

*The Newfoundland & Labrador Centre for Applied Health Research (NLCAHR) will send 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

**Health Economics, Policy and Law:** [Health economics and emergence from lockdown: the great big marginal analysis](#) (Published August 1, 2020)

This article examines the social and economic consequences of trade-offs in policy decisions addressing the COVID-19 pandemic, and why from a wellbeing perspective, it is important to recognize such trade-offs, and provide a framework for doing so. [LINK](#)

**Nature Public Health Emergency Collection:** [The First Modified Delphi Consensus Statement for Resuming Bariatric and Metabolic Surgery in the COVID-19 Times](#) (Published August 1, 2020)

This first global consensus statement on the resumption of BMS aims to provide a framework for multidisciplinary BMS teams planning to resume local services as well as guide future research in this area. [LINK](#)

**Wolters Kluwer:** [Back to work: Are workplace temperature checks enough?](#) (Published July 24, 2020)

This piece aims to answer the question: are temperature checks an effective measure to ensure workplace health and reduce risks of contagion? The article identifies some of the shortcomings of temperature checks as an infection control strategy. [LINK](#)

**The Lancet Child & Adolescent Health:** [Transmission of SARS-CoV-2 in Australian educational settings: a prospective cohort study](#) (Published August 3, 2020)

This study examines CoV-19 transmission among children and staff in schools and early childhood education and care settings in the Australian state of New South Wales (NSW). [LINK](#)

**The Lancet Child & Adolescent Health:** [Determining the optimal strategy for reopening schools, the impact of test and trace interventions, and the risk of occurrence of a second COVID-19 epidemic wave in the UK: a modelling study](#) (Published August 3, 2020)

This study uses individual-based model to predict the impact of two possible strategies for reopening schools to all students in the UK from September, 2020, in combination with different assumptions about relaxation of physical distancing measures and the scale-up of testing. [LINK](#)

## ANTICIPATING A “SECOND WAVE”

**British Medical Journal:** [Resurgence of COVID-19 in Japan](#) (Published August 18, 2020)

Editorial discussing what went wrong as the government repeats its mistakes. [LINK](#)

**Mathematical Biosciences:** [Hyperlinked article name](#) (Published August 18, 2020)

“We designed a mathematical model for addressing the key question of whether or not the universal use of face masks can halt such resurgence (and possibly avert a second wave, without having to undergo another cycle of major community lockdown)... Model calibration, using cumulative mortality data for the four jurisdictions during their respective pre-lockdown and lockdown periods, show that pre-symptomatic and asymptotically-infectious individuals are, by far, the main drivers of the COVID-19 pandemic in each of the jurisdictions.” [LINK](#)

**Cell:** [Robust T cell immunity in convalescent individuals with asymptomatic or mild COVID-19](#)

(Published August 14, 2020)

“The authors systematically mapped the functional and phenotypic landscape of SARS-CoV-2-specific T cell responses in unexposed individuals, exposed family members, and individuals with acute or convalescent COVID-19.” [LINK](#)

**MedRxiv:** [Functional SARS-CoV-2-specific immune memory persists after mild COVID-19](#) (Published August 15, 2020)

“A longitudinal assessment of individuals recovered from mildly symptomatic COVID-19 to determine if they develop and sustain immunological memory against the virus.” [LINK](#)

## TREATMENT

**CADTH:** [Ongoing Trials for Novel Vaccines in the Prevention of COVID-19.](#) (Published August 10, 2020)

“This report provides information on ongoing clinical trials of novel vaccines being investigated for the prevention of COVID-19.” [LINK](#)

**CADTH:** [Chloroquine or Hydroxychloroquine to Prevent or Treat COVID-19](#) (Published August 17, 2020)

“This report reviews the current scientific evidence on the potential benefits and harms of chloroquine and hydroxychloroquine for the prevention or treatment of COVID-19.” [LINK](#)

**Nature:** [Compassionate use of JAK1/2 inhibitor ruxolitinib for severe COVID-19: a prospective observational study](#) (Published August 19, 2020)

“Ruxolitinib is a JAK1/JAK2 inhibitor with potent anti-inflammatory properties. This is a prospective, observational study in 34 patients with COVID-19 who received ruxolitinib on a compassionate-use protocol.” [LINK](#)

**JAMA Network:** [Flu Vaccination Urged During COVID-19 Pandemic](#) (Published August 20, 2020)

“Although influenza’s disease burden varies from year to year, evidence clearly shows that vaccination can reduce flu severity and prevent hospitalizations—critical considerations at a time when the health care system is burdened by coronavirus disease 2019 (COVID-19).” [LINK](#)

**New York Times:** [The Coronavirus Could Dodge Some Treatments, Study Suggests](#) (Published August 19, 2020)

“A laboratory experiment hints at some of the ways the virus might elude antibody treatments. Combining therapies could help, experts said.” [LINK](#)

## CLINICAL MANAGEMENT

**Palliative Medicine:** [The role and response of primary healthcare services in the delivery of palliative care in epidemics and pandemics: A rapid review to inform practice and service delivery during the COVID-19 pandemic.](#) (Published July 31, 2020)

This rapid review summarizes and synthesizes current evidence related to the delivery of palliative and end-of-life care by primary healthcare professionals during the Covid-19 pandemic. [LINK](#)

**JAMA Network:** [What Happens When COVID-19 Collides With Flu Season?](#) (Published August 20, 2020)

“At least 2 things are clear: Quicker and more widely available testing is needed to distinguish between COVID-19 and influenza, which have similar symptoms, at least at first, but require different treatments. On top of that, a severe influenza season—the result of more virulent strains, inadequate vaccination rates, or a combination of both—coupled with a COVID-19 pandemic that shows no signs of abating, could overwhelm already taxed emergency departments and intensive care units.” [LINK](#)

**STAT:** [Long after the fire of a Covid-19 infection, mental and neurological effects can still smolder](#) (Published August 13, 2020)

“Early on, patients with both mild and severe Covid-19 say they can’t breathe. Now, after recovering from the infection, some of them say they can’t think.” [LINK](#)

## INFECTION CONTROL

**New York Times:** [A Smoking Gun’: Infectious Coronavirus Retrieved From Hospital Air](#) (Published August 11, 2020)

“Airborne virus plays a significant role in community transmission, many experts believe. A new study fills in the missing piece: Floating virus can infect cells.” [LINK](#). Also see original research article: MedRxiv: [Viable SARS-CoV-2 in the air of a hospital room with COVID-19 patients](#) (August 04, 2020)

**Aerosol and Air Quality Research: [An Overview on the Role of Relative Humidity in Airborne Transmission of SARS-CoV-2 in Indoor Environments.](#)** (Published July 28, 2020)

“RH is a factor responsible for airborne transmission of SARS-CoV-2 virus. In dry indoor areas, chances of airborne transmission are higher than humid areas. Indoor air at 40 to 60 percent RH is the optimum level for human health. Important to set minimum RH standard for indoor environments.” [LINK](#)

**MedRxiv: [COVID-19: Effectiveness of Non-Pharmaceutical Interventions in the United States before Phased Removal of Social Distancing Protections Varies by Region](#)** (Published August 20, 2020)

This observational study aimed to quantify national and sub-national effect sizes of non-pharmaceutical interventions in the US. [LINK](#)

**MedRxiv: [Comparing the impact on COVID-19 mortality of self-imposed behavior change and of government regulations across 13 countries](#)** (Published August 4, 2020)

This study presents a 13-country comparison on the impact of self-imposed behaviour change and government regulations on COVID-19 transmission and mortality. [LINK](#)

**National Collaborating Centre for Methods and Tools: [What is known about using wastewater surveillance to monitor the COVID-19 pandemic in the community?](#)** (Published July 29, 2020)

This rapid review appraise and summarizes most recent research evidence on using wastewater surveillance to monitor the COVID-19 pandemic in the community. [LINK](#)

**Journal of the Pediatric Infectious Diseases Society: [Burden of illness in households with SARS-CoV-2 infected children](#)** (Published August 11, 2020)

This study investigated the burden of diseases among household members and reported on the likelihood of child-to-adult transmission of Covid-19. [LINK](#)

## COVID-19 & HEALTHCARE WORKERS

**Journal of Medical Internet Research: [Work-related and Personal Factors Associated with Mental Well-being during COVID-19 Response: A Survey of Health Care and Other Workers](#)** (Published June 12, 2020)

This study describes the various factors associated with mental health and well-being among HCWs both with and without clinical exposure to COVID-19 patients. [LINK](#)

**Cochrane Special Collections: [Coronavirus \(COVID-19\): support for wellbeing in the healthcare workforce](#)** (Published August 10, 2020)

This Special Collection brings together Cochrane evidence on interventions that may help support the wellbeing of the healthcare workforce and reducing occupational stress. [LINK](#)

**CDC: [Interim Infection Prevention and Control Guidance for Veterinary Clinics Treating Companion Animals During the COVID-19 Response](#)** (Published August 12, 2020)

This updated guidance from the CDC provides infection control recommendations to veterinarians and their staff who may be treating or advising on companion animal medical care during the COVID-19 pandemic. [LINK](#)

## SENIORS AND OTHER VULNERABLE GROUPS

**Journal of Medical Virology:** [Epidemiology of COVID-19: A systematic review and meta-analysis of clinical characteristics, risk factors and outcomes](#) (Published August 13, 2020)

They determined pooled estimates for clinical characteristics and outcomes in COVID-19 patients including subgroups by disease severity (based on WHO Interim Guidance Report or IDSA/ATS criteria) and by country/region. [LINK](#)

**PLoS 1:** [Impact of cardiovascular risk profile on COVID-19 outcome. A meta-analysis](#) (Published August 14, 2020)

This is a meta-analysis of observational studies evaluating cardiovascular (CV) complications in hospitalized COVID-19 patients and the impact of cardiovascular risk factors (RF) or comorbidities on mortality. [LINK](#)

**Journal of Maternal-Fetal & Neonatal Medicine:** [COVID-19 and maternal, fetal and neonatal mortality: a systematic review](#) (Published August 16, 2020)

This is the first comprehensive review to focus on currently available evidence regarding maternal, fetal and neonatal mortality cases associated with Coronavirus Disease 2019 (COVID-19) infection, up to July 2020. [LINK](#)

**BMJ Archives of Disease in Childhood:** [COVID-19 in children: analysis of the first pandemic peak in England](#) (Published August 12, 2020)

Assessed disease trends, testing practices, community surveillance, case-fatality and excess deaths in children as compared with adults during the first pandemic peak in England. [LINK](#)

**Ageing Research Reviews:** [COVID-19: risk accumulation among biologically and socially vulnerable older populations](#) (Published August 17, 2020)

Based on preliminary data from Sweden and other reports, in this paper we propose a conceptual framework whereby different factors related to biological and social vulnerability may explain the specific COVID-19 burden among older people. [LINK](#)

**Annals of Physical and Rehabilitation Medicine:** [Emerging health challenges for children with physical disabilities and their parents during the COVID-19 pandemic: the ECHO French survey](#) (Published August 18, 2020)

This study aimed to identify potential healthcare issues relating to the wellbeing of disabled children, continuity of rehabilitation and medical care, and parental concerns during the COVID-19 lockdown. [LINK](#)

## MENTAL HEALTH & WELLNESS

**Progress in Neuro-Psychopharmacology and Biological Psychiatry:** [Psychiatric symptomatology associated with depression, anxiety, distress, and insomnia in health professionals working in patients affected by COVID-19: a systematic review with meta-analysis](#) (Published August 7, 2020)

The authors carried out an updated meta-analysis to investigate the psychiatric impacts on health professionals in the face of the physical and psychological conditions to which they are subjected due to the high demands of the COVID-19 pandemic. Papers were researched in four databases from December 2019 to April 2020. In total, eight papers were included in the study. [LINK](#)

**Journal of Affective Disorders: [Impact of COVID-19 pandemic on mental health in the general population: A systematic review](#)** (Published August 8, 2020)

This systematic review aims to synthesize extant literature that reports on the effects of COVID-19 on psychological outcomes of the general population and its associated risk factors. [LINK](#)

**The Journals of Gerontology: [The Impact of Sheltering in Place During the COVID-19 Pandemic on Older Adults' Social and Mental Well-Being](#)** (Published August 11, 2020)

"We examined whether social isolation due to the COVID-19 shelter-in-place orders was associated with greater loneliness and depression for older adults, and, if so, whether declines in social engagement or relationship strength moderated that relationship." [LINK](#)

**Psychiatry: [Resilience, COVID-19-related stress, anxiety and depression during the pandemic in a large population enriched for healthcare providers](#)** (Published August 20, 2020)

"We developed a brief resilience survey probing self-reliance, emotion-regulation, interpersonal-relationship patterns and neighborhood-environment, and applied it online during the acute COVID-19." [LINK](#)

**Brink News: [Even a Few Hours of Paid Work a Week Can Greatly Improve Mental Health](#)** (Published August 19, 2020)

Discusses how eight hours of paid work a week is enough to boost mental health. [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 July and August 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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