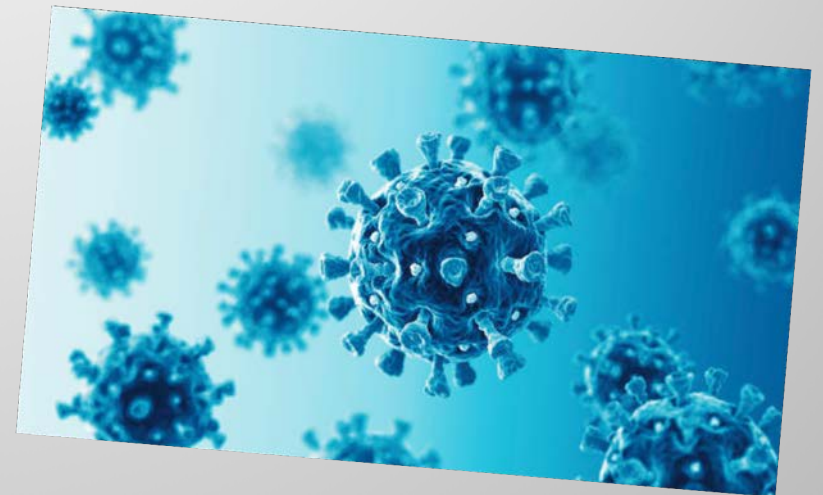




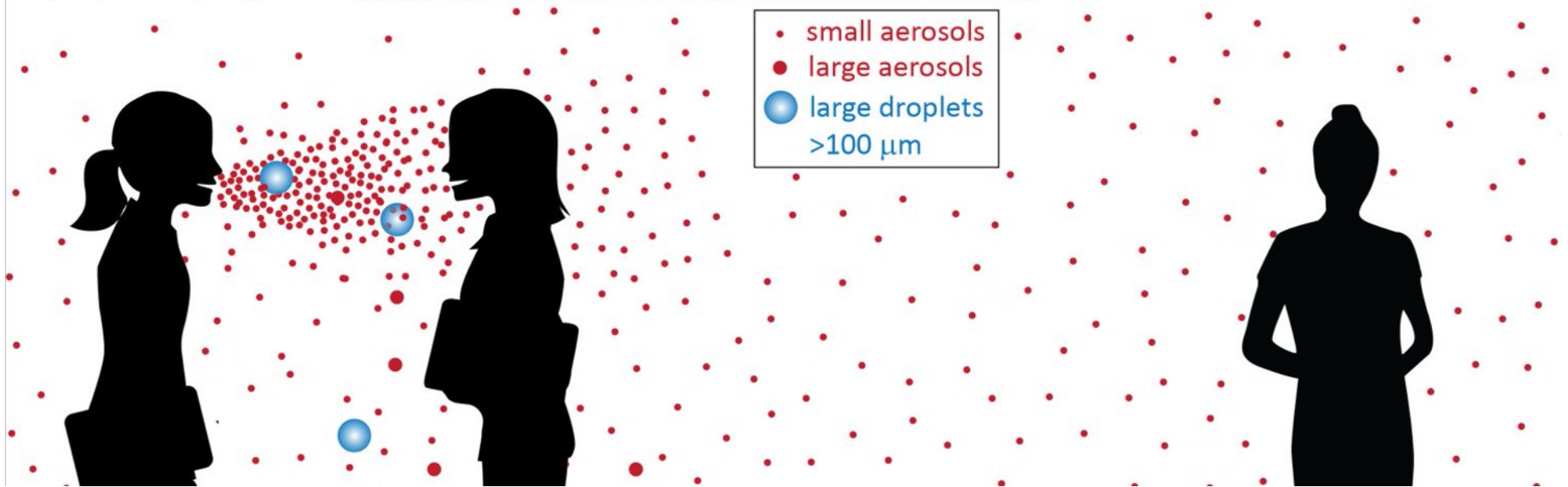
# The Aerosol Transmission Coalition

**Protecting Workers in the Pandemic**  
**MFL Occupational Health Centre**  
**December 14, 2021**  
**Marianne Levitsky**



# Basics of Aerosol Transmission

Graphic by Prof. Linsey Marr, published in [https://www.journalofhospitalinfection.com/article/S0195-6701\(21\)00007-4/fulltext](https://www.journalofhospitalinfection.com/article/S0195-6701(21)00007-4/fulltext)



# Aerosol Transmission and the failure of public health messaging - since beginning of the pandemic

## FACT CHECK: COVID-19 is NOT airborne

The virus that causes COVID-19 is mainly transmitted through droplets generated when an infected person coughs, sneezes, or speaks. **These droplets are too heavy to hang in the air. They quickly fall on floors or surfaces.**

You can be infected by breathing in the virus if you are within 1 metre of a person who has COVID-19, or by touching a contaminated surface and then touching your eyes, nose or mouth before washing your hands.

To protect yourself, keep at least 1 metre distance from others and disinfect surfaces that are touched frequently. Regularly clean your hands thoroughly and avoid touching your eyes, mouth, and nose.



This message spreading on social media is incorrect. Help stop misinformation. Verify the facts before sharing.



March 28 2020

#Coronavirus #COVID19

## *239 Experts With One Big Claim: The Coronavirus Is Airborne*

July 2020

← **Linsey Marr** ✓  
5,351 Tweets Following

**Tweets**   Tweets & replies   Media   Likes

📌 Pinned Tweet

 **Linsey Marr** ✓ @linseymarr · Mar 5, 2020 ...

Let's talk about #airborne transmission of #SARSCOV2 and other viruses. A discussion is needed to improve accuracy and reduce fear associated with the term. /1

💬 148   ↻ 683   ❤️ 1.2K   📌

## A message from Dr Kevin Hedges

[Leave a Comment](#) / [General](#) / [By Paracelsus](#)

On April 11, 2020, I wrote to the Honourable Patty Hajdu Minister of Health, Government of Canada and Dr. Theresa Tam Chief Public Health Officer, Public Health Agency of Canada on behalf of the WHWB board. I thanked both, on behalf of the board, for the leadership they have provided to combat COVID-19 in Canada. On behalf of the board, I also expressed concern about messaging from the World Health Organisation (WHO), and subsequent messaging from Canadian officials, especially as it impacts frontline healthcare workers around the world.



## *Our coalition came together in December 2020*

- People from different disciplines and groups concerned about aerosol transmission
- Joined forces to increase impact
- Meeting virtually almost weekly
- Wanted to apply lessons learned from SARS 1 and Campbell report – including precautionary principle
- Feared aerosol transmission and workers would be ignored again





# Our multidisciplinary membership

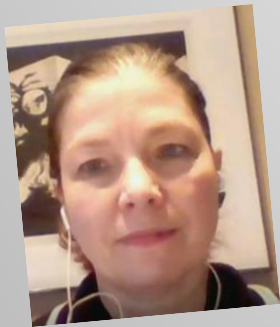


**Engineering:**  
Stéphane Bilodeau



**Respiratory protection:**  
Simon Smith

Christine Shea



**Physics:**  
Nancy Delagrave



Jennifer McDonald

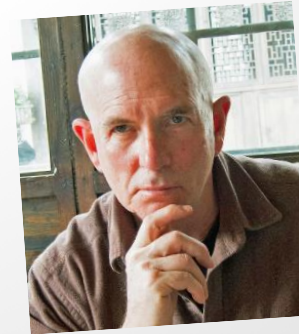
## Physicians:



Sarah Addleman



**OHS regulation and enforcement:**  
Alec Farquhar



Lawrence Svirchev



Dorothy Wigmore



Marianne Levitsky

## Occupational health/ hygiene scientists



Kevin Hedges



John Oudyk



Val Wolfe

**Microbiology:**  
Raymond Tellier

# Organizations linked to the coalition include




CANADIAN REGISTRATION BOARD OF OCCUPATIONAL HYGIENISTS  
CONSEIL CANADIEN D'AGRÉMENT DES HYGIÉNISTES DU TRAVAIL



Masks4Canada  
MASQUES POUR LE CANADA



**COVID-STOP**



Occupational Health Clinics for Ontario Workers Inc.  
Centres de santé des travailleurs (ses) de l'Ontario Inc.

# Our work has included



**First letter**  
(January 4, 2021)

**There is still time to address aerosol transmission of COVID-19**

January 4, 2020

Dear Dr. Theresa Tam, Hon. Patty Hajdu, Premiers and Medical Officer

We are a group of physicians, scientists, occupational health and safety professionals who have been following the COVID-19 developments by the recent increase in cases and hospitalizations across Canada. V COVID-19 guidelines, workplace regulations and public communication spreads through inhaled aerosols.

In July of 2020, 239 international scientists brought this issue to the attention of their letter, some progress has been made gaining recognition f

**LA TRANSMISSION PAR AÉROSOLS FRANCAIS LE**

Cliquez [ICI](#) pour lire et télécharger la lettre.



Le 19 février 2021

**La science est claire : les mesures de protection doivent intégrer la transmission par aérosols du virus, comme nous l'avions dit en janvier.**

M<sup>rs</sup> Theresa Tam, Honorable Patty Hajdu, Mesdames et Messieurs les premiers ministres et responsables de la santé publique,

La présente lettre se veut un **rappel** de celle qui vous avait été adressée, maintenant par plus de 640 spécialistes canadiens et d'autres pays le 4 janvier 2021. Dans cette lettre, nous demandons aux gouvernements fédéral et provinciaux comme aux agences de la santé publique d'adopter des mesures efficaces pour réduire la transmission par aérosols du SRAS-CoV2, notamment

après l'apparition de variants plus dangereux au moins une très grave épidémie de durée prolongée en Ontario, ainsi qu'en ce moment en de la viande de Toronto et d'autres villes. Le lent processus de vaccination ne peut pas être la seule mesure destinée à

**Second letter**  
(February 19, 2021)

**For immediate release**

**There's no excuse left. We need new, stronger measures to deal with COVID-19's airborne transmission**

**TORONTO – April 16, 2021** – Lives are at stake. Things will not improve until governments and public health officials accept that the SARS-CoV2 virus is airborne. The clear science about this can't be ignored or denied any longer. Only new and effective measures based on airborne transmission of all variants will protect essential workers and the rest of us.

That's the message from a Canadian coalition of organizations representing hundreds of scientists, occupational health specialists, engineers, physicians, nurses and others. They added their voices today to the growing chorus delivering similar messages, as new variants of the SARS-CoV2 virus take frightening tolls in many parts of the country.

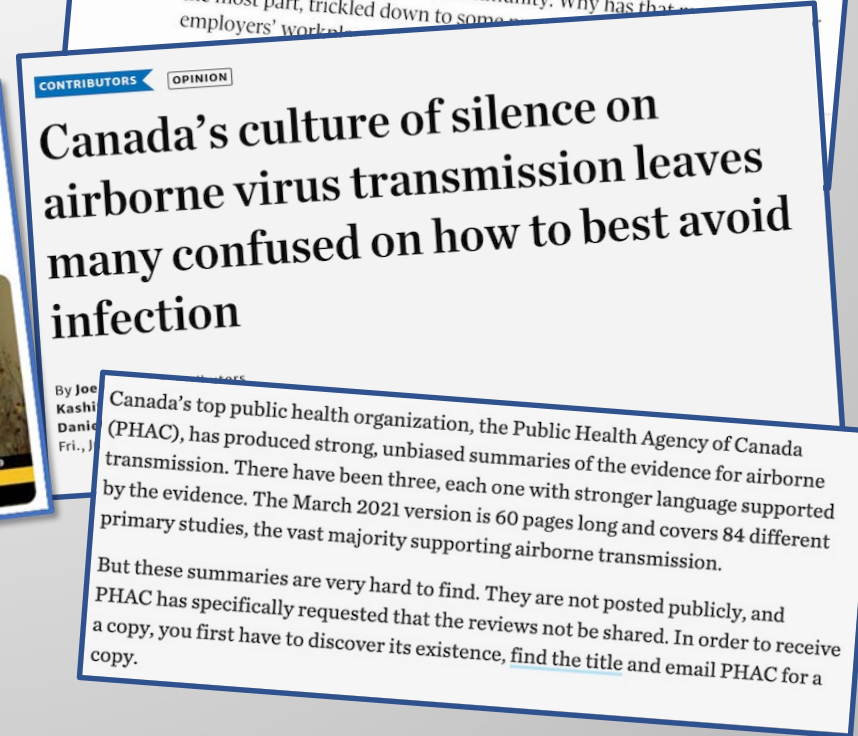
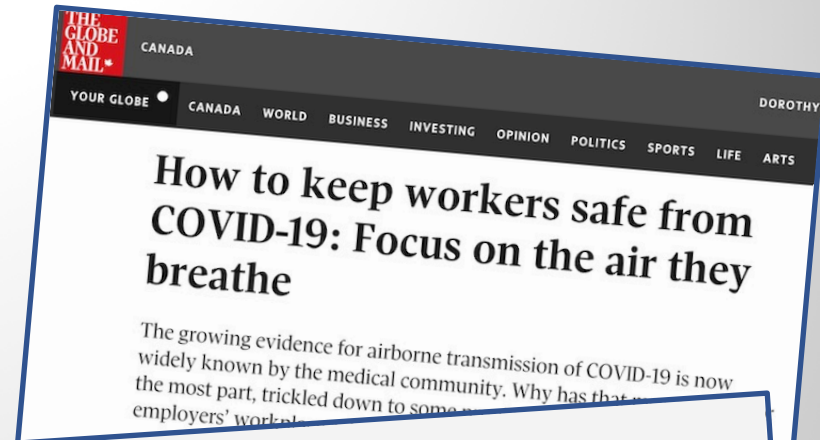
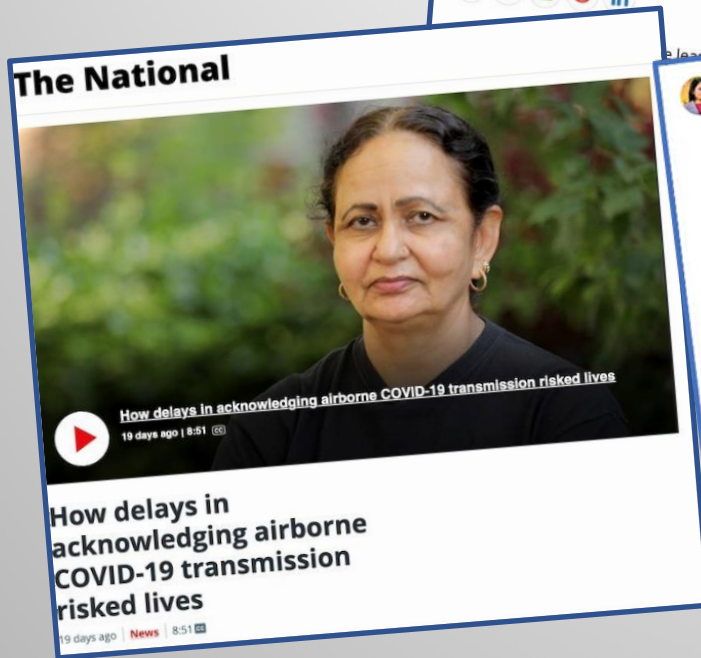
**Press release**  
April 16, 2021)



Dr. Amy Tan and Kevin Hedges on Vancouver television news, January 4, 2021



# Ongoing media coverage





# Canadian authorities were airborne hesitant, ignoring lessons and science, rejecting precautionary principle

## The Canadian Response - A Search for Certainty



- "A tempest in a teapot."
- The letter was "trying to foment a bit of controversy"
- "We're just rehashing the same arguments that we've heard throughout February, March, April up until now. I'm not quite sure what the fuss is all about."
- "The epidemiology of the disease tells us [the airborne route] is not a major contributor to transmission of the virus around the world."
- "We have epidemiological real-world experience."

Mario Possamai presentation.OHCOW April 2021  
<https://www.youtube.com/watch?v=Zy5HZuixC2w>

## The Canadian Response - "resulted in confusion and fear"

"... the authors draw **premature conclusions** about the importance of airborne transmission.

This has resulted in **confusion and fear** in the general public, **mistrust** in healthcare workers, and a **risk of a deepening divide** between experimental scientists and healthcare epidemiologists."

Letter to *Clinical Infectious Diseases*, August 11, 2020

"This article adds **fuel to fire.**"

"Promoting **unfounded conspiracy theories** is **irresponsible** and a **serious risk to public health**. They **fuel unnecessary health-care worker fear** and **destabilize health-care institutions by creating mistrust.**"

Letter to Toronto Star, May 2020, by Canadian ID doctors critical of article advocating precautionary principle and taking airborne risks seriously

# Other advocacy efforts

The banner features the Science Table logo at the top, which consists of a stylized sunburst of orange and yellow dots above the text "SCIENCE TABLE" and "COVID-19 ADVISORY FOR ONTARIO". Below the logo is a dark navigation bar with white text for "Science Briefs", "Ontario Dashboard", "Key Resources", "Glossary", "About Us", "Our Partners", and "Subscribe". The main text of the banner reads "A COLLECTIVE LENS." in large white letters, with "Informing Ontario's response to COVID-19" in smaller orange and white text below it.

The page is titled "Science Table Members" and has a sub-section for "Leadership". It features three circular profile pictures of men. The first is Adalsteinn Brown, DPhil, AB, Co-Chair, Dean, Dalla Lana School of Public Health, University of Toronto, and Senior Fellow, Massey College. The second is Brian Schwartz, MD, MScCH, Co-Chair, Vice-President, Public Health Ontario, and Associate Professor, Department of Family and Community Medicine. The third is Peter Jüni, MD, FESC, Scientific Director, Professor of Medicine and Epidemiology, Department of Medicine and Institute of Health... Each profile includes a "Read More" link.

The snippet shows the top of a Toronto Star article. The header includes the "TORONTO STAR" logo and navigation links for HOME, MY LOCAL, GTA, CANADA, POLITICS, WORLD, OPINION, LIFE, SPORTS, ENTERTAINMENT, and BUSINESS. A red "BREAKING" banner reads "Trudeau names Mary Simon as Canada's governor general". The article title is "Canadian study of surgical masks is needlessly putting health-care workers at risk of catching COVID-19, complaint alleges". The author is Robert Cribb, Staff Reporter, and the date is Wednesday, April 21, 2021. The article is 7 minutes long. The image shows a close-up of a surgical mask with a yellow circular filter.

A McMaster University study examining whether surgical masks provide health-care workers with similar protection to N95 respirators has triggered a formal complaint alleging the lives of participants are being needlessly placed at risk.

In an April 19 letter to the federal research ethics panel, a coalition of health-care practitioners allege the study “exposes health-care workers to COVID-19 infection” by allowing them to wear surgical masks instead of N95 respirators when caring for patients.

The complaint to Canada’s Secretariat on Responsible Conduct of Research (SRCR) states there is “ample research” to support the transmission of COVID-19 through aerosols that can be spread through the air and inhaled, requiring respirators as the “minimum line of safety protection for at-risk workers.”

**Success stories???**  
**Authorities are giving more recognition, sometimes hesitantly, to airborne transmission**



Transmission of this virus is airborne, therefore it loves it if people are inside crowded spaces that aren't so well ventilated.

Peter Juni, head of Ontario Science Table,  
Toronto Star, Nov. 29, 2021

← Thread



**Dr. Theresa Tam** ✓  
@CPHO\_Canada

1/5 Layering **#COVID19** protections is best! Evidence on aerosol spread of the **#SARSCoV2** virus shows that expelled virus particles can spread over distances and linger in fine aerosols for periods of time, much like second-hand smoke. [canada.ca/en/public-heal...](https://canada.ca/en/public-health)

12:39 PM · Nov 13, 2021 · Twitter Web App

Governments funding better ventilation and air purifiers



But more work to do!

TORONTO | News

## Ontario school board threatens to suspend teacher who wore respirator instead of blue surgical mask in class



**Chris Herhalt** CP24 Web Content Writer  
@\_Herhalt | [Contact](#)



**Ed Tubb** @EdTubb · Aug 26

(Toronto Star Reporter)

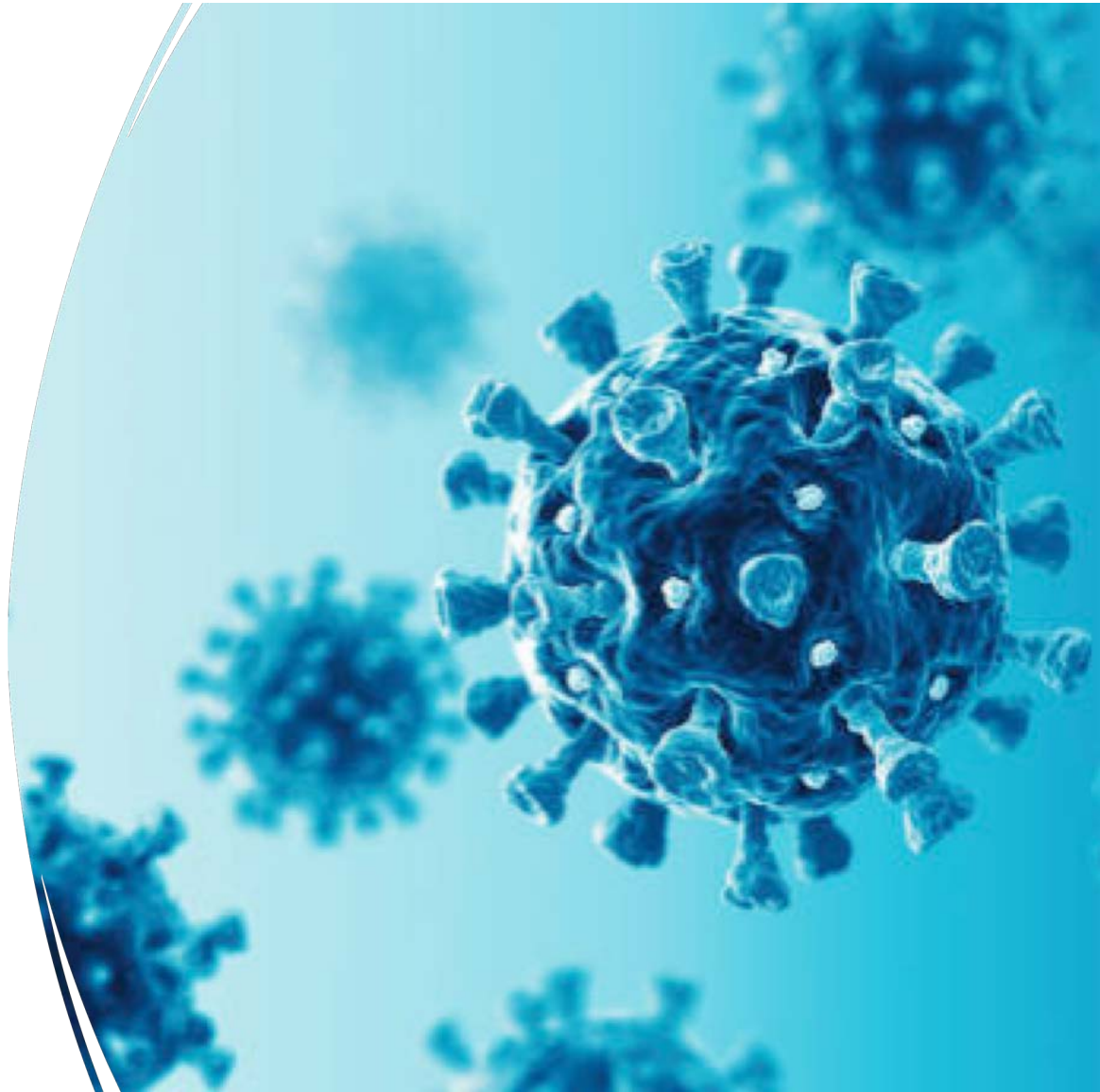
Replying to @EdTubb

Ontario's official policy inside hospitals has been "droplet and contact" precautions, with situational exceptions, since Wave 1.

# Next Steps

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- Continue advocacy for airborne prevention measures
- Partnerships with more organizations
- Call for pandemic inquiry





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