

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](#).

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

TREATING COVID-19

MedRxiv: [Efficacy and harms of remdesivir for the treatment of COVID-19: a systematic review and meta-analysis](#) (Published May 27, 2020)

A systematic review of randomized controlled trials (RCTs) and observational studies evaluating remdesivir on confirmed COVID-19 –positive adults with pneumonia and/or respiratory insufficiency. [LINK](#)

MedRxiv: [Simeprevir suppresses SARS-CoV-2 replication and synergizes with remdesivir](#) (Published May 26, 2020)

The authors report results on the discovery of FDA-approved drugs that are potentially active against the SARS-CoV-2 virus. [LINK](#)

Clinical Studies at NYU Langone Health: [Emergency Hyperbaric Oxygen for Respiratory Distress or Failure for COVID-19 Patients](#) (Ongoing study, accessed June 1, 2020)

This clinical study investigates hyperbaric oxygen therapy to treat respiratory distress in COVID-19 positive patients who may require mechanical ventilation. [LINK](#)

ClinicalTrials.Gov (USA): [Adaptive COVID-19 Treatment Trial \(ACTT\)](#) (Updated May 7, 2020)

A randomized, controlled clinical trial to evaluate the safety and efficacy of remdesivir in adults hospitalized with COVID-19 with 1,063 participants compares daily treatment of remdesivir delivered intravenously to a placebo control. Initial results from the study show that remdesivir accelerates recovery from COVID-19. [LINK](#)

CLINICAL MANAGEMENT

MedRxiv: [Six Scenarios for non-medical interventions in the SARS-CoV-2 epidemic](#) (Published May 27, 2020)

The authors investigate six scenarios involving non-medical interventions against the CoV-2 epidemic in Germany. [LINK](#)

MedRxiv: [Association of the COVID-19 lockdown with smoking, drinking, and attempts to quit in England: an analysis of 2019-2020 data](#)

(Published May 27, 2020)

An analysis of data that examines changes in smoking, drinking, and quitting/reduction behaviours following the COVID-19 lockdown in England. [LINK](#)

MedRxiv: [The LOW-HARM score for predicting mortality in patients diagnosed with COVID-19: A multicentric validation study](#) (Published May 27, 2020)

The aim of this paper is to assess the sensitivity, specificity, and predictive values of the novel LOW-HARM score (Lymphopenia, Oxygen saturation, White blood cells, Hypertension, Age, Renal injury, and Myocardial injury). [LINK](#)

The Health Foundation (UK): [Understanding excess mortality: What is the fairest way to compare COVID-19 deaths internationally?](#) (Published May 6, 2020)

The authors contend that international comparisons of COVID-19 mortality rates can be misleading because deaths are recorded differently across countries. They assert that calculating excess deaths is a better measure of the pandemic's total mortality. Data collection methods are then compared to help commentators make sense of international data on COVID-19 mortality. [LINK](#)

Social Science Research Network: [Estimating the Severity of COVID-19: Evidence from the Italian Epicenter](#) (Published April 15, 2020)

The authors provide new results on misreported levels of mortality in the Italian region of Lombardy and in the province of Bergamo using official and original data sources. [LINK](#)

Smithsonian Magazine: [Why immunity to the novel coronavirus is so complicated](#) (Published May 14, 2020)

This article explores how certain immune responses may be sufficient to make a person impervious to reinfection, but argue that scientists don't yet know enough about how the human body reacts to the novel coronavirus (COVID-19) [LINK](#)

INFECTION CONTROL

Respiratory Medicine: [A Study on Infectivity of Asymptomatic SARS-CoV-2 Carriers](#) (Published May 13, 2020)

This study reports on asymptomatic patients and presents the clinical characteristics of 455 contact in an aim to understand the infectivity of asymptomatic carriers. [LINK](#)

Science: [Reducing transmission of SARS-CoV-2](#) (Published May 27, 2020)

The authors assert that masks and testing are necessary to combat asymptomatic spread of COVID-19 in aerosols and droplets. [LINK](#)

Centres for Disease Control and Prevention: [Interim Guidelines for COVID-19 Antibody Testing in Clinical and Public Health Settings](#) (Published May 23, 2020)

The CDC notes that serologic assays can play an important role in understanding the virus's epidemiology in the general population and in identifying groups at higher risk for infection. Although serology assays do not typically replace direct detection as the primary tool for diagnosing active infection, they do have several important applications in monitoring and responding to the COVID-19 pandemic. Guidelines will be updated as evidence evolves. [LINK](#)

Cochrane Collaboration: [Recommendations for the re-opening of dental services: a rapid review of international sources](#) (Published May 27, 2020)

This rapid review collates and summarizes recommendations from various sources relevant to the re-opening of dental services including recommendations for: practice preparation, personal protective equipment, managing the clinical area, dental procedures, cleaning, and disinfection. [LINK](#)

Journal of Psychiatric Practice: [The 5% of the population at high risk for severe COVID-19 infection is identifiable and needs to be taken into account when reopening the economy](#) (Published May 19, 2020)

This article argues that the people most vulnerable to COVID-19 infection can be identified, and suggests strategies to protect this population as part of planning towards re-opening social and economic activities. [LINK](#)

Biology (Basel): [De-Escalation by Reversing the Escalation with a Stronger Synergistic Package of Contact Tracing, Quarantine, Isolation, and Personal Protection: Feasibility of Preventing a COVID-19 Rebound in Ontario, Canada, as a Case Study](#) (Published May 16, 2020)

Using available data in Ontario to conduct a case study, this article highlights the various conditions needed to prevent epidemic rebound during de-escalation and re-opening of social and economic activities. [LINK](#)

Harvard University Edmond J. Safra Centre for Ethics: [Outpacing the Virus: Digital Response to Containing the Spread of COVID-19 while Mitigating Privacy Risks](#) (Published April 3, 2020)

This white paper reviews the role and impact of surveillance and contact tracing on the spread of COVID-19 and looks at the trade-offs between privacy, confidentiality and civil liberties in contact tracing methods. [LINK](#)

COVID-19 & HEALTHCARE WORKERS

Journal of the American College of Cardiologists: [Cardiovascular Considerations for Patients, Health Care Workers, and Health Systems during the COVID-19 Pandemic](#) (Published May 20, 2020)

This article provides an extensive review of current evidence concerning cardiovascular considerations for health care workers, patients, and healthcare systems during the pandemic. [LINK](#)

Psychiatric Praxis: [COVID-19 Pandemic: Stress Experience of Healthcare Workers - A Short Current Review](#) (Published May 4, 2020)

A short review of evidence on psychological stress experienced by frontline healthcare workers dealing with the COVID-19 pandemic and discusses potential interventions. [LINK](#)

Brain, Behaviour and Immunity: [Prevalence of Depression, Anxiety, and Insomnia Among Healthcare Workers During the COVID-19 Pandemic: A Systematic Review and Meta-Analysis](#) (Published May 8, 2020)

The authors outline existing evidence on the prevalence of depression, anxiety, and insomnia among healthcare workers during the COVID-19 outbreak and argue that health systems prioritize monitoring healthcare workers' mood, sleep and other mental health issues to help inform targeted interventions. [LINK](#)

SENIORS & OTHER VULNERABLE POPULATIONS

Joanna Briggs Institute Rapid Review Summary: [Commentary on Older Adults in Long-term Care: Systematic reviews on prevention of respiratory illness](#) (Published March 16, 2020)

A rapid review of the best available evidence regarding infection prevention and control for adults aged 60 years and older in long-term care, particularly in terms of respiratory viruses (including coronavirus and influenza). [LINK](#)

Cochrane Library: [Video calls for reducing social isolation and loneliness in older people](#) (Published May 21, 2020)

This rapid evidence review assesses the effectiveness of video calls for reducing social isolation, loneliness and depression while improving quality of life in older adults. [LINK](#)

Oxford Academic: [Age and Ageing: COVID-19 in older people](#) (Published May 6, 2020)

This rapid overview was undertaken to address the established association between increasing age and poor prognosis in COVID-19 with a view to forming a basis upon which future work can be established to counter the exclusion of older people, particularly those with comorbidities, from clinical trials, a factor potentially being perpetuated in current COVID-19 research. [LINK](#)

Molecular Medicine Reports: [Obesity – a risk factor for increased COVID-19 prevalence, severity and lethality - a review](#) (Published May 5, 2020)

This study looks at novel data reporting more severe symptoms and even a negative prognosis for obese patients with COVID-19 including examining factors such as immune system activity and chronic inflammation. [LINK](#)

Diabetes & Metabolic Syndrome: Clinical Research & Reviews: [Diabetes mellitus is associated with increased mortality and severity of disease in COVID-19 pneumonia – a systematic review, meta-analysis and meta-regression](#) (Published April 17, 2020)

This review assesses Diabetes Mellitus and health outcomes for patients with COVID-19, including an examination of other risk factors such as age, gender, hypertension, cardiovascular disease, and pulmonary disease in assessing the association between Diabetes Mellitus and poorer COVID-19 health outcomes. [LINK](#)

MENTAL HEALTH & WELLNESS

Taylor Francis Online | Medical Teacher: [Optimizing resilience and wellbeing for healthcare professions trainees and healthcare professionals during public health crises – practical tips for an ‘integrative resilience’ approach](#) (Published May 25, 2020)

This article provides advice for optimizing resilience and wellbeing with an integrative resilience approach and includes individual, learning environment, and organization/systems factors. [LINK](#)

International Journal of Social Psychiatry: [Psychological health during the coronavirus disease 2019 pandemic outbreak](#) (Published May 21, 2020)

This review evaluates past outbreaks to understand the extent of adverse effects of psychological health and to discuss psychological crisis intervention and mental health management plans. [LINK](#)

Psychiatry Research: [Psychological effects of the COVID-19 outbreak and lockdown among students and workers of a Spanish university](#) (Published May 19, 2020)

This article examines the psychological impact of the COVID-19 pandemic on a Spanish university community during the first weeks of confinement. [LINK](#)

Psychiatry Research: [Danger in danger: interpersonal violence during COVID-19 quarantine](#) (Published April 30, 2020)

A review of recent studies focusing on abusive situations, including intimate partner violence and other forms of interpersonal and domestic violence during the pandemic emergency. [LINK](#)

Scielo Public Health Notebooks: [Violence against women, children, and adolescents during COVID-19 pandemic: overview, contributing factors, and mitigating measures](#) (Published April 30, 2020)

This article looks at the repercussions of lockdown on interpersonal relationships, especially between intimate partners and between parents and children. [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 May and 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?

CONTACT

**The Newfoundland & Labrador Centre for Applied Health
Research**

Newfoundland & Labrador Centre for

**APPLIED
HEALTH
RESEARCH**

www.nlcahr.mun.ca

95 Bonaventure Avenue, Suite 300

St. John's, NL A1B 2X5

nlcahr@mun.ca

www.nlcahr.mun.ca