**PEER Simplified Lipid** 





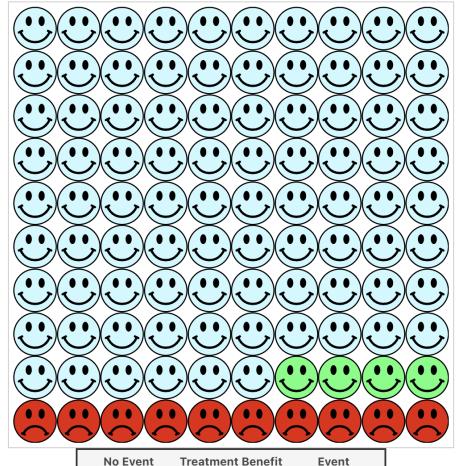
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### 2. Choose your treatments

**Lifestyle options** 

☐ Mediterranean diet

Physical activity

Medication options (only select one)

These options have clear and direct evidence for primary prevention

**☐** Statin (low to moderate dose)

Statin (high dose)

Single blood pressure medication (thiazide, ACEI/ARB, or CCB)

Non-statin options not recommended for primary prevention in our guideline

**Ezetimibe** 

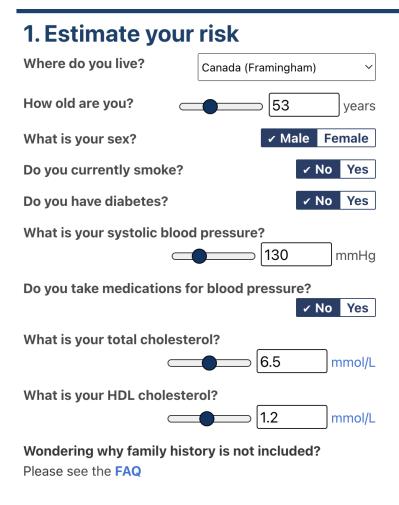
**PCSK9** inhibitor

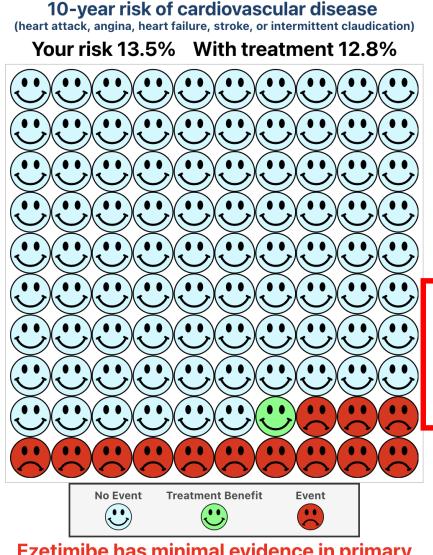
**Fibrates** 

- Risk of side effects over placebo: Muscle pain (1%)
- **90-day cost:** \$30-\$50
- Routine: One pill once a day

Print







# 2. Choose your treatments Lifestyle options

□ Mediterranean diet
□ Physical activity

Medication options (only select one)

These options have clear and direct evidence for primary prevention

**Statin (low to moderate dose)** 

Statin (high dose)

Single blood pressure medication

(thiazide, ACEI/ARB, or CCB)

Non-statin options not recommended for primary prevention in our guideline

Ezetimibe
PCSK9 inhibitor

**Fibrates** 

Risk of side effects over placebo: None

**90-day cost:** \$30-\$50

• Routine: One pill once a day

Print

EMR Note/Share Link

**PEER Simplified Lipid** 

### Ezetimibe has minimal evidence in primary prevention

(risk reduction from secondary prevention trial used)



# Patient Handout

Lipid guidelines

### What can I do to lower my risk?



**Stop smoking:** This is likely the best thing you can do for your health. If you need help, talk to a healthcare provider.



**Eat a Mediterranean diet:** This diet typically includes lots of vegetables, fruits, Fish, nuts, and olive oil.





Increase physical activity: Find an activity you enjoy and can stick with! One type of physical activity is usually not better than another.



**Consider medicines:** Based on your risk, your healthcare provider may suggest a statin (e.g., atorvastatin and rosuvastatin).

# Healthy Patients & Cholesterol Management: Frequently Asked Questions

For people who have not had a heart attack or stroke

Your cholesterol is one of many known risk factors for heart attack or stroke. Other risk factors include age, sex, smoking, blood pressure, and other conditions such as diabetes.

### How often should I have my cholesterol checked?

Your cholesterol changes slowly, about one percent every year, so we don't need to check your cholesterol more than every 5 to 10 years. If you are taking a medicine called a statin, you don't need to recheck your cholesterol. Statins help prevent heart attacks and strokes no matter what your cholesterol is.

Health care providers used to check cholesterol every year. They now use cholesterol as one part of your overall risk of having a heart attack or stroke.

### What is my risk of having a heart attack or stroke?

Use this link to the PEER Cardiovascular Decision Aid and talk to your health care provider



#### What can I do to lower my risk?



**Stop smoking:** This is likely the best thing you can do for your health. If you need help, talk to a healthcare provider.



Eat a Mediterranean diet: This diet typically includes lots of vegetables, fruits, Fish, nuts, and olive oil.





**Increase physical activity:** Find an activity you enjoy and can stick with! One type of physical activity is usually not better than another.



Consider medicines: Based on your risk, your healthcare provider may suggest a statin (e.g., atorvastatin and rosuvastatin).

#### How well do statins work?

Statins may lower the risk of heart attacks and strokes by 25 percent. For example, if your 10-year risk of having a heart attack or stroke is 20 percent, a statin can lower your risk to 15 percent. Statins are the only cholesterol medicine that may lower your risk of dying. Statins are generally well tolerated. Some patients report muscle pains; however, muscle pains occur as often with a placebo (a pill that contains no medicine) as they do with statins.

If you have questions about this information, go to the PEER cardiovascular decision aid or talk to your healthcare provider.

The information provided in this pamphlet is based on recommendations from the 2023 PEER Simplified Lipid Guideline Update.













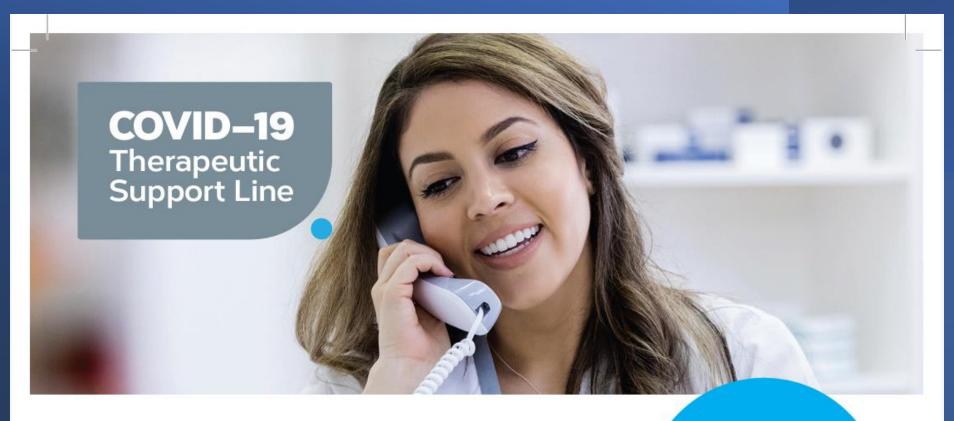
# Toronto Public Health Community Vaccination Clinics for Pediatric COVID-19 Vaccinations and School Vaccinations

Toronto Public Health has launched community vaccination clinics to help school-aged children catch up on their routine immunizations and avoid suspension, and to provide COVID-19 vaccinations to children five years of age and under and Novavax vaccines for residents 12 years of age and older who are unable (due to allergies) or unwilling, to get an mRNA vaccine.

- Clinics are by appointment only, and are open Tuesdays, Wednesdays, and Thursdays from 12:30 p.m. to 6:30 p.m. for the rest of the school year at the following locations:
  - Etobicoke Civic Centre: 399 The West Mall
  - Scarborough Civic Centre: 150 Borough Drive
  - North York Civic Centre: 5100 Yonge Street
  - To book an appointment for school catchup vaccination: <u>Toronto Public Health Appointment Booking System –</u>
     City of Toronto
  - To book an appointment for pediatric COVID-19 vaccination: <u>Toronto Public Health COVID-19 Immunization</u>
     <u>Clinics (frontdesksuite.ca)</u>
- The clinics will offer vaccines under the Province of Ontario's <u>Immunization of School Pupils Act (ISPA)</u> and <u>Student Immunization Program (SIP)</u>; Hep B, HPV, Diphtheria, Tetanus, Polio, Measles, Mumps, Rubella, Meningococcal, Pertussis, and Varicella (if born in 2010 or later).
- In the coming weeks, clinic offerings will expand to include weekends, PA days and weekend appointments.

### Pharmacies Providing Pediatric COVID-19 Vaccinations

- The resource list has a <u>PDF with maps of pharmacies in Toronto Region</u> that were providing pediatric COVID-19 vaccinations as of December 28, 2023
- We recommend that people searching for pediatric vaccinations call these pharmacies to confirm that they are still offering pediatric vaccinations, or check their websites, before attempting to access vaccination.
- PLEASE NOTE:
  - The Ministry of Health (MOH) provided Toronto Public Health (TPH) and Ontario Health Toronto with a list of pharmacies that were offering COVID-19 vaccinations to kids aged 5 years old and under, as well as 2 years old and under. TPH contacted all of these pharmacies and provided Ontario Health Toronto with the list of 59 verified pharmacies in Toronto offering pediatric COVID-19 vaccinations as of **December 28**, **2023**. The updated pharmacy list was shared by TPH to assist parents and caregivers to ensure that their children receive COVID-19 vaccinations. **The attached document provides a map of the location of the 59 pharmacies by OHT** (map developed by Ontario Health Toronto).
  - Many thanks to Toronto Public Health for surveying pharmacies in late December. As this information was valid at that point in time and may change based on pharmacy operations, individuals are strongly encouraged to phone each pharmacy prior to visiting, to determine if the service is still available.



# Are you a healthcare professional with a question about COVID-19 therapeutics?

Staffed by a registered pharmacist, OPA's COVID-19 Therapeutic Support Line provides Ontario vaccinators and prescribers with a dedicated resource to assist with timely, evidence-based clinical decision-making support.

# ONTARIO PHARMACISTS ASSOCIATION Advocating Excellence in Piedice and Care

1-888-519-6069

10 am – 8 pm EST, 7 days per week

### **Contact Us Today!**



opatoday.com/ covid19support

# RECENT SESSIONS

October 27	Respiratory and Flu Season: Counselling Kids & Balancing Workload	Dr. Joan Chan Dr. Janine McCready
October 6	Update on COVID-19, influenza and RSV vaccines	Dr. Zain Chagla Dr. Elizabeth Muggah
September 15	Preparing for the fall	Dr. Kieran Michael Moore Dr. Daniel Warshafsky
December 15	Winter virus season and Changes to breast cancer screening in Ontario	Dr. Allison McGeer Dr. Jonathan Isenberg Dr. Anna M. Chiarelli Maggie Keresteci
January 19	COVID-19 Updates and Managing Respiratory Illness in Kids	Dr. Alon Vaisman Dr. Tasha Stoltz

**Previous webinars & related resources:** 

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

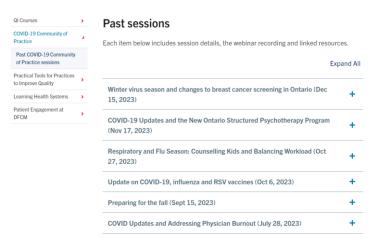
# Accessing Previous Sessions and Self Learning

### **Previous webinars & related resources**

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







# Thank you!

To all those who have helped make the COVID-19 Community of Practice a success!

Tara Kiran

Mekalai Kumanan

Ali Damji

Eleanor Colledge

Mina Viscardi Johnson

Julia Galbraith

Pavethra Yogeswaran

June Yee

Jay Scull

Marisa Schwartz

Erin Plenart

Olivia Neale

Past team members:

Trish O'Brien,

Kirsten Eldridge

Adrienne Spencer

Leanne Clark

Susan Taylor

Kim Moran

Jennifer Young

Leslie Greenberg

Brian Da Silva

David Kaplan

Elizabeth Muggah



### **Questions?**

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

Our next Community of Practice: February 23, 2024

Contact us: ocfpcme@ocfp.on.ca

*Visit*: <a href="https://www.ontariofamilyphysicians.ca/tools-resources/covid-19-resources">https://www.ontariofamilyphysicians.ca/tools-resources/covid-19-resources</a>

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.



