

COVID-19 e-bulletin

June 30, 2020

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.

REOPENING AFTER LOCKDOWN

New England Journal of Medicine: <u>Challenges of "Return to Work" in an Ongoing Pandemic</u> (Published June 18, 2020)

"The Massachusetts High Technology Council...assembled a group of medical, business, and legal experts to address return to work issues and to assist state government in determining reopening standards. In this article, building on the work of that expert panel, the authors seek to identify the major public health challenges faced by private entities in resuming on-site operations and explore ways in which this might be done most effectively, consistent with applicable regulations." LINK

Edmond J. Safra Center for Ethics (Harvard University): <u>Pandemic Resilience on Campus</u> (Published June 22, 2020)

This article reviews and provides recommendations on the different issues and criteria that must be considered before university campuses are able to safely re-open. <u>LINK</u>

Public Health Ontario: Negative Impacts of Community-Based Public Health Measures during a Pandemic on Children and Families (Published June 16, 2020)

This rapid review summarizes currently available evidence on the potential effects of public health measures on the health, wellbeing and development of children and families. <u>LINK</u>

Bloomberg: We Will Be Living With the Coronavirus Pandemic Well Into 2021

(Published June 18, 2020)

"Most experts believe a vaccine won't be ready until next year. It's time to reset our expectations and to change our behavior." <u>LINK</u>

ANTICIPATING A "SECOND WAVE"

Disaster Medicine and Public Health Preparedness: <u>A proposed COVID-19 testing algorithm</u> (Published June 24, 2020)

To prevent a massive second wave of infections, the authors propose a data-driven methodology for testing. LINK

Nature- Human Behaviour: <u>The end of social confinement and COVID-19 re-emergence risk</u> (Published June 22, 2020)

The authors explore different post-confinement scenarios by using a model that accounts for: the spread of infection during COVID-19 latent periods; time-decaying effects due to potential loss of acquired immunity; increasing public awareness about social distancing; and the use of non-pharmaceutical interventions. LINK

Bloomberg: Why Acting Fast Is the Key to Beating a Second Wave of COVID-19 (Published June 16)

The authors make the case for quick action in managing a second wave: "Fast responses were those where the full suite of containment measures went into effect within 35 days of reporting a first case—the average length of time for all countries analyzed." <u>LINK</u>

TREATMENT

MedRxiv: Effect of Dexamethasone in Hospitalized Patients with COVID-19 – Preliminary Report (Published June 12, 2020).

In this randomized trial, the authors report preliminary results from a comparison of dexamethasone 6 mg given once daily for up to ten days vs. usual care alone. <u>LINK</u>

CLINICAL MANAGEMENT

The Hill: The unintended impact of COVID-19 on cancer (Published June 18, 2020)

The authors assert that "while we may have successfully flattened the proverbial curve, we have created a potentially larger, more dangerous shadow curve in the world of cancer." <u>LINK</u>

MedRxiv: The remaining unknowns: A determination of the current research priorities for COVID-19 by the global health research community (Published June 24, 2020)

The authors sought to build on the work of the World Health Organization to gain a more current and global perspective on initial research priorities through a mixed methods study. <u>LINK</u>

MedRxiv: Using Machine Learning of Clinical Data to Diagnose COVID-19 (Published June 24, 2020)

The authors aimed to investigate correlations between clinical variables, cluster COVID-19 patients into subtypes, and generate a computational classification model for discriminating between COVID -19 patients and influenza patients based on clinical variables alone. <u>LINK</u>

INFECTION CONTROL

National Collaborating Centre for Environmental Health: <u>COVID-19 and outdoor safety: Considerations</u> <u>for use of outdoor recreational spaces</u> (Published April 17, 2020)

This guidance document reviews potential issues related to the safe use of public spaces during easing of COVID-19 lockdown. It synthesizes available evidence on available community-based precautions and the options for implementing them. LINK

Institute of Labor Economics (Germany): <u>Face Masks Considerably Reduce COVID-19 Cases in</u>
<u>Germany: A Synthetic Control Method Approach</u> (Published June, 2020)

The authors make the case for compulsory face masks: "Our identification approach exploits regional variation in the point in time when face masks became compulsory. Depending on the region we analyze, we find that face masks reduced the cumulative number of registered COVID-19 cases between 2.3% and 13% over a period of 10 days after they became compulsory. Assessing the credibility of the various estimates, we conclude that face masks reduce the daily growth rate of reported infections by around 40%." LINK

Health Affairs: <u>The Double Pandemic Of Social Isolation and COVID-19: Cross-Sector Policy Must Address Both</u> (Published June 22, 2020)

This article addresses the social, emotional and health consequences of isolation, and how the COVID-19 imposed 'isolation' may lead to long-term, detrimental effects on the health and wellbeing of vulnerable populations. The author proposes a "social in all policy" framework to address the dual challenges of COVID-19 and social isolation. LINK

The Lancet: Effectiveness of isolation, testing, contact tracing, and physical distancing on reducing transmission of SARS-CoV-2 in different settings: a mathematical modelling study (Published June 16, 2020)

This modelling study estimated the reduction of Coronavirus Disease 2019 (COVID-19) transmission under different public health strategies and settings, and estimated the number of contacts that would need to be quarantined under different strategies. LINK

Nature: <u>Social network-based distancing strategies to flatten the COVID-19 curve in a post-lockdown</u> world (Published June 4, 2020)

This study adopts a social network approach to evaluate the effectiveness of three distancing strategies designed to keep the curve flat and aid compliance in a post-lockdown world: limiting interaction to a few repeated contacts; seeking similarity across contacts; and strengthening communities via triadic strategies. LINK

Nature: The end of social confinement and COVID-19 re-emergence risk (Published June 22, 2020) Arguing that the re-emergence (Second Wave) of COVID-19 is a real possibility, given the lack of effective pharmaceutical interventions, this article explores different post-confinement scenarios by using a stochastic modified SEIR (susceptible–exposed–infectious–recovered) model to highlight potential infection transmission scenarios. LINK

SENIORS & OTHER VULNERABLE POPULATIONS

European Geriatric Medicine: <u>COVID-19 highlights the need for universal adoption standards of</u> <u>medical care for physicians in nursing homes in Europe</u> (Published June 17, 2020)

This article discusses how the gravity of concerns arising from nursing home care from the COVID-19 pandemic mandates an urgent review of medical standards for nursing homes and argues that physicians providing care should have formal competence in geriatric medicine and geriatric psychiatry. <u>LINK</u>

Psychological Trauma: <u>Psychological sequelae* of social isolation and loneliness might be a larger</u> problem in young adults than older adults (Published June 11, 2020)

This commentary draws attention to two at-risk populations and provides recommendations for the prevention of loneliness during social distancing and after social distancing measures are eased. (* sequelae are defined as pathological conditions resulting from a disease, injury, therapy, or other trauma) LINK

Journal of Medical Virology: Why obesity, hypertension, diabetes, and ethnicities are common risk factors for COVID-19 and H1N1 influenza infections (Published June 24, 2020)

This letter to the editor raises the issue of common comorbidities and possible risk factors for severity of COVID-19 and H1N1 and whether a common mechanism may exist to explain them. <u>LINK</u>

Clinical Obesity: <u>Impact of COVID-19 stay-at-home orders on weight-related behaviors among patients</u> <u>with obesity</u> (Published June 9, 2020)

This study explores the health implications of COVID-19 among a sample of adults with obesity

MedRxiv (Preprint): <u>Prevalence of IgG antibodies to SARS-CoV-2 in Wuhan - implications for the ability</u> <u>to produce long-lasting protective antibodies against SARS-CoV-2</u> (Published June 16, 2020)

This article looks at post-infection immunity in Wuhan, China and notes that: "Prevalence of IgG antibodies to SARS-CoV-2 was 31.4% in COVID-19 patients, 1.5% in healthcare providers, 1.3% in general workers, and 0.2% in other patients. Very few healthcare providers had IgG antibodies to SARS-CoV-2, though a significant proportion of them had been infected with the virus. After SARS-CoV-2 infection, people are unlikely to produce long-lasting protective antibodies against this virus." LINK

MENTAL HEALTH & WELLNESS

Psychiatry Research: The psychological and mental impact of coronavirus disease 2019 (COVID-19) on medical staff and general public – a systematic review and meta-analysis (Published June 7, 2020)

The authors conducted a systematic review and meta-analysis on the psychological and mental impact of COVID-19 among healthcare workers, the general population, and patients with higher COVID-19 risk. LINK

Quarterly Journal of Medicine: <u>The psychological impact of COVID-19 on mental health in the general population</u> (Published June 22, 2020)

This article comprehensively reviews the current literature about the impact of COVID-19 on mental health in the general population. <u>LINK</u>

Quarterly Journal of Medicine: <u>The impact of COVID-19 pandemic on the mental health of healthcare professionals</u> (Published June 22, 2020)

This article analyzes the impact of COVID-19 on the mental health of healthcare professionals. LINK

The Canadian Journal of Psychiatry: <u>COVID-19 impacts on child and youth anxiety and depression:</u> <u>challenges and opportunities</u> (Published June 22, 2020)

This article focuses on the impact on of the pandemic on the mental health of children and adolescents, with particular attention to depression and anxiety. <u>LINK</u>

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? CONTACT

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