

COVID-19 PANDEMIC – RAEB’S EVIDENCE UPDATE

Highlights of health research evidence synthesized by the
Research, Analysis and Evaluation Branch (RAEB)

• July 20, 2020 •

FEATURED

- RAEB’S Rapid Responses for Ontario’s health sector
- Evidence products from our partners
- Research evidence
- Jurisdictional experience
- Trusted resources

ABOUT RAEB

Through research funding, brokering, translating, and sharing, we promote an enhanced evidence use capacity that supports all aspects of health policy, programming, and investment decision making.

Services include:

- Literature reviews
- Jurisdictional scans
- Economic analysis
- Evaluation planning
- Research fund management
- Knowledge translation services

CONTACT RAEB

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RAEB’S RAPID RESPONSES FOR ONTARIO’S HEALTH SECTOR

Please contact [Evidence Synthesis Unit](#) for the full read of these rapid responses.

• Approaches to Mitigating the Risk of COVID-19 in Workplace Settings with Children where Physical Distancing cannot be Maintained

While physical distancing is important to preventing the spread of COVID-19, certain workplaces experience difficulty maintaining distance, as physical interaction is required and/or inevitable to carry out job functions. To address this difficulty, personal protective equipment (PPE) has been recommended or implemented in workplaces where physical distancing cannot be maintained pertaining to:

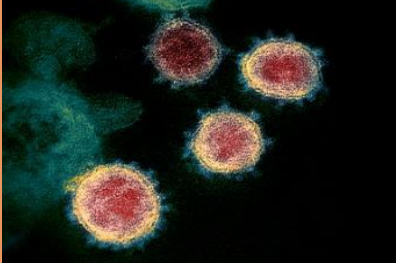
- **School Settings:** Canada, China, France, Germany South Korea, UK, US, and Vietnam highlight three circumstances where PPE would be required:
 - Where physical distancing (i.e., two meters) is not maintained: Ontario (masks, goggles, face shields, gloves), Alberta (masks), Newfoundland and Labrador (masks, face shields), Centers for Disease, Control and Prevention (US) (masks), Texas (facial coverings, face shields), and Vermont (facial coverings) recommend the use of PPE if a two-metre distance is not maintained between staff and students.
 - Close contact with a symptomatic student: British Columbia (masks, gloves), Quebec (masks, face shields, gowns, gloves), and Saskatchewan (masks, eye protection) recommend the use of PPE if staff are in contact with a symptomatic student.
 - Mandatory at all times: Northwest Territories (Canada) (masks), China (masks, thermal scanner), France (masks, visor caps), Bavaria (Germany) (masks), South Korea (masks), and Vietnam (masks) recommend staff and students wear PPE at all times, with the medical and various exceptions (e.g., eating, age).
- **Daycare and Child Care Centres:** Canada identified PPE recommendations specific to daycare and child care centres. In particular, the Canadian Centre for Occupational Health and Safety and Nova Scotia recommend the use of masks in cases where staff encounter children exhibiting signs or symptoms suggestive of COVID-19.
- **School and Child Care Settings:** The UK recommends PPE use applicable to schools and child care settings. For example, when interacting with a child who is symptomatic, staff are recommended to wear a face mask, eye protection, and apron and gloves.



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EVIDENCE PRODUCTS FROM OUR PARTNERS

Ministry research partners are actively working with leading agencies and organizations on questions related to COVID-19. The McMaster Health Forum has recently produced two products:

- [Where and with What Impacts have Shifts from In-Person to Virtual Approaches Occurred in the Delivery of Healthcare Services in General and Mental Health and Addictions Services in Particular?](#)
A rapid evidence review was conducted to identify evidence on the types of mental health and addiction issues arising as a result of health, economic, and social system responses to COVID-19; indicators that can be used to monitor these changes in population mental health; strategies to respond to emergent needs; and the experiences of other provinces and countries. It is suggested that health, economic, and social system responses to the pandemic have affected the mental health of citizens. Less evidence is available on the indicators that can be used and strategies to respond to emergent needs.
- [What Pandemic-Related Mental Health and Addictions Issues have Emerged and What Indicators and Strategies can be Used to Monitor and Address them, Respectively?](#)
A rapid evidence review was conducted to identify evidence on the shift to virtual care during COVID-19, including within the mental health sector and beyond it; what is known about the outcomes of this shift; and what relevant policies have been created in other provinces and countries. Virtual care pathways have been developed in a range of sectors and services, and some facilitators and barriers to doing so have been identified. Less is known about health outcomes and population-specific adaptations of virtual care during COVID-19, especially with respect to mental health services.

RESEARCH EVIDENCE

The research evidence profiled below was selected from highly esteemed academic journals, based on date of publication and potential applicability or interest to the Ontario health sector.

- **Association between universal masking and SARS-COV-2 positivity among health care workers**
[July 14, 2020](#). A study in Massachusetts across 12 hospitals found that 12.9% of health care workers tested positive for COVID-19, and that universal masking led to a significantly lower rate of COVID-19 positivity among health care workers (i.e., weighted mean decline of 0.49% in positivity rate per day). [Read](#)

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RESEARCH EVIDENCE cont'd

- **Obesity, walking pace, and risk of severe COVID-19: Analysis of UK biobank**
[July 11, 2020](#). An analysis of 414,201 UK Biobank participants suggested that the risk of severe, hospitalizing COVID-19 is highest for slow walkers, regardless of obesity status. Compared to those with a brisk walking pace, the odds ratio of severe COVID-19 in steady/average and slow walkers was 1.15 and 1.84, respectively. Self-reported walking pace appears to be a risk factor for severe COVID-19 that is independent of obesity. [Read](#).
- **Convalescent plasma or hyperimmune immunoglobulin for people with COVID-19: A living systematic review**
[July 10, 2020](#). This systematic review noted that it is uncertain whether plasma from people who have recovered from COVID-19 is an effective treatment for COVID-19. The review found 98 ongoing studies evaluating convalescent plasma and hyperimmune immunoglobulin, of which 50 are randomized. This living review will continue to be updated as additional studies are conducted. [Read](#).
- **Effectiveness of cloth masks for protection against COVID-19**
[July 8, 2020](#). A US study suggested that until cloth masks are proven to be equally effective as medical or N95 masks, wearing them should not be mandated for health care workers. In community settings, cloth masks may be used to prevent community spread of infections by sick or asymptotically infected persons, and the public should be educated about their correct use. [Read](#).
- **Pre-existing immunity to SARS-CoV-2 and the common cold**
[July 7, 2020](#). Researchers suggested that, to some degree, there is pre-existing immune reactivity to SARS-CoV-2 in the general population, possibly due to exposure to 'common cold' coronaviruses. [Read](#).

JURISDICTIONAL EXPERIENCE

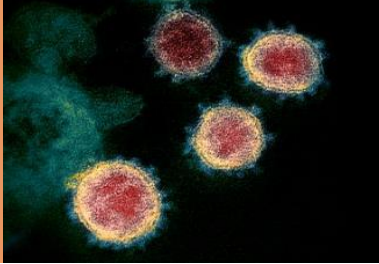
- **Seroprevalence of COVID-19 in British Columbia**
[July 15, 2020](#). According to a seroprevalence survey study (preprint) conducted in British Columbia, less than 1% of the province was infected with COVID-19 when first-wave mitigation measures were relaxed in May 2020, indicating successful suppression of community transmission. [Read](#).
- **Database of international public health guidance on COVID-19**
[July 14, 2020](#). A Health Information and Quality Authority Excel database in Ireland includes updated links to international guidance on all aspects of COVID-19 (e.g., contact tracing, infection prevention and control, surveillance). [Read](#).



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JURISDICTIONAL EXPERIENCE cont'd

- **Absence of apparent SARS-CoV-2 transmission from hair salon with a universal face covering policy**
[July 14, 2020](#). A Centers for Disease Control and Prevention report indicated that a hair salon in the US which implemented universal masking for all stylists and clients (i.e., 139 clients) and had two laboratory confirmed cases of COVID-19 among hairstylists, did not report symptomatic secondary cases. There were 67 clients who agreed to be tested and reported negative results, suggesting that broader implementation of face covering policies could mitigate the spread of infection in the general population. [Read](#).
- **Preparing for a challenging winter 2020/2021**
[July 14, 2020](#). An Academy of Medical Sciences report in the UK suggested that urgent preparation for COVID-19 is needed to mitigate the potential risks of the winter, which includes: 1) minimizing community SARS-CoV-2 transmission and impact; 2) organizing health and social care settings to ensure that COVID-19 and routine care can take place in parallel; 3) improving public health surveillance for COVID-19, and other winter diseases; and, 4) minimizing influenza transmission and impact. [Read](#).
- **Enhancing patient engagement during virtual care during COVID-19**
[July 10, 2020](#). A Stanford Healthcare commentary in the US shares the lessons learned during its rapid deployment of virtual visits during the COVID-19 pandemic. [Read](#).
- **COVID-19 pandemic speeds largest test yet of universal basic income in Spain**
[July 10, 2020](#). On June 15, 2020, spurred by the COVID-19 crisis and its economic fallout, Spain's government launched a website offering monthly payments of up to USD \$1,145 to the nation's poorest families. The program, which will support 850,000 households, is the largest test yet of universal basic income, in which people are given a cash payment each month to spend however they choose. [Read](#).
- **Australia's first COVID-19 treatment approved**
[July 10, 2020](#). The Therapeutic Goods Administration in Australia has granted provisional approval to remdesivir for use in adult and adolescent patients with severe COVID-19 symptoms who have been hospitalized. This follows recent approvals in the European Union, Japan, and Singapore. [Read](#).
- **Australia government issues guidance on wearing masks in the community**
[July 9, 2020](#). A Government of Australia report suggested that the country continues to not recommend wearing masks in the community. However, if someone is in a region where community transmission is occurring and they are having difficulty physically distancing, they should take extra precautions, including wearing a mask. [Read](#).



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JURISDICTIONAL EXPERIENCE cont'd

- COVID-19 lessons learned from Vietnam

[July 9, 2020](#). Vietnam, with a population of 97 million, has had a total of 369 confirmed cases, no deaths, and no cases of community transmission in the past three months. Analysts from the Johns Hopkins Center for Health Security detail their approach: 1) early, aggressive screening, mandatory quarantine, and school closures (by the end of January 2020); and 2) targeted testing (by the end of April, 1,000 people tested for every confirmed case found) and 11,000 community health centres supporting contact tracing. [Read](#).

TRUSTED RESOURCES

An up-to-date and comprehensive list of sources, organized by type of research evidence, is available on McMaster Health Forum's COVID-19 Evidence Network to support Decision-making (COVID-END) [website](#).

* Figures in the header: Transmission electron microscope image shows SARS-CoV-2, the virus that causes COVID-19, isolated from a patient in the United States. Virus particles are emerging from the surface of cells cultured in the lab. The spikes on the outer edge of the virus particles give coronaviruses their name, crown-like. *National Institutes of Health's National Institute of Allergy and Infectious Diseases – Rocky Mountain Laboratories*