

Exton, Adam (HC/SC)

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Sent: 2020-10-20 8:15 AM
To: gphin / rmisp (PHAC/ASPC)
Subject: GPHIN Daily Report (20 October 2020)
Attachments: GPHIN Daily Report 20201020 SR.docx

Good morning,

Please find below the daily Summary and articles collected by GPHIN for your review and risk assessment.

GPHIN Daily Report Email Summary

Special Section on Coronavirus

[Canada \(Update\) - Coronavirus disease \(COVID-19\) Outbreak \(Official\)](#)

As of 19 October 2020 at 19:00 EDT, a total of 201,437 cases have been recorded in Canada including 9,778 deaths. The cases are reported in Newfoundland and Labrador (287 confirmed cases, 4 deaths), Prince Edward Island (63 confirmed cases), Nova Scotia (1,097 confirmed cases, 65 deaths), New Brunswick (313 confirmed cases, 3 deaths), Quebec (94,429 confirmed cases, 6,044 deaths), Ontario (65,075 confirmed cases, 3,050 deaths), Manitoba (3,382 confirmed cases, 42 deaths), Saskatchewan (2,396 confirmed cases, 25 deaths), Alberta (22,673 confirmed cases, 292 deaths), British Columbia (11,687 confirmed cases, 253 deaths), Yukon (17 confirmed cases), Northwest Territories (5 confirmed cases), Nunavut (0 confirmed case), and repatriated travellers (13 confirmed cases). A detailed [epidemiological summary](#) is available. The risk will vary between and within communities, but given the increasing number of cases in Canada, the risk to Canadians is considered [high](#).

[International \(Update\) - Coronavirus disease \(COVID-19\) Outbreak \(Media\)](#)

As of 20 October 2020, 11:40 GMT, there were 40,721,928 cases of COVID-19 and 1,124,231 deaths reported globally. Top 10 countries with the highest number of cases, by alphabetical order are: Argentina (1,002,662 cases, 26,716 deaths), Brazil (5,251,127 cases, 154,226 deaths); Colombia (965,883 cases, 29,102 deaths); France (910,277 cases, 33,623 deaths); India (7,597,063 cases, 115,236 deaths); Mexico (854,926 cases, 86,338 deaths); Peru (870,876 cases, 33,820 deaths); Russia (1,431,635 cases, 24,635 deaths); Spain (1,015,795 cases, 33,992 deaths); United States (8,459,041 cases, 225,241 deaths).

Canada – Coronavirus disease (COVID -19) Outbreaks and Outcomes (Official and Media)

- [Provincial Health Officer Dr. Bonnie Henry has declared B.C. is in its second wave of COVID-19](#). However, she said B.C. is not seeing exponential growth.
- [Canada prolonged its ban on non-essential U.S. travel until 21 November](#).
- [More than 79 COVID-19 cases, mostly in northern Sask., now tied to Prince Albert gospel centre superspreader](#). According to CBC News, more than 79 cases of COVID-19 have been traced back to the Prince Albert gospel centre superspreader - including a newer third generation of cases that Saskatchewan's chief medical health officer says can be hard to pin down. Health officials have broken down cases connected to Prince Albert's Full Gospel Outreach Centre in three categories. A first generation of people attended meetings at the church (where food was served and singers went unmasked) from 14 September to 4 October and tested positive for the virus. A second generation of people came into contact with church attendees. Both first- and second-generation cases live primarily in communities north of Prince Albert.
- [Alberta recorded a total of 898 new cases of COVID-19 over the weekend \(16-18 October\), surpassing a provincial record for the highest number of active cases](#). The latest COVID-19 numbers released by the province on 19 October show there are 3,138 active cases. The previous record was on April 30 when 3,022 active cases were identified.

United States - Coronavirus Disease 2019 (COVID-19) - Communication Resources (Official and Media)

- As many people in the United States begin to plan for fall and winter holiday celebrations, CDC offers the [following considerations](#) to help protect individuals and their families, friends, and communities from COVID-19.

These considerations are meant to supplement—not replace—any [state, local, territorial](#), or [tribal](#) health and safety laws, rules, and regulations with which holiday gatherings must comply.

- [Coronavirus hospitalizations are growing in a majority of U.S. states](#) as the nation's leading infectious disease expert, warns that the world is not yet on the road to ending the pandemic. Coronavirus hospitalizations, like the so-called positivity rate and deaths, are a key measure because they help scientists gauge the pandemic's severity. COVID-19 hospitalizations were growing by 5% or more in 37 states as of 18 October, according to analysis of data collected by the COVID Tracking Project, an increase from 36 states a week earlier. The District of Columbia and Hawaii are the only two places where hospitalizations are declining, according to the data.

International - Coronavirus disease (COVID-19) Outbreak and Outcomes (Media)

- On 19 October 2020, [the United Nations](#) said it would stockpile one billion syringes around the world by the end of 2021, to be used for the delivery of any future coronavirus vaccine. Unicef, the UN Children's Fund, said it aims to get 520 million syringes in its warehouses by the end of this year, to guarantee an initial supply in countries ahead of the vaccine. The syringes will be used by Covax, the international coronavirus vaccine procurement, production and distribution pool created by the World Health Organization (WHO).
- On 19 October 2020, [ECDC has released a technical document](#) that provides guidance on COVID-19 infection prevention and control measures for primary care, including general practitioner practices, dental clinics and pharmacy settings.
- As of 19 October 2020, [the government of Slovenia](#) has declared the coronavirus disease a nationwide epidemic, as a resurgence in new cases hit an all-time high. The current epidemiological situation with the spread of the SARS-COV-2 virus requires an immediate declaration of an epidemic throughout the Republic of Slovenia, as all statistical regions have either reached or surpassed the threshold required for declaring an epidemic. Slovenia officially declared the end of the COVID-19 pandemic in May and recorded only a relatively small number of new infections during the summer. The country has now been divided into green, orange and red zones, based on the number of coronavirus cases and rate of infections.
- [Russia plans to begin supplying the Sputnik V anti-influenza vaccine, developed by the Gamaleya Epidemiological and Microbiology Research Center, to Latin America by December 2020.](#)
- [Coronavirus vaccine storage issues could leave 3 billion without access.](#) From factory to syringe, the world's most promising coronavirus vaccine candidates need non-stop sterile refrigeration to stay potent and safe. But despite enormous strides in equipping developing countries to maintain the vaccine "cold chain," nearly three billion of the world's 7.8 billion people live where temperature-controlled storage is insufficient for an immunization campaign to bring COVID-19 under control.

Studies Related to Coronavirus disease (COVID -19) Outbreak (Media)

- Scientists from [The Pirbright Institute in collaboration with the University of Queensland and the University of Oxford](#) have developed a test that can detect antibodies that prevent COVID-19 infecting neighbouring cells. The method, can be used in tandem with other tests to assess the effectiveness of vaccines, therapeutics and antivirals. Until now, limited tools existed to assess whether the neutralising antibodies could also prevent these cell fusion events and whether halting this process would result in better protection against the virus. However, studies described in the Journal of General Virology have demonstrated this new method – dubbed the micro-fusion inhibition test (mFIT) – can determine whether antibodies are effective at preventing syncytia formation, which can facilitate further research into whether this characteristic improves the protection offered by antibodies. This test gives us additional markers to assess when developing vaccines, antivirals and therapies, and could ultimately help us to improve their effectiveness.
- According to the findings of a small UK study, more than half of COVID-19 patients discharged from hospital still experienced symptoms of breathlessness, fatigue, anxiety and depression for two to three months after their initial infection. [The research, led by scientists at Britain's Oxford University, looked at the long-term impact of COVID-19 in 58 patients hospitalized with the pandemic disease.](#) It found that some patients have abnormalities in multiple organs after being infected with the novel coronavirus and that persistent inflammation caused problems for some for months. The study has not been peer-reviewed by other scientists but was published before review on the MedRxiv website.
- In a study published in *Anaesthesia*, researchers reported that [COVID-19 patients who have chronic kidney disease \(CKD\) or develop coronavirus-related kidney injury in the intensive care unit \(ICU\) face higher odds of death than their otherwise-healthy peers.](#) The authors said that were surprised that the death rate in patients with end-stage renal failure (ESRF), and on dialysis, who usually have poorer outcomes in many other illnesses, wasn't significantly higher than in those with less-serious CKD and coronavirus-related kidney injury. The finding, they noted, suggests that COVID-19 patients receiving dialysis—including those with ESRF—have a similar chance for survival as those with less severe disease or injury and thus should be considered for ICU care.
- Researchers reported in [Clinical Infectious Diseases](#), a randomized, controlled clinical trial involving high-risk healthcare workers found that pre-exposure prophylaxis with hydroxychloroquine once or twice weekly did not

significantly reduce COVID-19 compared with placebo. Hydroxychloroquine blood concentrations did not differ between participants who developed COVID-19-compatible illness and those who did not. The authors noted that enrollment in the study ended prematurely, after a severe decline that followed several studies that highlighted hydroxychloroquine safety concerns, and a subsequent warning from the Food and Drug Administration. As a result, the study was underpowered. In addition, the doses of hydroxychloroquine may have been insufficient.

- In a recent study published in [JAMA Network](#), researchers observed high asymptomatic and presymptomatic SARS-CoV-2 infection rates in a large multistate sample of skilled nursing facility (SNF), demonstrating the importance of universal testing for identifying and isolating cases. The SNFs located in areas with high SARS-CoV-2 prevalence detected higher numbers of asymptomatic and presymptomatic cases during initial point prevalence surveys, building on emerging evidence that SNF location is an important predictor of outbreaks.
- A study in the Proceedings of the [National Academy of Sciences](#) has found that women are more likely to see COVID-19 as a serious health problem and more likely to agree and comply with containment measures, highlighting the importance of gender-based public health messaging. Scientists have documented higher COVID-19 mortality in men worldwide, with a number of factors speculated to play a role, such as differences in biology, preexisting conditions, occupation, and likelihood of seeking health care. Gender differences in public policy compliance behaviors have not been fully examined but may help explain observed mortality differences. The authors suggested that higher compliance in women may reduce the likelihood of contracting and spreading the disease, pointing to the role of gender-related behavioral differences in disease transmission
- Certain oral antiseptics and mouthwashes may have the ability to inactivate human coronaviruses, according to a [Penn State College of Medicine](#) research study. The results indicate that some of these products might be useful for reducing the viral load, or amount of virus, in the mouth after infection and may help to reduce the spread of SARS-CoV-2, the coronavirus that causes COVID-19.

Domestic Events of Interest

[Canada- Fraser Health issues Overdose Alert for Surrey \(Media\)](#)

Drug overdoses, resulting from cocaine contaminated with fentanyl, have spiked in the City of Surrey over the past 24 hours, Fraser Health has reported. In an Overdose Alert issued October 17, the health authority says there has been an increase in emergency room admissions for overdoses in the city.

International Events of Interest

[China- Update - China disease warning: More cases confirmed as bacterial outbreak continues to spread \(Media\)](#)

According to media reports, new cases of brucellosis were recorded in Inner Mongolia and the provinces of Gansu and Shaanxi in recent days. The brucellosis outbreak started in July 2019 after the bacteria leaked out during vaccine production.

Researches, Policies and Guidelines

[United States- Researchers discover how a small molecule is the key to HIV forming capsules \(Media\)](#)

A group of University of Chicago scientists announced a ground-breaking study that explores the role of a small molecule, called IP6, in building the HIV-1 virus capsid. The genetic information of the HIV virus is surrounded by a layer of proteins called a capsid, which works as the armor of the virus. Figuring out how this capsid is formed provides an important avenue to developing treatments.

Best Regards | Sincères salutations
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