

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

*We hope you will find this information to be helpful. We welcome your [feedback and suggestions](#).*

Please look for NLCAHR e-bulletins and COVID-19 *Quick Response Reports* [online here](#).

## REOPENING AFTER LOCKDOWN

**Journal of the American Medical Association (JAMA): [Reopening Society and the Need for Real-Time Assessment of COVID-19 at the Community Level](#)** (Published May 15, 2020)

This article argues that comprehensive and up-to-date COVID-19 data, including community-level incidence, spectrum of disease, diagnostic test penetration, and proportion of the community with protective immunity, are vital to understanding where communities are on the continuum of COVID-19 infections and how non-pharmaceutical interventions can be best continually measured and adjusted to successfully re-open society and business. [LINK](#)

**Disaster Medicine and Public Health Preparedness: [COVID-19 Community Stabilization and Sustainability Framework: An Integration of the Maslow Hierarchy of Needs and Social Determinants of Health](#)** (Published April 21, 2020)

This study proposes a framework that combines Maslow's hierarchy of needs and the social determinants of health, proposing that decision making be aligned with societal needs to ensure that all segments of society are catered to while managing the crisis while maintaining the public health benefits achieved through lockdown. [LINK](#)

**The Week: [The case for doing everything outside](#)** (Published June 1, 2020)

This opinion piece argues that, given the relatively lower risk of COVID-19 transmission in outdoor settings when people take appropriate precautions, as compared to the risk of transmission indoors, government and public health decision makers must begin to consider the option of moving social activities outdoors as part of re-opening society. [LINK](#)

## TREATING COVID-19

**STAT News:** [Top medical journals raise concerns about data in two studies related to COVID-19](#)

(Published June 2, 2020)

This news article reports on concerns expressed by two of the world's leading medical journals about potential flaws in the data produced by a small company that may result in erroneous conclusions being drawn about certain heart drugs and the malaria drug hydroxychloroquine in treating COVID-19. [LINK](#)

**Canadian Agency for Drugs and Technologies in Health (CADTH):** [What You Should Know About Drug Treatments for COVID-19](#) (Published May 27, 2020)

CADTH created this document to explain to the general public the risks of taking unproven drug treatments for COVID-19. [LINK](#)

**Canadian Agency for Drugs and Technologies in Health (CADTH):** [Convalescent Plasma Therapy for the Treatment of COVID-19: A Review of Clinical Effectiveness](#) (Published June 2, 2020).

Evidence about the effectiveness of Convalescent Plasma therapy for the treatment of COVID-19 is still in its early stages. This report summarizes the current evidence and will be updated monthly as a living review. [LINK](#)

## CLINICAL MANAGEMENT

**Journal of the American Medical Association:** [Magnetic Resonance Imaging \(MRI\) Alteration of the Brain in a Patient with Coronavirus Disease 2019 \(COVID-19\) and Anosmia](#) (Published May 29, 2020)

This report on magnetic resonance imaging (MRI) evidence of in vivo brain alteration (presumably due to SARS-CoV-2) demonstrates that anosmia, the loss of the sense of smell, can represent the predominant symptom in COVID-19-positive patients. [LINK](#)

**MedRxiv:** [Enforced inactivity in the elderly and diabetes risk: initial estimates of the burden of an unintended consequence of COVID-19 lockdown](#) (Published June 8, 2020)

The authors modelled the effects of enforced inactivity on diabetes burden using published data from the Health Survey for England. They estimated the prevalence of pre-diabetes and physical activity in adults aged 70 and older. The number of new diabetes cases directly attributed to lockdown were then calculated using population attributable risk. [LINK](#)

**John Hopkins HUB:** [The Impact of the COVID-19 Pandemic on Adolescents](#) (Published May 11, 2020)

Children and adolescents may appear to be at lower risk for severe COVID-19 symptoms, but the pandemic has significantly disrupted their lives in other ways. Two experts from the John Hopkins Centre for Adolescent Health explain how social distancing and the interruption of typical school routines can be especially challenging for adolescents. [LINK](#)

**The Lancet Psychiatry:** [Psychiatric and neuropsychiatric presentations associated with severe coronavirus infections: a systematic review and meta-analysis with comparison to the COVID-19 pandemic](#) (Published May 18, 2020)

The authors aim to assess various psychiatric and neuropsychiatric presentations associated with SARS, MERS, and COVID-19. [LINK](#)

## INFECTION CONTROL

**Journal of Nanoscience and Nanotechnology (ACS Nano): [Aerosol Filtration Efficiency of Common Fabrics Used in Respiratory Cloth Masks](#)** (Published April 24, 2020)

This article reports the findings of studies that evaluated the filtration efficiencies of the most common fabrics used in home-made face/cloth masks including cotton, silk, chiffon, flannel, various synthetics, and their combinations. The study investigated the efficiency of these cloth masks in preventing aerosol particulate sizes in the 10 nm to 10 µm range which is particularly relevant for respiratory virus transmission. [LINK](#)

**MedRxiv (Preprint): [Human agency and infection rates: implications for social distancing during epidemics](#)** (Published April 21, 2020)

This paper presents a theoretical model on the implications of interaction rates among individuals in workplace and social settings. While the theoretical model is not intended for studying geographic spread, it does indicate that the most efficient methods of epidemic control would be “interaction capping approaches” (i.e., approaches that reduce the interaction levels of the most interactive individuals in any given setting). [LINK](#)

**The LANCET: [Small droplet aerosols in poorly ventilated spaces and SARS-CoV-2 transmission](#)** (Published May 27, 2020)

To better understand the spread of COVID-19 through respiratory droplets and to inform possible preventative measures, this study analyzed droplet production resulting from coughs and speech by measuring the droplet size distribution, travel distance, velocity, and airborne time in relation to the level of air ventilation. [LINK](#)

**The American Civil Liberties Union: [Temperature Screening and Civil Liberties during an Epidemic](#)** (Published May 19, 2020)

This white paper cautions against the widespread use of temperature detection devices noting that high temperature (fever) can be caused a wide range of factors. The authors also outline privacy and civil liberties considerations. [LINK](#)

## COVID-19 & HEALTHCARE WORKERS

**Anesthesiology: [COVID-19 Infection: Implications for Perioperative and Critical Care Physicians](#)** (Published March 18, 2020)

Healthcare providers, and particularly anesthesiologists, are at the frontline of the COVID-19 pandemic and they need to be aware of the best available evidence to guide therapeutic management of patients with COVID-19 and to keep themselves safe while doing so. Here, the authors review COVID-19 pathogenesis, presentation, diagnosis, and potential therapeutics, to provide a comprehensive summary of the evidence currently available to guide management of critically ill patients with COVID-19. [LINK](#)

**European Review for Medical and Pharmacological Sciences: [An update on the status of COVID-19: A comprehensive review](#)** (Published April 21, 2020)

This article provides a comprehensive and up-to-date synthesis of current understanding of epidemiology, pathogenesis, diagnostics and therapeutics of COVID-19 disease. [LINK](#)

**Cochrane Collaboration Special Collections: [Coronavirus \(COVID-19\): regional anaesthesia to reduce drug use in anaesthesia and avoid aerosol generation](#) (Published May 14, 2020)**

This Cochrane Special Collection summarizes safe and evidence-based regional anaesthesia practices to maintain reliable anaesthetic services while reducing the exposure of healthcare workers to COVID-19. Regional anaesthesia is the term given to a variety of techniques where an anaesthetist injects local anaesthetic around peripheral nerves or the spinal cord to create temporary paraneesthesia or paralysis in that part of the body. [LINK](#)

## SENIORS & OTHER VULNERABLE POPULATIONS

**Journal of the American Geriatrics Society: [Characteristics of U.S. Nursing Homes with COVID-19 Cases](#) (Published June 2, 2020)**

This article examines the characteristics of nursing homes with documented COVID-19 cases in 30 states and reports on the individual facilities affected. [LINK](#)

**Infection Control & Hospital Epidemiology: [Unprecedented solutions for extraordinary times: Helping long-term care settings deal with the COVID-19 pandemic](#) (Published March 30, 2020)**

This article discusses the measures that need to be taken by the healthcare system to support efforts within long-term care settings to prioritize the safety of the residents. [LINK](#)

**Journal of Aging & Social Policy: [COVID-19 and Long-Term Care Policy for Older People in Canada](#) (Published May 18, 2020)**

This article discusses the impact of the COVID-19 pandemic on Long-Term Care (LTC) policies in Canada, following from recent developments in Quebec's LTC facilities. [LINK](#)

**St. Michael's Unity Health Toronto: [Guidelines for preventing respiratory illness in older adults aged 60 years and above living in long-term care](#) (Published March 16, 2020)**

This rapid review identifies infection-protecting and infection-control recommendations from published clinical practice guidelines (CPGs) for adults aged 60 years and older in long-term care settings. [LINK](#)

**Epidemiology and Infection: [Association of hypertension with the severity and fatality of SARS-CoV-2 infection: A meta-analysis](#) (Published May 28, 2020)**

This meta-analysis studies the association of hypertension with the severity and fatality of COVID-19 and provides evidence that hypertension can significantly increase the risk of both the severity and fatality of COVID-19 infection. [LINK](#)

## MENTAL HEALTH & WELLNESS

**International Journal of Eating Disorders: [Eating and exercise behaviors in eating disorders and the general population during the COVID-19 pandemic in Australia: Initial results from the COLLATE project](#) (Published June 1, 2020)**

The study identifies changes in eating and exercise behaviors in an Australian sample among individuals with an eating disorder, and the general population, amidst the COVID-19 pandemic outbreak. [LINK](#)

**Brain, Behavior, and Immunity: [COVID-19 pandemic and mental health consequences: systematic review of the current evidence](#)** (Published June 1, 2020)

A systematic review including studies measuring psychiatric symptoms and morbidities associated with COVID-19 among infected patients and non-infected groups (psychiatric patients, health care workers and non-health care workers). [LINK](#)

**The Lancet: [The psychological impact of quarantine and how to reduce it: a rapid review of the evidence](#)** (Published March 14, 2020)

A review of the psychological impact of quarantine looking at negative psychological effects, stressors and long-lasting effects. [LINK](#)

**The Lancet Public Health: [COVID-19: a public health approach to manage domestic violence is needed](#)** (Published May 10, 2020)

This article discusses the problem of domestic violence, its causes, what works and for whom, and how to scale up more effective policies and programs. [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 June, 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?**

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