

COVID-19 PANDEMIC – RAEB'S EVIDENCE UPDATE

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

• November 9, 2020 •

FEATURED

- Research evidence and 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

RESEARCH EVIDENCE/JURISDICTIONAL EXPERIENCE

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

VULNERABLE POPULATIONS

- ***Centers for Disease Control and Prevention: Characteristics of symptomatic women of reproductive age with laboratory-confirmed SARS-CoV-2 infection***
[Nov 6, 2020](#). In an analysis of 400,000 women aged 15–44 years with symptomatic COVID-19, intensive care unit admission, invasive ventilation, extracorporeal membrane oxygenation, and death were more likely in pregnant women than in nonpregnant women. [Read](#).
- ***International Long-Term Care Policy Network: Impacts of visiting policies in care homes during the COVID-19 pandemic***
[Nov 1, 2020](#). This review (preprint) found evidence that the wellbeing of care home residents was severely affected during the period that included visitor bans, which included high levels of loneliness and depression and worsening mood and behavioural problems. The review recommended that allowing visitors in facilities where there are no COVID-19 cases is important to support resident wellbeing. [Read](#).
- ***Public Health: Psychological impact of infectious disease outbreaks on pregnant women***
[Oct 31, 2020](#). This review of thirteen articles identified themes relating to the psychological impact of infectious disease outbreaks on pregnant women including: 1) negative emotional states; 2) living with uncertainty; 3) concerns about infection; and 4) disrupted routines. Pregnant women have unique needs during infectious disease outbreaks such as COVID-19 and could benefit from: 1) up-to-date, consistent information and guidance; 2) support from health care professionals; and 3) virtual support groups. [Read](#).

* 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*

RESEARCH EVIDENCE/JURISDICTIONAL EXPERIENCE cont'd

INFECTION, PREVENTION AND CONTROL IN SPECIFIC SETTINGS

- ***European Geriatric Medicine: Interim EuGMS guidance to prepare European long-term care facilities (LTCF) for COVID-19***
[Nov 3, 2020](#). This European guidance suggests that early recognition of symptoms compatible with COVID-19 may help diagnose COVID-19 residents and staff more promptly, as earlier testing for SARS-CoV-2 symptomatic and asymptomatic LTCF staff and residents will enable the implementation of appropriate infection prevention and control. [Read](#).
- ***WHO European Observatory on Health Systems and Policies: Lessons learned from the first wave of COVID-19 about protecting long-term care (LTC) homes***
[Nov, 2020](#). This article reviews what countries have done to support LTC homes in response to COVID-19, including increasing oversight, funding, staff recruitment and retention, health care provision, and efforts to prevent and manage outbreaks. [Read](#).
- ***WHO European Observatory on Health Systems and Policies: Restarting more routine hospital activities during COVID-19***
[Nov, 2020](#). This article reports on the approaches taken in six countries (England, France, Germany, Italy, Spain, and the Netherlands) to resume hospital care after the first wave of the pandemic. Four strategies were observed in all countries: prioritization or rationing of treatments, converting clinical spaces to separate patients, using virtual treatments, and implementing COVID-19-free hospitals or floors. [Read](#).

PUBLIC HEALTH MEASURES

- ***WHO European Observatory on Health Systems and Policies: Global solidarity in vaccine development and deployment***
[Nov, 2020](#). This commentary frames the development of European Union and WHO responses to COVID-19 vaccine development, procurement, and distribution. The European Union has a Vaccines Strategy that goes beyond earlier procurement strategies, and the WHO's COVAX partnership pursues a global strategy of vaccines procurement and distribution. Governments are maximizing their chances of access to vaccines for their own citizens with various combinations of national deals and international collaboration. [Read](#).
- ***The Lancet: Evaluating the effect of demographic factors, socioeconomic factors, and risk aversion on mobility during the COVID-19 epidemic in France***
[Oct 28, 2020](#). This study found that the COVID-19 lockdown in France caused a 65% reduction in countrywide displacements (from about 57 million to about 20 million trips per day) and was particularly effective in reducing work-related short-range mobility, especially during rush hour and long trips. [Read](#).

RESEARCH EVIDENCE/JURISDICTIONAL EXPERIENCE cont'd

DATA ANALYTICS, MODELLING AND MEASUREMENT

- **Canadian Medical Association Journal: Clearing the surgical backlog caused by COVID-19 in Ontario**
[Nov 2, 2020](#). This modelling study suggests that between March 15 and June 13, 2020, the estimated backlog in Ontario was 148,364 surgeries, an average weekly increase of 11,413 surgeries. Estimated backlog clearance time was 84 weeks, with an estimated weekly throughput of 717 patients requiring 719 operating room hours, 265 ward beds, and nine intensive care unit beds per week. [Read](#).
- **The Lancet: Transparency assessment of COVID-19 models**
[Oct 27, 2020](#). This study evaluated the transparency of a sample of COVID-19 models (n=29) that have earned global attention and been referenced in governmental public health efforts. The study reported that each of the 27 criteria were satisfied by an average of 22 (76%) of 29 models, however, most criteria were satisfied by a much smaller percentage of models. This study suggested that governments should not rely on a small number of models to inform policy. [Read](#).

TRANSMISSION

- **medRxiv: Monitoring of SARS-CoV-2 on high-touch surfaces in a community setting in Massachusetts**
[Nov 1, 2020](#). This study of swab sampling of high-touch, non-porous surfaces (i.e., crosswalk buttons, trash can handles, and door handles of essential business entrances such as grocery stores, liquor stores, banks, and gas stations) found that 29 of 348 (8.3 %) surface samples were positive for SARS-CoV-2 and estimated that the risk of infection from touching a contaminated surface to be low (less than five in 10,000). This suggests surfaces play a minimal role in SARS-CoV-2 community transmission. [Read](#).

DISEASE MANAGEMENT

- **Obstetrics and Gynaecology: Clinical care of pregnant and postpartum women with COVID-19: Living recommendations**
[Oct 29, 2020](#). The Australian National COVID-19 Clinical Evidence Taskforce for the care of pregnant and postpartum women with COVID-19 offers recommendations including: 1) the type of delivery; 2) delayed umbilical cord clamping; 3) skin-to-skin contact; 4) breastfeeding; 5) keeping the newborn at the mother's bedside 6) the use of medications; and 7) standard health measures such as hand hygiene and masks when mothers are caring for their babies. A key finding from these recommendations is that there is a lack of direct evidence for the guidance of pregnant and breastfeeding women with COVID-19. [Read](#).

COVID-19 PANDEMIC – RAEB'S EVIDENCE UPDATE

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

• November 9, 2020 •

RESEARCH EVIDENCE/JURISDICTIONAL EXPERIENCE cont'd

FRONTLINE WORKERS

- *WHO European Observatory on Health Systems and Policies: Strategies to expand health workforce surge capacity Nov, 2020.* This article explores the strategies that 44 countries in Europe and Canada have taken to maintain and increase the availability of health workers. All countries have used a variety of strategies to repurpose and mobilize the existing health workforce, while some have also augmented capacity by using foreign-trained or previously retired or inactive health professionals, medical and nursing students, and volunteers. There is little information on how these strategies have played out in practice and the impact they have had on workforce expansion, workflows, skill-mix, and quality of care. [Read](#).

TRUSTED RESOURCES

- The Evidence Synthesis Network (ESN) is a collaborative COVID-19 response initiative by Ontario's research and knowledge production community. The [ESN website](#) is a portal where research evidence requests can be made and includes previously completed ESN briefing notes.
- 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](#).
- The [Ontario COVID-19 Science Advisory Table](#) is a group of scientific experts and health system leaders who evaluate and report on emerging evidence relevant to the COVID-19 pandemic, to inform Ontario's response to the pandemic.