

April 28, 2021

Ontario COVID-19 Science Advisory Table
(sent by e-mail to individual members)

Greetings:

We are writing on behalf of a cross-Canada multi-disciplinary coalition of individuals and groups focusing on aerosol transmission of COVID19.

We have appreciated the Ontario Science Advisory Table's work. We particularly admire your courage in recently speaking up about essential workplaces and the importance of avoiding enclosed spaces. We have used your modelling and impact forecasting of the variants of concern, integrated with vaccine roll-out and efficacy options, to support the need for stronger prevention strategies.

We are concerned that the current occupational health and safety measures for essential workers are insufficient to protect them from being infected. We are requesting the opportunity to present our prevention proposals to you as soon as possible.

Similar to your advice to government, our coalition also has tried to emphasize the importance of protective measures for workplaces and not "sharing air". We appreciate that the Table's latest brief, [Fighting COVID in Ontario: The Way Forward](#) stated that people should avoid "inside" and strive for "outside" interactions and ask that you go further to recognize the role of aerosol transmission and its control.

It's clear that distancing, barriers, disinfecting and masking are not sufficient. And it will be some time before vaccination reaches a sufficient level. The current enforcement measures based on the belief that transmission is by droplets or surface contact are insufficient. The busy workplaces behind the horrific toll in this third wave need clear new rules.

The obvious reason to avoid "inside" spaces is that the virus is airborne. (As Tang and his colleagues [explained](#) recently in the *British Medical Journal*, "(e)ssentially, if you can inhale particles -- regardless of their size or name—you are breathing in aerosols.") From that should flow equally clear guidance (and requirements) about what to do **inside** workplaces and how occupational health and safety (OHS) provides a useful existing framework to address such measures.

Many in our coalition are familiar with that OHS framework and practical "inside" solutions to prevent and reduce virus transmission in workplaces, and beyond. We would appreciate an opportunity to discuss those solutions and related

messaging with members of the Science Advisory Table, and to otherwise assist however we can.

As explained in our national letters of [January 4](#) and [February 19](#) to government, public health and occupational health and safety officials, and recent [press release](#), the key issues are:

- accepting the precautionary principle, as Judge Archie Campbell recommended in his SARS Commission [report](#) and the Ontario government had in place until [March 10, 2020](#)
- heeding the evidence for aerosol and airborne transmission (as [summarised](#) most recently by Greenhalgh and colleagues) and declaring that aerosol and airborne transmission is significant
- recognize that the virus is a job-related hazard, making it subject to requirements and enforcement of the *Occupational Health and Safety Act*,
- involving occupational health/hygiene specialists, aerosol scientists and ventilation engineers to provide effective solutions and strategies for **inside** workplaces, including ventilation, CO₂ monitoring, effective respiratory protection and using the least toxic products for cleaning and disinfecting
- include communications expertise to distill key messages about airborne transmission and its control, in line with your recent [Behavioural Science Principles for Enhancing Adherence](#) document.

We would like to elaborate on these solutions with you, and help to inform a scientifically-based way forward to tackle this pandemic. Please let us know when and how this would be possible.

Sincerely

Kevin Hedges, PhD, Certified Industrial Hygienist/CIH (American Board of Industrial Hygiene), Certified Occupational Hygienist/COH (Australian Institute of Occupational Hygienists); International Past President, Workplace Health Without Borders (WHWB) (kevinhedges.kh@gmail.com)

Marianne Levitsky, MES, CIH, Registered Occupational Hygienist/ROH, FAIHA, Founding President and current Board member, WHWB; Adjunct Lecturer, Dalla Lana School of Public Health (marilev@sympatico.ca)

Simon Smith, PhD, CChem FRSC(UK); Chair, ISO working group for CBRN respirator standards; former President, International Society for Respiratory Protection (sjsmith@kos.net).

Stéphane Bilodeau, PhD, FEC, Engineer; former Associate professor, University of Sherbrooke (sbilodeau@th2b.com)

Other coalition members include:

Sarah Addleman, MDCM, CCFP-EM

Alec Farquhar, LLB, Workplace Health Without Borders, Board of Directors; formerly Director of Ontario Ministry of Labour Occupational Health and Safety Branch during the implementation of the Campbell recommendations

Marc-André Lavoie, M. Sc., ROH; President, Canadian Registration Board of Occupational Hygienists (CRBOH)

Jennifer McDonald, MD, FRCPC-PMR

John Oudyk, CIH, ROH, Assistant Professor (part-time) McMaster University

Laurence Svirchev, CIH, retired WorkSafeBC officer

Raymond Tellier, MD, Associate Professor, Department of Medicine, McGill University

Dorothy Wigmore, MS, Occupational hygienist/health specialist