

The Newfoundland & Labrador Centre for Applied Health Research (NLCAHR) sends this COVID-19 e-bulletin to our health system stakeholders on a bi-weekly basis. This e-bulletin includes results from recent searches of health evidence and grey literature on the pandemic under specific subject headings, highlighting those findings considered to be of particular relevance to you.

We welcome your [feedback and suggestions](#).

To subscribe to this e-bulletin, please email: Rochelle.Baker@med.mun.ca

You can find NLCAHR e-bulletins and COVID-19 *Quick Response Reports* [online here](#).

CLINICAL PRESENTATION AND BIOLOGY

Children's Hospital of Philadelphia (CHOP): [CHOP Researchers Find Elevated Biomarker Related to Blood Vessel Damage in All Children with SARS-CoV-2 Regardless of Disease Severity](#) (December 8, 2020)

"Researchers at Children's Hospital of Philadelphia have found elevated levels of a biomarker related to blood vessel damage in children with SARS-CoV-2 infection, even if the children had minimal or no symptoms of COVID-19. They also found that a high proportion of children with SARS-CoV-2 infection met clinical and diagnostic criteria for thrombotic microangiopathy." [LINK](#)

Public Health Agency of Canada: [Canada COVID-19 Weekly Epidemiology Report \(6 December to 12 December, 2020\)](#) (December 13, 2020)

- "In Canada, there was an average of 6,569 new daily cases reported during the week of 6 December to 12 December, representing a 4% increase compared to the previous week (week of 29 November to 5 December).
- All provinces and territories reported new cases.
- Manitoba reported the highest age-standardized incidence rate
- Yukon observed the largest increase in age-standardized incidence rate compared to the previous week
- British Columbia observed the largest decrease in age-standardized incidence rate compared to the previous week
- Incidence rates for all age groups combined decreased compared to the previous week." [LINK](#)

Health Canada: [Epidemiological summary of COVID-19 cases in First Nations communities](#) (December 11, 2020)

- "Information on demographics and outcomes is currently available for reported cases in First Nations communities.

- The charts on this page do not include COVID-19 cases in First Nations individuals residing off reserve or in the territories.
- Statistics about First Nations individuals diagnosed with COVID-19 who do not live on a reserve are included in the provincial and territorial case counts, although they are not distinguished as such." [LINK](#)

The New York Times: [‘Natural Immunity’ from COVID Is Not Safer than a Vaccine](#) (December 5, 2020)

This news article discusses some inquiries about immunity and vaccines: "I'm young, healthy and at low risk of COVID. Why not take my chances with that rather than get a rushed vaccine? The experts were unanimous in their answer: COVID-19 is by far the more dangerous option." [LINK](#)

HEALTH SYSTEM ADMINISTRATION

The British Medical Journal Open: [How primary healthcare in Iceland swiftly changed its strategy in response to the COVID-19 pandemic](#) (December 7, 2020)

This observational study describes how primary healthcare in Iceland adapted to the COVID-19 pandemic. "Pragmatic strategies and new tasks were rapidly applied to clinical work to meet the foreseen healthcare needs caused by the pandemic. The number of daytime consultations increased by 35% during the study period. Telephone and web-based consultations increased by 127%. The same tendency was observed in out-of-hours services." [LINK](#)

The British Medical Journal Open: [National primary care responses to COVID-19: a rapid review of the literature](#) (December 8, 2020)

This study evaluates available national primary care guidelines for COVID-19, with 17 documents from 14 countries and explores how these guidelines support primary care facilities in responding to the demands of the COVID-19 pandemic. [LINK](#)

PLOS ONE: [Factors affecting mental health of healthcare workers during coronavirus disease outbreaks \(SARS, MERS & COVID-19\): A rapid systematic review](#) (December 15, 2020)

This systematic review of available evidence identifies the risk and protective factors for mental health outcomes in healthcare workers working in the frontlines during the COVID-19 pandemic. [LINK](#)

International Journal of Environmental Research and Public Health: [Investigating the Psychological Impact of COVID-19 among Healthcare Workers: A Meta-Analysis](#) (December 5, 2020)

This meta-analysis reviews current evidence on the psychological impact of providing care to COVID-19 patients, and highlights the importance of "designing a targeted intervention to improve resilience and foster post-traumatic growth among frontline responders." [LINK](#)

PLOS ONE: [How to better communicate the exponential growth of infectious diseases](#) (December 9, 2020)

This article highlights the various ways that information about the spread of COVID-19 infection could be better communicated to the public to improve understanding of "the magnitude of the benefit of non-pharmaceutical interventions" and to effect necessary behavioral change. [LINK](#)

PLOS ONE: [Comparison of COVID-19 infections among healthcare workers and non-healthcare workers](#) (December 9, 2020)

This study compares the characteristics and outcomes of COVID-19 patients among those patients who are, and those who are not, healthcare workers. [LINK](#)

Journal of Surgical Education: [Optimizing Resident Wellness During a Pandemic: University of British Columbia's General Surgery Program's COVID-19 Experience](#) (July 19, 2020)

"Efficiency in delivering information and patient care minimizes additional stress to residents that is caused by the pandemic. By having a reserve team, prioritizing the safety of residents and taking burnout seriously, the culture of wellness and sense of community in our program are emphasized. All of the residents' personal resilience was further optimized by the regular and mandatory measures put in place by the program." [LINK](#)

INFECTION PREVENTION AND CONTROL

National Collaborating Centre for Environmental Health: [Air cleaning technologies for indoor spaces during the COVID-19 pandemic](#) (December 10, 2020)

"The increased risks of COVID-19 transmission indoors has led to renewed interest in air cleaning devices. This blog provides an overview of the types of air cleaning devices, how they work and the potential risks and considerations for anyone using them." [LINK](#)

MedRxiv: [Predictors of COVID-19 vaccine acceptance across time and countries](#) (December 11, 2020)

This study examines the psychological correlates of willingness to receive a COVID-19 vaccine across 12 different countries. [LINK](#)

COVID-19 Critical Intelligence Unit: [Routine border screening evidence check](#) (December 7, 2020)

This rapid review evaluates current evidence on the effectiveness of routine asymptomatic screening for COVID-19 at border settings. [LINK](#)

The Atlantic: [How to Build Trust in the Vaccines](#) (December 12, 2020)

This article argues that to succeed in vaccinating the population against COVID-19, countries must draw on the "network of trust that connect healthcare professionals with their patients and people with their communities." [LINK](#)

Cambridge University Press: [Public behaviour in response to the COVID-19 pandemic: understanding the role of group processes](#) (December 7, 2020)

This article provides a detailed review of the group processes that shape public behaviour and adherence to required public health behaviours during a pandemic. [LINK](#)

European Centre for Disease Prevention and Control: [Rapid Risk Assessment: Risk of COVID-19 transmission related to the end-of-year festive season](#) (December 4, 2020)

"This document assesses the risk of SARS-CoV-2 transmission to the general population and medically vulnerable individuals in the EU/EEA and the UK, from the perspective of the upcoming end-of-year festive season." [LINK](#)

Centres for Disease Control and Prevention: [Implementing Mitigation Strategies in Early Care and Education Settings for Prevention of SARS-CoV-2 Transmission — Eight States, September–October 2020](#) (December 7, 2020)

"Implementing and monitoring adherence to recommended mitigation strategies can reduce risk for SARS-CoV-2 transmission in child care settings. These approaches could be applied to other early care and education settings that remain open for in-person learning and potentially reduce the spread of coronavirus disease." [LINK](#)

The Asahi Shimbun: [Screens showing CO₂ level set up at venues to lessen virus risk](#) (October 23, 2020)
 "Showing the airborne CO₂ concentration is expected to make clear whether the sites are ventilated properly, helping prevent the "three Cs" of closed, crowded and close-contact settings." [LINK](#)

TREATMENT

Nature: [Oxford COVID-vaccine paper highlights lingering unknowns about results](#) (December 8, 2020)
 "The first formally published results from a large clinical trial of a COVID-19 vaccine — which scientists hope could be among the cheapest and easiest to distribute around the world — suggest that the vaccine is safe and effective. But the data also highlight a number of lingering unknowns, including questions about the most effective dosing regimen and how well it works in older adults." [LINK](#)

MedRxiv: [Association of Mortality and Aspirin Prescription for COVID-19 Patients at the Veterans Health Administration](#) (December 14, 2020)
 "There is growing evidence that thrombotic and inflammatory pathways contribute to the severity of COVID-19. Common medications such as aspirin, that mitigate these pathways, may decrease COVID-19 mortality. This assessment was designed to quantify the correlation between aspirin and mortality for COVID-19 positive patients in our care. Findings demonstrated that pre-diagnosis aspirin prescription was strongly associated with decreased mortality rates for veterans diagnosed with COVID-19." [LINK](#)

Nature: [COVID research updates: A drug duo that helps people with severe COVID](#) (December 14, 2020)
 "A combination of the drugs baricitinib and remdesivir shaved one day off the recovery of people hospitalized with COVID-19. The US National Institutes of Health recommends remdesivir as a treatment for some people with COVID-19. But questions linger about remdesivir's effectiveness, and the World Health Organization cautions against its use." [LINK](#)

Canadian Agency for Drugs and Technologies in Health (CADTH): [Virus-neutralizing monoclonal antibodies against SARS-CoV-2](#) (December 7, 2020)
 "This Horizon Scan report will explore what we know about virus-neutralizing monoclonal antibodies, their mechanism of action and how they are administered, and which virus-neutralizing monoclonal antibodies are in clinical development for SARS-CoV-2 infection." [LINK](#)

SENIORS AND OTHER VULNERABLE GROUPS

Institute for Research on Public Policy: [Disabled Canadians ignored in policies on COVID-19](#) (October 2, 2020)
 "Lack of financial support, poor data and insecure housing mean disabled and autistic Canadians will not get the help they need during the pandemic." [LINK](#)

Rehabilitation Psychology: [The COVID-19 Pandemic, Stress, and Trauma in the Disability Community: A Call to Action](#) (November 4, 2020)
 "This article sheds light on the ways in which people with disabilities in the United States are disproportionately exposed to sources of stress and trauma during the COVID-19 pandemic. The authors call on rehabilitation psychologists and others to recognize and address these disparities in their work through acknowledging and addressing ableism and other forms of oppression." [LINK](#)

Child Abuse and Neglect: [Child Maltreatment during the COVID-19 Pandemic: Consequences of Parental Job Loss on Psychological and Physical Abuse towards Children](#) (September 4, 2020)

“Job loss during the COVID-19 pandemic is a significant risk factor for child maltreatment. Reframing coping may be an important buffer of this association on physical abuse and presents implications for maltreatment prevention.” [LINK](#)

Child Abuse and Neglect: [Telemental health for child trauma treatment during and post-COVID-19: Limitations and considerations](#) (August 19, 2020)

“This article discusses both the benefits and barriers to telemental health in a child maltreatment population and offers considerations for child trauma service provision, program development, and policy during and post the COVID-19 pandemic.” [LINK](#)

Critical Studies: [Unequal Impact of COVID-19: Emergency Neoliberalism and Welfare Policy in Canada](#) (July 31, 2020)

“This paper examines Canada’s liberal welfare state in relation to the COVID-19 pandemic. It argues that contrary to claims that the pandemic is affecting both rich and poor equally, its impact is both gendered, racialized and class-related. COVID-19 thereby exacerbates existing social and health inequalities.” [LINK](#)

Canadian Medical Association Journal (CMAJ): [COVID-19 and people experiencing homelessness: challenges and mitigation strategies](#) (June 29, 2020)

“People experiencing homelessness often find it difficult to adhere to public health directives such as physical distancing, isolation and quarantine because of shelter conditions and other challenges.” [LINK](#)

Cities and Health: [COVID-19 highlights the need to plan for healthy, equitable and resilient food systems](#) (June 26, 2020)

“Rising food insecurity during COVID-19 has revealed deep inequities in food systems. The pandemic has also highlighted the vulnerabilities of global food supply chains and the need for cities to increase the resilience of their food systems. The challenge is to harness the lessons of COVID-19 to promote more resilient urban food systems that are also healthy, equitable and sustainable. Policy solutions should focus on robust social protection mechanisms, strong networks of food system actors that can respond rapidly to shocks, and diverse food supply chains that draw on local as well as global sources of food.” [LINK](#)

MENTAL HEALTH & WELLNESS

Journal of the American Academy of Child & Adolescent Psychiatry: [Impact of COVID on College Student Mental Health and Wellness](#) (October 19, 2020)

“COVID and associated educational/governmental mitigation strategies had a modest but persistent impact on mood and wellness behaviors of first-year university students. Colleges should prepare to address the continued mental health impacts of the pandemic.” [LINK](#)

New England Journal of Medicine (NEJM) Catalyst Innovations in Care Delivery: [Creating Wellness in a Pandemic: A Practical Framework for Health Systems Responding to COVID-19](#) (June 1, 2020)

“The long-term psychological impact of the COVID-19 pandemic on frontline healthcare workers has yet to be fully understood. Attention to staff mental health and well-being is a critical aspect of crisis management. We describe a simple, easy to follow framework... as an interdisciplinary, proactive effort that promotes staff well-being during COVID-19 and with generalizability to other similar healthcare crises.” [LINK](#)

Journal of the American College of Radiology: [Coronavirus Disease 2019 \(COVID-19\) and Beyond: Micropractices for Burnout Prevention and Emotional Wellness](#) (March 23, 2020)

“In our experience, both physicians and managers hunger for skills and strategies to help successfully navigate their increasingly complex worlds. In particular, physicians long to serve their patients and practices with energy and inspiration and have some semblance of balance in their lives. In our experience, physicians especially enjoy highly actionable tools that require minimal time to learn and implement, also known as micropractices.” [LINK](#)

Psychological Medicine: [The mental health impact of COVID-19 and lockdown related stressors among adults in the UK](#) (December 7, 2020)

“Around 29% of adults without [common mental disorder (CMD)] less than a year earlier had a CMD in April 2020. However, by July 2020, monthly incidence of CMD had reduced to 9%. Most employment, financial and psychological “shocks” were at their highest levels in April and reduced steadily in later months. Despite the lifting of some lockdown conditions by July, stressors related to loneliness, unemployment, financial problems and domestic work continued to influence CMD.” [LINK](#)

Psychiatry Research: [Prevalence of symptoms of depression, anxiety, insomnia, posttraumatic stress disorder, and psychological distress among populations affected by the COVID-19 pandemic: A systematic review and meta-analysis](#) (January, 2021)

“Findings suggest that the short-term mental health consequences of COVID-19 are equally high across affected countries, and across gender. However, reports of insomnia are significantly higher among healthcare workers than the general population.” [LINK](#)

Canadian Broadcasting Corporation: [The price of shame: Newfoundland and Labrador’s rotational workers reveal hidden consequences of social media trolling](#) (December 7, 2020)

“Taken together, these remarks [of public shaming] carve out an alienating landscape for families caught between financial ruin and pariahdom, where simply going to work means risking not only their health, but their reputations.” [LINK](#)

Public Health Ontario: [COVID-19 Pandemic School Closure and Reopening Impacts](#) (July 27, 2020)

“This rapid review aims to equip decision-makers with evidence to support decision-making during the pandemic as it relates to a comprehensive perspective on school closures as a public health measure.” [LINK](#)

This **COVID-19 e-bulletin** was prepared by researchers at the Newfoundland & Labrador Centre for Applied Health Research (Kazeem Adefemi, Waseem Abu Ashour, Wendy Lasisi, and Pablo Navarro) to summarize research evidence and grey literature produced by a variety of sources that were accessed online in December of 2020. Given the rapidly changing nature of the coronavirus pandemic, some of the references included in this e-bulletin may quickly become out-of-date.

We further caution readers that researchers at the Newfoundland & Labrador Centre for Applied Health Research are not experts on infectious diseases and are relaying work produced by others.

This report has been produced quickly and it is not exhaustive, nor have the included studies been critically appraised.

QUESTIONS/ SUGGESTIONS? CONTACT:

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