

COVID-19 PANDEMIC – RAEB'S EVIDENCE UPDATE

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

• May 25, 2020 •

FEATURED

- RAEB'S rapid responses for Ontario's health sector
- Evidence products produced with 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

[Anne Hayes](#), RAEB Director
[Andrea Proctor](#), Evidence Synthesis

[Emre Yurga](#), Economic Analysis and Evaluation

[Erika Runions-MacNeil](#), Research Planning and Management

RAEB'S RAPID RESPONSES FOR ONTARIO'S HEALTH SECTOR

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

• Infection Prevention and Control (IPC) and Treatment of COVID-19 in Long-Term Care (LTC) facilities

IPC guidance from Canadian and international jurisdictions recommend both environmental measures (e.g., hand hygiene, social distancing, disinfecting) and infection control measures (e.g., training staff on PPE, steps to manage an outbreak) to prevent and control COVID-19 in LTC facilities. These IPC measures involve: 1) screening all visitors, staff, and residents through passive (e.g., signage) and active (e.g., daily symptom checks, such as temperature) modes; 2) isolating residents with suspected or confirmed COVID-19 in designated locations that are separate from other residents, and immediately launching an epidemiological investigation including contact tracing of all staff, visitors, and residents to identify any additional cases; and 3) designating a team, or at least one full-time staff member, in each facility to be the lead for COVID-19 preparedness and response (e.g., IPC training). Limited information was identified on the treatment of residents with COVID-19 in LTC facilities.

• Infection Prevention and Control Strategies for People Experiencing Homelessness During COVID-19

People experiencing homelessness are vulnerable to high rates of infection and mortality compared to the general population, and their potential exposure to COVID-19 might negatively affect their ability to be housed, as well as their mental and physical health. The review identified three national and state plans for providing outreach services and accommodation for 'rough sleepers' and people living in shelters and encampments in the United Kingdom and Australian states. Moreover, several jurisdictions (e.g., Toronto, Vancouver, Los Angeles, New York City) have guidance on sheltering homeless people in hotels or camplike settings. Four guidance reports from the Public Health Agency of Canada, British Columbia, Alberta, and the US Centers for Disease Control and Prevention provide recommendations for mitigating the spread of COVID-19 among people experiencing homelessness, or in precarious or congregate housing, including protocols for hygiene, physical distancing, and staffing.

RAEB'S RAPID RESPONSES FOR ONTARIO'S HEALTH SECTOR cont'd

- **Interventions Supporting the Mental Health of Health Care Workers (HCWs) during COVID-19**
HCWs who are directly involved in the diagnosis, treatment, and care of patients with COVID-19 are at risk of developing psychological distress and other mental health symptoms. Studies suggest that HCWs clinically present symptoms of anxiety, depression, and/or distress that are largely caused by workplace stress. The decline in mental health can be addressed through in-person (e.g., coaching sessions, compassion-focused therapy, peer-to-peer debriefing), online (e.g., peer support groups, courses, assistance hotline teams), or multimodal (i.e., psychological first aid in-person and online) interventions. There is marked uptake in the use of online applications during the COVID-19 pandemic, some of which are associated with reducing feelings of loneliness, isolation, confusion, and emotional stress. Best practices include, for example: management leading discussions with HCWs and providing them routine supports (e.g., peer support programs), and HCWs ensuring they get sufficient sleep, eat well, make time for hobbies, maintain contact with colleagues and family, and seek help from mental health professionals when needed.

EVIDENCE PRODUCTS PRODUCED IN COLLABORATION WITH OUR PARTNERS

The COVID-19 Evidence Synthesis Network is comprised of groups specializing in evidence synthesis and knowledge translation. The group has committed to provide their expertise to provide high-quality, relevant, and timely synthesized research evidence about COVID-19 to inform decision makers as the pandemic continues. Please contact [Evidence Synthesis Unit](#) for the full read of these evidence products.

- **Screening Approaches to Use in Non-Healthcare Settings to Identify People Who May have COVID-19**
(Produced in collaboration with [McMaster Health Forum](#)).
Screening approaches that can be used in non-healthcare workplaces include: 1) a list of COVID-19-related symptoms (with the symptoms signalling an increased chance of having COVID-19); 2) temperature taking (with an elevated temperature signalling an increased chance of having COVID-19); and 3) a positive antibody test (with a recent positive test signaling a decreased chance of having COVID-19). Such screening approaches can be used for those at high risk for COVID-19 (e.g., travellers passing through air, land, and sea borders) and for the entire population (e.g., on entering university buildings, stores, and office buildings). Such screening approaches can also be operationalized in different ways (e.g., by self-screening prompted by signage, self-screening using a questionnaire, or screening using a questionnaire administered by another person; by randomly selecting individuals for symptom screening or screening everyone; and by varying the frequency of and settings for symptom screening). Appropriate follow-up actions for those who screen as being at elevated risk for COVID-19 can include self-isolating and seeking a diagnostic test, among others. Ontario is using different tools to screen for COVID-19 symptoms: the provincial [self-assessment tool](#), the Ministry of Labour, Training and Skills Development's sector-specific guidance and signage, and the Infrastructure Health and Safety Association's [screening checklist](#).

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.

- **Clinical presentation of health care workers with COVID-19 symptoms in the Netherlands**
[May 21, 2020](#). This study revealed that health care workers with self-reported fever or respiratory symptoms were infected with SARS-CoV-2, likely from the community during the early phase of local spread. The high prevalence of mild clinical presentations, frequently not including fever, suggests the currently recommended case definition for suspected COVID-19 should be used less stringently. [Read](#).
- **Respecting disability rights – toward improved crisis standards of care**
[May 19, 2020](#). Legal experts analyzed discrimination complaints that disability rights advocacy groups and persons with disabilities made about COVID-19 guidelines from several US states. They recommended six key steps policymakers and hospitals can take to honour commitments to anti-discrimination principles while appropriately stewarding scarce resources during the pandemic. [Read](#).
- **Scientists detected SARS-CoV-2 from feces**
[May 18, 2020](#). Scientists in China detected SARS-CoV-2 in feces samples from patients who died from the disease, affirming the potential for fecal-oral or fecal-respiratory transmission. [Read](#).
- **The data gap undermining the US pandemic response**
[May 15, 2020](#). A commentary suggested a key limitation in the US federal disaster response is the lack of adequate testing data, which are a cornerstone of epidemic forecasting models that are necessary to reveal the future demand of care, including the timing of case surges and the magnitude of required emergency medical services, ventilatory equipment, and mortuary services. [Read](#).
- **High SARS-CoV-2 attack rate following exposure at choir practice**
[May 15, 2020](#). Following a 2.5-hour choir practice attended by 61 persons in Washington state, including a symptomatic patient, 32 confirmed and 20 probable secondary COVID-19 cases occurred; three patients were hospitalized, and two died. Transmission was likely facilitated by close proximity (within six feet) during practice and augmented by the act of singing. [Read](#).
- **An interpretable mortality prediction model for COVID-19 patients**
[May 14, 2020](#). A study described a machine learning-based model that uses three biomarkers to predict the mortality rates of patients more than 10 days in advance with more than 90% accuracy, enabling detection, early intervention, and a potential reduction mortality. [Read](#).
- **The American College of Physicians' (ACP) issued Practice Points against use of chloroquine or hydroxychloroquine**
[May 13, 2020](#). The ACP does not recommend the use of chloroquine or hydroxychloroquine alone, or in combination with azithromycin, for the treatment or prevention of COVID-19 due to known harms and no available evidence of benefits in the general population. [Read](#).

COVID-19 PANDEMIC – RAEB'S EVIDENCE UPDATE

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

• May 25, 2020 •

JURISDICTIONAL EXPERIENCE

- **Ontario leading COVID-19 research in Canada**

[May 21, 2020](#). The Ontario government is funding 15 promising [proposals](#) that were submitted in response to a recent call for proposals for the government's \$20 million [Ontario COVID-19 Rapid Research Fund](#). These innovative projects focus on areas of research such as vaccine development, diagnostics, drug trials and development, and social sciences. Additionally, Ontario is leading the country with 22 clinical trials investigating COVID-19 vaccines and treatments. [Read](#).

- **Re-opening schools: Mitigating the risks**

[May 21, 2020](#). A quick response report on school re-openings from the Newfoundland and Labrador Centre for Applied Health Research reviewed plans and guidance documents from British Columbia, Quebec, several international jurisdictions and organizations, research literature, and expert advice. [Read](#).

- **The UK updated COVID-19 screening symptoms to include anosmia**

[May 18, 2020](#). The UK issued an updated statement on COVID-19 symptoms, advising that all individuals should self-isolate if they develop a new continuous cough, or fever, or loss of or change in normal sense of smell (anosmia). [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*