

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 hope you will find this information to be helpful.

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

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

REOPENING AFTER LOCKDOWN

BioScience: [Diverse Computer Simulation Models Provide Unified Lessons on University Operation during a Pandemic](#) (October 15, 2020)

This study reports common findings from various simulation modeling techniques to investigate the safety of universities reopening during the pandemic. The authors conclude that COVID-19 infection "invariably spreads very fast" and that "effective mitigation appears quite difficult" in the university context. [LINK](#)

Axios: [Schools haven't become COVID hotspots](#) (October 20, 2020)

The author of this commentary piece argues that drawing from available COVID-19 data and statistics, re-opened "schools generally have not experienced large coronavirus outbreaks, an early sign that they may not be the super-spreaders some experts had feared." [LINK](#)

Toxicology and Industrial Health Journal: [Return to normal operations: COVID-19 mitigation strategies for workplaces](#) (October 16, 2020).

This paper describes reopening frameworks, considerations, and strategies that can be used as a starting point for businesses to optimize and tailor their unique operations to the realities of the COVID-19 pandemic. [LINK](#)

TREATMENT

MedRxiv: [Real-world effectiveness of hydroxychloroquine, azithromycin, and ivermectin among hospitalized COVID-19 patients: results of a target trial emulation using observational data from a nationwide healthcare system in Peru](#) (October 14, 2020)

“This study aimed to evaluate the effectiveness [of hydroxychloroquine, azithromycin, and ivermectin] alone or combined, to reduce mortality among COVID-19 hospitalized patients without life-threatening illness. This study reported no beneficial effects of hydroxychloroquine, ivermectin, or azithromycin. The HCQ+AZIT treatment seems to increase risk for all-cause death.” [LINK](#)

Sage Journals: [Efficacy of Povidone-Iodine Nasal and Oral Antiseptic Preparations against Severe Acute Respiratory Syndrome-Coronavirus 2 \(SARS-CoV-2\)](#) (September 21, 2020)

“This study evaluated nasal and oral antiseptic formulations of PVP-I for virucidal activity against SARS-CoV-2. This is the first report on the efficacy of PVP-I against the virus that causes COVID-19. Nasal and oral PVP-I antiseptic solutions are effective at inactivating the SARS-CoV-2 at a variety of concentrations after 60-second exposure times. The formulations tested may help to reduce the transmission of SARS-CoV-2 if used for nasal decontamination, oral decontamination, or surface decontamination in known or suspected cases of COVID-19.” [LINK](#)

Cochrane: [Is plasma from people who have recovered from COVID-19 an effective treatment for people with COVID-19?](#) (October 12, 2020)

“The authors were uncertain whether plasma from people who have recovered from COVID-19 is an effective treatment for people hospitalized with COVID-19 and whether convalescent plasma affects the number of serious unwanted effects. These findings could be related to the natural progression of disease, to other treatments, or to convalescent plasma.” [LINK](#)

Canadian Agency for Drugs and Technologies in Health (CADTH): [Convalescent Plasma Therapy for the Treatment of COVID-19: A Review of Clinical Effectiveness](#) (October 01, 2020)

“Convalescent plasma (CP) therapy is an intervention where plasma is collected from recovered COVID-19 patients in the hope that the disease-specific antibodies could help the recipient recover from COVID-19. Evidence on the effectiveness of CP therapy for the treatment of COVID-19 is still in the early stages. This report summarizes the current evidence and it will be updated monthly as a living review.” [LINK](#)

Royal Society DELVE Initiative: [SARS-CoV-2 Vaccine Development & Implementation; Scenarios, Options, Key Decisions](#) (October 01, 2020)

“There are currently over 200 vaccine candidates in development and the results of initial large-scale trials are expected soon; however, to deliver a successful vaccination programme, many challenges remain. This report discusses the key issues involved in developing, evaluating, manufacturing and distributing a vaccine for COVID-19, the impact of those challenges and future strategies to mitigate their effects.” [LINK](#)

CLINICAL MANAGEMENT

The Nuance: [The Truth about Blood Types and the Coronavirus](#) (July 2, 2020)

“The New England Journal of Medicine published a study that found links between COVID-19 and certain genetic and blood-type variables. The study reported that infection appeared to be less common among people with blood type O and more common among people with blood type A.” [LINK](#)

Scientific American: [Debunking the False Claim that COVID Death Counts are Inflated](#) (October 20, 2020)

“Researchers know beyond a doubt that the number of COVID-19 deaths in the U.S. have surpassed 200,000. These numbers are supported by three lines of evidence, including death certificates. The inaccurate idea that only

6 percent of the deaths were really caused by the coronavirus is “a gross misinterpretation” of how death certificates work, says Robert Anderson, lead mortality statistician at the CDC’s National Center for Health Statistics.” [LINK](#)

MedRxiv: [Multi-organ impairment in low-risk individuals with long COVID](#) (October 16, 2020)

“An ongoing prospective, longitudinal, two-centre, observational study was performed in individuals symptomatic after recovery from acute SARS-CoV-2 infection. It was found that in a young, low-risk population with ongoing symptoms, almost 70% of individuals have impairment in one or more organs four months after initial symptoms of SARS-CoV-2 infection. There are implications not only for burden of long COVID but also public health approaches which have assumed low risk in young people with no comorbidities.” [LINK](#)

Health Information and Quality Authority (Ireland): [Database of public health guidance on COVID-19](#) (October 14, 2020)

“To inform the ongoing response to the COVID-19 pandemic, specifically, to inform the development of public health guidance to prevent the spread of COVID-19, we have created a database of COVID-19 public health guidance produced by international organisations.” [LINK](#)

Centre for Evidence-Based Medicine (CEBM): [Global Covid-19 Case Fatality Rates](#) (October 07, 2020)

“The proportion of deaths to the total numbers of cases was meta-analysed. CEBM presents country-level case fatality as a percentage along with 95% confidence intervals in a forest plot.” [LINK](#)

INFECTION CONTROL

Scientific American: [Eight Persistent COVID-19 Myths and Why People Believe Them](#) (October 12, 2020)

This commentary piece from Scientific American both describes and debunks common myths about COVID-19 infection. [LINK](#)

MedRxiv: [What predicts adherence to COVID-19 government guidelines? Longitudinal analyses of 51,000 UK adults](#) (October 21, 2020).

Using data from 51,000 adults across the first three months of lockdown in the UK, this study examines and reports on factors that will predict public compliance with COVID-19 guidelines. [LINK](#)

MedRxiv: [Efficacy of face masks, neck gaiters, and face shields for reducing the expulsion of simulated cough-generated aerosols](#) (October 07, 2020)

This study used a cough aerosol simulator to test the efficacy of face masks, neck gaiters, and face shields as source control devices to reduce the expulsion of respiratory aerosols during coughing, breathing, and speaking. [LINK](#)

The Conversation: [WHO is right: lockdowns should be short and sharp. Here are 4 other essential COVID-19 strategies](#) (October 16, 2020)

This piece argues that lockdowns should be deployed as stop-gap measures, and highlights other 'essential' infection control strategies for consideration by policy makers. [LINK](#)

The Atlantic: [We Need to Talk About Ventilation](#) (July 30, 2020)

This article draws attention to the importance of 'good' ventilation in mitigating any respiratory or airborne disease, and wonders why, months into the pandemic, little has been said or done about this important variable. [LINK](#)

The Lancet: [Physical distancing, face masks, and eye protection to prevent person-to-person transmission of SARS-CoV-2 and COVID-19: a systematic review and meta-analysis](#) (June 01, 2020)

This systematic review evaluates available evidence on the effects of physical distance, face masks, and eye protection on virus transmission in healthcare and non-healthcare (e.g., community) settings. [LINK](#)

Los Angeles Times: [Largest study of COVID-19 transmission highlights essential role of super-spreaders](#) (September 30, 2020)

This news article reports the findings of a large epidemiological study in India that highlights the role and impact of super spreaders on COVID-19 infection rates. [LINK](#)

COVID-19 & HEALTHCARE WORKERS

Disaster Medicine and Public Health Preparedness: [Identifying and implementing strategies to reduce the risk of self-contamination of healthcare workers caused by doffing of PPE during COVID-19 pandemic](#) (October 22, 2020)

This article describes 'recent information and advancements' in the structure and process of doffing of PPE to reduce self-contamination and COVID-19 infection among healthcare workers. [LINK](#)

British Medical Journal (BMJ) Open: [Protecting the front line: a cross-sectional survey analysis of the occupational factors contributing to healthcare workers' infection and psychological distress during the COVID-19 pandemic in the USA](#) (October 21, 2020)

This study investigates factors associated with healthcare worker infection and psychological distress during the COVID-19 pandemic in the USA. [LINK](#)

Journal of Infection and Public Health: [An alternative approach for the decontamination of hospital settings](#) (October 21, 2020)

This paper discusses alternative technologies and strategies that can be employed to supplement traditional methods to achieve necessary surface disinfection in hospital settings. [LINK](#)

Journal of Safety and Health at Work: [COVID-19 Risk Factors Among Health Workers: A Rapid Review](#) (September 2020)

This rapid review highlights the various risk factors for COVID-19 infection among healthcare workers and outlines measures that might improve the safety of this vulnerable population. [LINK](#)

SENIORS AND OTHER VULNERABLE GROUPS

Canadian Medical Association Journal: [COVID-19 in long-term care homes in Ontario and British Columbia](#) (September 30, 2020)

This comparative case study examined pandemic preparedness in long-term care and subsequent first-wave pandemic responses in Ontario and British Columbia. [LINK](#)

Clinical & Transitional Endocrinology: [How important is obesity as a risk factor for respiratory failure, intensive care admission and death in hospitalised COVID-19 patients? Results from a single Italian centre](#) (October 2020)

This study analyzed whether Body Mass Index (BMI) represented a risk factor for respiratory failure, admission to the intensive care unit (ICU) and death. [LINK](#)

Acta Diabetologica: [Lessons learned from the continuous glucose monitoring metrics in pediatric patients with type 1 diabetes under COVID-19 lockdown](#) (October 7, 2020)

This study assessed the impact of COVID-19 lockdown on the glycemic control of pediatric patients with Type 1 diabetes. [LINK](#)

Medicine: [Diabetes mellitus increases the risk of hospital mortality in patients with COVID-19](#) (October 2, 2020)

This systematic review with meta-analysis determined the mortality rate of hospitalized patients with Covid-19 in China and identified factors that may potentially influence this rate. [LINK](#)

MENTAL HEALTH & WELLNESS

Globalization and Health: [Factors associated with psychological distress, fear, and coping strategies during the COVID-19 pandemic in Australia](#) (October 8, 2020)

This study identified factors associated with psychological distress, fear, and coping strategies during the COVID-19 pandemic in Australia. [LINK](#)

Journal of Medical Internet Research: [Integration of Online Treatment Into the “New Normal” in Mental Health Care in Post–COVID-19 Times: Exploratory Qualitative Study](#) (October 8, 2020)

This paper formulates expectations with regard to the sustainability of online mental health care after COVID-19. [LINK](#)

Current Psychology: [The psychological impact of COVID-19 outbreak on medical staff and the general public](#) (October 7, 2020)

The authors of this study administered questionnaires and surveys to medical staff and members of the general population in order to explore the effects of COVID-19 on their mental health. [LINK](#)

European Archives of Psychiatry and Clinical Neuroscience: [Mental health effects of infection containment strategies: quarantine and isolation—a systematic review and meta-analysis](#) (October 6, 2020)

This systematic literature review and meta-analysis of the mental health effects of quarantine and isolation is based on controlled primary study data. [LINK](#)

Biomed Central Psychiatry: [Exploring nurses’ experiences of psychological distress during care of patients with COVID-19: a qualitative study](#) (October 6, 2020)

This study explored nurses’ experiences of psychological distress during care of patients with COVID-19. [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 September and October 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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