

Exton, Adam (HC/SC)

From: Guerrero, Gerardo (PHAC/ASPC) on behalf of gphin / rmisp (PHAC/ASPC)
Sent: 2020-08-25 8:21 AM
To: gphin / rmisp (PHAC/ASPC)
Subject: GPHIN Daily Report (25 August 2020)
Attachments: GPHIN Daily Report 20200825 GG.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 21 August 2020 at 19:00 EDT, a total of 125,647 cases have been recorded in Canada including 9,083 deaths. The cases are reported in Newfoundland and Labrador (268 confirmed cases, 3 deaths), Prince Edward Island (44 confirmed cases), Nova Scotia (1,080 confirmed cases, 65 deaths), New Brunswick (189 confirmed cases, 2 deaths), Quebec (61,741 confirmed cases, 5,744 deaths), Ontario (41,507 confirmed cases, 2,798 deaths), Manitoba (993 confirmed cases, 12 deaths), Saskatchewan (1,602 confirmed cases, 22 deaths), Alberta (13,006 confirmed cases, 234 deaths), British Columbia (5,184 confirmed cases, 203 deaths), Yukon (15 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 25 August 2020, 10:48 GMT, there were 23,837,049 cases of COVID-19 and 817,606 deaths reported globally. Top 10 countries with the highest number of cases, by alphabetical order are: Brazil (3,627,217 cases, 115,451 deaths); Chile (399,568 cases, 10,916 deaths); Colombia (551,696 cases, 17,612 deaths); India (3,170,942 cases, 58,570 deaths); Mexico (563,705 cases, 60,800 deaths); Peru (600,438 cases, 27,813 deaths); Russia (966,189 cases, 16,568 deaths); South Africa (611,450 cases, 13,159 deaths); Spain (420,809 cases, 28,872 deaths); United States (5,915,988 cases, 181,117 deaths).

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

- [Canada's Chief Public Health Officer has issued a statement indicating](#) that, as Canadians continue their collective effort to limit the spread of COVID-19, health officials are closely monitoring disease activity indicators in order to inform, adjust and adapt their actions as needed. Nationally, average daily case counts have remained stable over the past three weeks and the number of hospitalizations and deaths remain low overall. However, increases in case counts in provinces west of Ontario over the last few weeks serve as reminders that the virus can emerge anywhere. She added that, young adults aged 20 to 39 years continue to make up the highest proportion of cases reported in recent weeks. This week, additional video testimonials from young adults who have recovered from COVID-19 were published here on the Government of Canada website. While most young adults experience milder illness due to COVID-19, they can get severely ill and can spread the virus to others in their household and social circles who are at risk of severe outcomes. She has encouraged young adults to watch the testimonials to learn more about the experience of Canadians of similar age who have been impacted by COVID-19.
- The [Saskatchewan Health Authority is alerting the public that they may have been exposed to COVID-19 after visiting businesses in Swift Current the week of 17 August](#). The businesses include, Shoppers Drug Mart, Dairy Queen, and Original Joe's.
- [The Good Samaritan Society has reported two deaths at the Southgate Care Centre in south Edmonton](#). The death toll due to COVID-19 at the center now sits at 31.
- [A COVID-19 outbreak has been declared at Toronto's Sunnybrook Hospital](#). According to Toronto Public Health (TPH), there have been four confirmed cases of COVID-19 and appropriate precautions and outbreak control measures are in place.

- [An outbreak at a Calgary chicken processing plant has led to 13 cases of COVID-19](#). Alberta's Chief Medical Officer of health reported, 11 active cases and two recovered cases linked to the Lilydale plant in Ramsay. The plant is owned by Sofina Foods Inc., which operates 16 plants across Canada.
- [On 22 August 2020 Health officials in Ontario reported just over 100 new cases of COVID-19. The 108 new infections bring the total number of COVID-19 cases in Ontario to 41,287](#). A day earlier, the province added 131 cases of the novel coronavirus. Ontario's COVID-19 death toll now stands at 2,797. As well, 90 more infections are now considered to be resolved by the ministry of health. Since the start of the pandemic, 37,487 patients in Ontario have recovered from the virus. Most of the new cases recently added were reported in people between the ages of 20 and 39.
- [Montreal public health is asking anyone who attended indoor or outdoor Latin dance events since 31 July to be tested for the novel coronavirus](#). The health officials indicated that three people with confirmed cases of COVID-19 attended dances in Montreal.
- [Alberta's chief medical officer of health continues to encourage teachers to add COVID-19 testing to their back-to-school to-do lists](#). The return to school in Canada this fall has been an argumentative topic, and parents took their frustrations to the front steps of the offices of United Conservative MLAs on 21 August 2020 to demand more funding and safety measures for schools. As teachers and school staff return to their classrooms to prepare for the new school year.
- A letter shared with the media, show the concern of some citizens regarding that [some long-term care operators are now asking visitors to sign a waiver acknowledging they may be putting their health at risk while visiting residents](#). After signing the waiver, they are giving up their legal right to sue the facility for any COVID-related issues. The waiver was drafted by lawyers for the Alberta Continuing Care Association (ACCA) in response to concerns from its members in light of the loosening of visitor restrictions last month.
- The [Prairie Mountain Health Region is officially under the restricted level of Manitoba's pandemic response system](#). The level was announced the week of 17 August, and as of 24 August includes rules regarding gathering sizes and mandatory masks to help reduce the spread of COVID-19 in the region.
- [Workers at Brandon's Maple Leaf meat plant are calling for a two-week shutdown of the facility to help get the COVID-19 outbreak under control](#). The plant has been a hotspot for cases in the region, which is currently under increased provincial restrictions, including limits on gatherings and mandatory masks in public.

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

- U.S. Food and Drug Administration has taken steps to encourage the development of SARS-CoV-2 tests. The FDA posted a [new webpage](#) that provides an overview of available resources related to SARS-CoV-2 screening testing and testing using pooled samples.
- The [Office for Civil Rights \(OCR\) at the U.S Department of Health and Human Services \(HHS\) has issued amended guidance on how the Health Insurance Portability and Accountability Act of 1996 \(HIPAA\) Privacy Rule permits covered health care providers \(e.g., hospitals, pharmacies, laboratories\) and health plans to contact their patients and beneficiaries who have recovered from COVID-19 to inform them about how they can donate their plasma containing antibodies \(known as "convalescent plasma"\) to help treat others with COVID-19](#). OCR added health plans to the June 2020 guidance that explains how HIPAA permits covered health care providers and health plans to identify and contact patients and beneficiaries who have recovered from COVID-19 for individual and population-based case management or care coordination. The guidance also emphasizes that, without individuals' authorization, the providers and health plans cannot receive any payment from, or on behalf of, a plasma donation center in exchange for such communications with recovered individuals.
- On 24 August 2020, the Centers for Disease Control and Prevention (CDC) updated its guidance on [Preparing K-12 School Administrators for a Safe Return to School in Fall 2020](#). This guidance is intended to aid school administrators as they consider how to protect the health, safety, and wellbeing of students, teachers, other school staff, their families, and communities and prepare for educating students this fall.
- On 24 August 2020, the Centers for Disease Control and Prevention (CDC) updated its guidance on [Limiting Workplace Violence Associated with COVID-19 Prevention Policies in Retail and Services Businesses](#). This information is intended for use by employers and employees in retail, services, and other customer-based businesses. Retail or service businesses sell goods and provide services to the public and include department stores, grocery stores, gas stations, and restaurants. These businesses are open and have started state-directed, municipality-directed, and company-directed Coronavirus Disease 2019 (COVID-19) prevention policies and practices to minimize the spread of the virus among employees and customers.
- On 24 August 2020, the Centers for Disease Control and Prevention (CDC) updated its guidance on [Nursing Homes and Long-Term Care Facilities](#). The page brings information on Infection Control Guidance; SARS-CoV-2 Testing Guidance; Infection Control Assessment Tool; Training Resources; Videos for Training Front Line Long-Term Care Staff; and Additional Resources.
- On 24 August 2020, the Centers for Disease Control and Prevention (CDC) updated its guidance on [COVID-19 and Animals](#). At this time, there is no evidence that animals play a significant role in spreading the virus that

causes COVID-19. Based on the limited information available to date, the risk of animals spreading COVID-19 to people is considered to be low. More studies are needed to understand if and how different animals could be affected by COVID-19. Studies are underway to learn more about how this virus can affect different animals. Health authorities are still learning about this virus, but it appears that it can spread from people to animals in some situations. The U.S. Department of Agriculture (USDA) [maintains a list](#) of all animals with confirmed infections with SARS-CoV-2 in the United States.

WHO - Coronavirus disease (COVID-19) Weekly Epidemiological Update 2 (Official)

- During the 20 August Member State Briefing, WHO Director-General highlighted that [the fastest way to end the pandemic and reopen economies is to start by protecting the highest risk populations everywhere, rather than the entire populations of just some countries](#). The official encouraged all countries to join the [COVAX Global Vaccines Facility](#), part of the [ACT Accelerator](#), a critical mechanism for joint procurement and pooling risk across multiple vaccines. Nine vaccine candidates in the COVAX portfolio are currently going through Phase II or Phase III clinical trials. WHO is proposing to allocate vaccines in two phases. WHO issued terms of agreement for all countries to confirm how they prefer to join the mechanism, with a deadline of 31 August 2020.
- WHO has published updated guidance on [quarantine measures for individuals](#) who are identified as contacts of a case of COVID-19. This includes information on the implementation of quarantine, as well as on ventilation and on the care of children in quarantine.
- WHO has published new guidance on the [use of masks for children](#) which serves as an annex to [previously published guidance on use of masks](#) in the context of COVID-19. The [Q&A on children and the use of masks](#) has recently been updated that provides answers to questions the public may have.
- In a WHO survey of 39 countries in sub-Saharan Africa, only six schools were found to be fully open. The impact of extended disruption to education as a result of school closure is significant, and includes poor nutrition, stress, increased exposure to violence and exploitation, childhood pregnancies, and diminished educational progress. [WHO and UNICEF have urged governments in Africa to promote the safe reopening of schools](#) while taking measures to limit the spread of the virus
- Globally, risks of COVID-19 resurgence remain in all countries that have managed to suppress transmission. WHO Regional Director for Europe has highlighted this during a statement to the press, indicating that as summer turns to autumn in the northern hemisphere, [we must make sure that we adopt the right public health measures to enable the safe return to school, manage the approaching influenza season, sustain our economies, and address the increased health risks to older people at this time of year](#).
- The COVID-19 pandemic has negatively affected mental health and raised concerns of an increase in domestic violence in the Region of the Americas. WHO Regional-Director has counseled that [countries in the Americas should expand and invest in mental health services](#). WHO has produced several [publications on mental health and COVID-19](#), including advice for the public, a children's book, and other guidance.
- [Recent studies that show an increased risk among pregnant women of presenting with severe forms of COVID-19](#). In light of this, the WHO Regional Office for the Americas is encouraging countries to step up efforts to ensure access to prenatal care services for pregnant women.
- [WHO and the Jack Ma Foundation have donated COVID-19 essential medical supplies to 20 Caribbean countries](#). The supplies, which landed in Barbados, will be delivered through a new integrated regional logistics hub, supported by a donation by the Government of Canada.
- The COVID-19 pandemic has affected older people disproportionately, especially those living in long term care facilities. Some countries indicate that more than 40% of COVID-19 related deaths have been linked to long-term care facilities. The WHO Regional Office for the Western Pacific has produced a [communication toolkit for long-term care facilities](#) to support Infection Prevention and Control. This compliments a WHO policy brief released last month on [preventing and managing COVID-19 across long-term care services](#).

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

- [There are now potentially 172 countries interested in participating in a global initiative to ensure fair access to a safe and effective coronavirus vaccine](#), the World Health Organization (WHO) has announced. The aim would be to bring the COVID-19 pandemic under control through pooling resources and distributing a potential vaccine to all countries taking part. If all countries who have shown an interest officially sign up to the scheme, more than 70 per cent of the world's population would be able to access a vaccine through the WHO-led COVAX plan.
- [China has been secretly inoculating key workers with an unknown vaccine since July](#). The keyworkers involved include frontline medical staff and border control inspectors. A senior official from the national health commission has revealed that the vaccine had been secretly approved on 22 July 2020.
- On 24 August 2020, [Cuba began in Havana the human clinical trials of its first project of the SARS-CoV-2 coronavirus vaccine, whose first two phases will continue until the beginning of next November and involve 676 volunteers](#). The Cuban vaccine successfully passed the animal experimentation stage between May and August. In the initial stage the vaccine will be administered at the National Toxicology Center (Cenatox) to 20 volunteers

between the ages of 19 and 59 and one week later to another 20 people aged 60 to 80, according to their managers. The second phase will begin on 11 September with the vaccination of the remaining volunteers until reaching the 676 planned. Trial participants will receive two doses of the vaccine with a 28-day interval and their response will be studied over two months. The state centre set the date of completion of the vaccine study on 11 January 2021, the results of which would be available on 1 February for publication on the 15th of the same month.

- On August 24, 2020, [South Korean authorities from the Korean Centers for Disease Control and Prevention reported new 138 cases of infections in Seoul](#). Almost one third of the cases we detected in Gyeonggi province. The number of deaths from COVID-19 remained at 309, and the death rate is 1.78%. The country's top has warned that South Korea is on the brink of a [massive nationwide outbreak](#) of the coronavirus as it recorded its highest number of new cases in months.
- [France Health Minister confirmed on 24 August 2020 a spike of 4,897 new coronavirus cases over the last 24 hours, the highest single-day figure since the start of the outbreak](#). The death toll in France currently stands at 30,513 with overall cases at 242,899, according to the Health Ministry. In addition France Health Minister stated that France has accomplished the ability to test 700,000 people per week approximately 1% of the French population.
- [On 23 August 2020, Mexico surpassed 60 thousand deaths by Covid-19](#). There are 560,164 confirmed cases and 80,198 suspected. In addition 618,779 negatives, 60,480 confirmed deaths and 383,872 people recovered have been reported. Nationally, 64% of general hospital beds are available and 36% occupied. In beds with fans, 69% are available and 31% occupied.
- [The World Health Organization \(WHO\) considers that there is a lack of evidence regarding the convalescent plasma therapy, if is effective or safe in treatment of COVID-19 patients and recommends to use it as an experimental therapy](#). WHO chief scientist mentioned that a number of ongoing clinical trials are looking at convalescent plasma, but only few of them have actually reported on the results and those are not conclusive. WHO has been tracking this development and assessing with an ongoing meta-analysis and systematic reviews to see where the evidence is shifting or pointing, and at the moment it is still very low-quality evidence.
- [Approximately 100 naked holidaymakers have tested positive for Covid-19 at the Cap d'Agde resort on the Mediterranean coast of France](#) as the country grapples with a second wave. The Cap d'Agde resort registered 38 positive tests on 17 August 2020, and another 57 on 19 August 2020. The coronavirus infection rate is four times higher in the nudist resort than the rest of the area. France has been added to the United Kingdom quarantine requirement travel list. French Health Minister has insisted the country will not have to do a second nationwide lockdown.
- [The World Health Organization \(WHO\) has issued guidance that children over the age of 12 should wear masks, in line with recommended practice for adults in their country or area](#). However the true number of people who have had the virus is believed to be far higher, due to insufficient testing and asymptomatic cases. WHO's Chief has expressed hopefulness that the pandemic will be over in two years; but a top scientific adviser in the UK warned that Covid-19 might never be eradicated, with people needing regular vaccinations.
- [Brazilian President has praised the doctors who prescribed hydroxychloroquine in the initial states of Covid-19 and assured that this questioned drug would have saved the lives of many of the nearly 115,000 deaths of the virus in Brazil](#). That group of volunteer doctors, which according to its spokespersons has about 10,000 adherents in the 27 states of the country, made a vigorous defense of hydroxychloroquine combined with other drugs in mild coronavirus patients, even though the efficacy of this antimalarial for the new coronavirus lacks scientific verification.
- [New mortality figures revised by the Times suggest that the actual number of deaths in Bolivia during the outbreak is almost five times higher than the official figure](#), indicating the country Bolivia has suffered one of the worst epidemics in the world. The extraordinary increase in mortality, adjusted according to its population, is more than double that of the United States, and much higher than the levels of Italy, Spain and the United Kingdom. Bolivia's forensic chief has noted that agents collected up to 150 bodies a day, fifteen times more than normal in July. The lawsuit suggested that the official count of COVID-19 deaths was very low. But with limited evidence, and a political crisis, the extra lives that have been largely lost are not recognized.
- The [United Nations reports, in the midst of pandemic fatigue, intensifying violence and conflict in some parts of the world, including, attacks on civilians and humanitarians, is hampering the safe delivery of protection services for the COVID-19 \(C19\) response](#). C19 cases are reported in 26 of 32 countries where the Protection Cluster operates.
- [The Health Ministry in the Gaza Strip has announced the first cases of coronavirus spread through the community](#), raising fears of an outbreak in the impoverished territory blockaded by Israel and Egypt. Until now, all the cases reported in Gaza were linked to quarantine facilities for residents returning from abroad. The Health Ministry noted four people from the same family have tested positive for the virus in central Gaza and investigations were underway to track the source of the infection. A full lockdown was imposed on the al-Maghazi

refugee camp, where the family lives. The government announced 48-hour curfew in the entire territory, closing businesses, schools, mosques and cafes.

- [Sweden's top epidemiologist and architect of its pandemic strategy has stated that the country is likely to see local outbreaks but no big second wave of COVID-19 cases in the autumn, such as inundated hospitals a few months ago.](#) New cases, hospitalisations and mortality have fallen sharply over the past couple of months. With most Swedes having returned from summer vacations and schools reopening second week of August 2020 for the new semester, there are concerns the country could see a second wave of infections.

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

- [New research studies from June suggest there could be serious flaws in the COVID-19 exposure notification app promoted by Canada's federal government.](#) According to a spokesperson for the Canadian Digital Service the [app COVID Alert](#) has been out for nearly one month and has been downloaded by some two million Canadians. The app, is based on an application programming interface (API) co-developed by Google and Apple, uses Bluetooth technology to log exposures, defined as when two phones have been in close proximity for a set period of time. In Canada, two phones have to be within two metres for 15 minutes to log an exposure. That's the same threshold for most countries that have adopted the app. The German app, Corona-Warn-App, logs an exposure when two phones have been within two metres for 10 minutes. The first research points to this being a particularly acute problem in mass transit because it is difficult to identify people travelling on public transport with whom an infected person has been in contact, since the identities of these people are usually not known to the infected person and are generally not otherwise recorded. The [study](#) was directed by the Trinity College Dublin in Ireland. Another [study](#), found that no exposure notifications would have been triggered despite the fact that all pairs of handsets were within two metres of one another for at least 15 minutes.
- [Wastewater containing coronaviruses may be a serious threat, according to a new, global study led by researchers from the Zuckerberg Institute for Water Research at Ben-Gurion University of the Negev \(BGU\).](#) The new paper, published in [Nature Sustainability](#), by an international collaboration of 35 researchers, evaluates recent studies on coronaviruses in wastewater and previous airborne infectious diseases, including SARS and MERS. The researchers indicate that sewage leaking into natural watercourses might lead to infection via airborne spray. Similarly, treated wastewater used to fill recreational water facilities, like lakes and rivers, could also become sources of contagion. Lastly, fruits and vegetables irrigated with wastewater that were not properly disinfected could also be an indirect infection route. The research team recommends immediate, new research to determine the level of potential infection, if any, and how long coronaviruses last in various bodies of water and spray.
- A new study by researchers at MassBiologics of UMass Medical School published in [Nature Communications](#) suggests that [COVID specific IgA monoclonal antibodies may provide effective immunity in the respiratory system against the novel coronavirus—a potentially critical feature of an effective vaccine.](#) Researchers describe the discovery and characterization of a cross-reactive human monoclonal antibody (MAB) to SARS-CoV-2 spike proteins which blocks ACE2 receptor binding on the mucosal tissue of the respiratory tract—potentially preventing or limiting SARS-CoV-2 infection causing COVID-19 disease.
- A research letter published in the [Annals of Internal Medicine](#) has found that about [40 million US adults who work or live with school-aged children have definite or possible risk factors for severe COVID-19, carrying implications for fall school reopenings.](#) Researchers who analyzed representative data from the 2018 National Health Interview Survey showed that 2.9 million of 5.8 million K-12 teachers (50.6%) had definite or possible risk factors for serious coronavirus illness, including obesity (32.1%), heart conditions (8.0%), and cancer (0.7%). Of nonteaching staff, 55.8% had definite or possible risk factors. Of 69.7 million adults living with children 5 to 17 years old, 37.7 million (54.0%) had definite or possible risk factors, including age older than 64 (6.6%), heart disease (12.5%), type 2 diabetes (12.7%), and cancer (at least 1.6%). The prevalence of risk factors was similar for those living with children aged 5 to 10 years and with those aged 11 to 17 years. Adult household members of children in low-income families were at higher risk for severe COVID-19 than those in high-income households. While adults living with black children were at elevated risk, those living with Asian children or those of other ethnicities were at lowest risk. The authors noted that the study did not include the 4.4 million non teachers working at schools or 1.6 million daycare workers, so the number of at-risk adults would be higher than 40 million
- [The Rising Voices Center for Indigenous and Earth Sciences](#), which is administered in part by the National Center for Atmospheric Research (NCAR), organized [a survey and webinar discussion to create a space in which to better understand and center Indigenous perspectives on the coronavirus pandemic and identify key concerns, vulnerabilities, and emerging questions.](#) Indigenous communities are particularly vulnerable to the novel coronavirus because many residents live in small multifamily and multigenerational homes of more than 10 people, which makes social distancing difficult, the survey also revealed a resilience that draws on the strategies of ancestors during challenging events. In some cases, families have turned to eating foods that are out of season, such as shellfish that can contain biotoxins if consumed at the wrong times of the year. COVID-19 has unique impacts on Indigenous populations. Now a leading network of Indigenous leaders, scientists, and other experts has identified research topics that are important for better understanding the pandemic's impacts on

Native Peoples. The significance of the survey highlights the necessity of including Indigenous knowledge within the discussion of solutions for this global pandemic

- A study led by The University of Texas Southwestern Medical Center and published in the [Pediatric Infectious Disease Journal](#), adds to a growing body of evidence that the SARS-CoV-2 virus can be transmitted in utero. It also underscores the importance of limiting COVID-19 exposure for pregnant women. [The research assessed a pregnant mother who tested positive for COVID-19 transmitted the virus causing the disease to her prematurely born baby](#). The woman who was 34 weeks pregnant visited the emergency room with signs of premature labor and was admitted to the COVID unit at Parkland Memorial Hospital when she tested positive for the SARS-CoV-2 virus. About 24 hours after birth, the newborn developed a fever that spiked, and she also showed signs of respiratory distress, including an abnormally high breathing rate and lower levels of oxygen in her blood. Although more than 20 million people around the world have been infected with SARS-CoV-2—the virus that causes COVID-19—data on how the virus affects pregnant women have been limited. Both were treated and recovered.
- On 24 August 2020, [Novavax, Inc. \(Nasdaq: NVAX\)](#), a [biotechnology company developing vaccines Covid-19 announced that the first volunteers have been enrolled in the Phase 2 portion of its ongoing clinical trial to evaluate the immunogenicity and safety of NVX-CoV2373](#). In the Phase 1 portion of the Phase 1/2 clinical trial, conducted in Australia, NVX-CoV2373 was generally well-tolerated and elicited robust antibody responses numerically superior to that seen in human convalescent sera. NVX-CoV2373 was created using Novavax' recombinant nanoparticle technology to generate antigen derived from the coronavirus spike (S) protein and contains Novavax' patented saponin-based Matrix-M™ adjuvant to enhance the immune response and stimulate high levels of neutralizing antibodies. The Phase 2 portion of the ongoing Phase 1/2 clinical trial is a randomized, placebo-controlled, observer-blinded study to evaluate the safety and immunogenicity of NVX-CoV2373 with Matrix-M in subjects aged 18 to 84 years. The primary objectives expand evaluation of immunogenicity and safety, the secondary objectives include preliminary efficacy assessment. The trial to enroll up to 1,500 volunteers in United States and Australia, with approximately 50 percent between 60 and 84 years of age. Interim immunogenicity and safety data expected in fourth quarter of 2020. The preliminary data have been submitted for peer-review to a scientific journal and are posted online at the preprint server [medRxiv.org](#).
- A study, confirmed [a Hong Kong man who recovered from COVID-19 was infected again four-and-a-half months later in the first documented instance of human re-infection. The study was led by the University of Hong Kong](#). The case raises questions about the durability of immune protection from the coronavirus. But it was also met with caution by other scientists, who questioned the extent to which the case pointed to broader concerns about reinfection. But in this case, researchers at the University of Hong Kong sequenced the virus from the patient's two infections and found that they did not match, indicating the second infection was not tied to the first. There was a difference of 24 nucleotides between the two infections. [The findings suggest that the SARS-CoV-2 may persist in the global human population](#) as is the case for other common cold-associated human coronaviruses, even if patients have acquired immunity via natural infection. The researchers indicate patients who recover after getting coronavirus should also wear masks and maintain social distancing. Since the immunity can be short-lasting after natural infection, vaccination should also be considered for those with one episode of infection. Experts cautioned that this patient's case could be an outlier among the tens of millions of cases around the world and that immune protection may generally last longer than just a few months. Ongoing studies tracking patients who had recovered from Covid-19 would help reach more definitive conclusions. Studies are increasingly finding that most people who recover from the illness mount a robust immune response involving both antibodies and T cells. This has suggested that people would be protected from another case for some amount of time. But based on what happens with other coronaviruses, experts knew that immunity to SARS-CoV-2 would not last forever. People generally become susceptible again to the coronaviruses that cause the common cold after a year or even less, while protection against SARS-1 and MERS appears to last for a few years. The study has been accepted by medical journal *Clinical Infectious Diseases*, but the full research is yet to be published
- [According to new research from the University of East Anglia, medication for high blood pressure could improve COVID-19 survival rates and reduce the severity of infection. The study analyzed information of 28,000 patients taking antihypertensives, which is a class of drugs that are used to treat hypertension \(high blood pressure\)](#). Researchers studied 28,000 patients taking antihypertensives a class of drugs that are used to treat hypertension (high blood pressure). The research concluded that the risk of severe COVID-19 illness and death was reduced for patients with high blood pressure who were taking Angiotensin-Converting Enzyme inhibitors (ACEi) or Angiotensin Receptor Blockers (ARB). This is the largest meta-analysis including critical events and mortality data on patients prescribed ACEi/ARB and found evidence of beneficial effects of chronic ACEi/ARB use especially in hypertensive cohort with COVID-19. As such, the authors strongly encourage patients to continue with RAAS inhibitor pharmacotherapy during the COVID-19 pandemic.
- According to a study published in [Nature Medicine](#), [Mount Sinai scientists have identified two markers of inflammation that reliably predict the severity of COVID-19 cases and likelihood of survival, providing a foundation for a diagnostic platform and therapeutic targets](#). The researchers studied four proteins known as cytokines that circulate in blood and are commonly associated with infections, and found that two of them, called IL-6 and TNF- α , were able to predict which patients were likely to develop more severe forms of COVID-19 and die. The

scientists established that the levels of IL-6 and TNF- α in serum, when measured at admission to the hospital, were elevated in patients who fared the worst, a finding that was independent of the patients' other underlying medical conditions, of demographics such as age and sex, and of other standard clinical biomarkers of disease severity such as low blood oxygen saturation and common markers related to inflammation, iron levels, and blood clotting issues. This study suggests that these cytokines should be monitored in the treatment of COVID-19 patients to help select those who should enter clinical trials and receive specific drugs that can target them.

- [Researchers from King's College London and Imperial College London have developed a theoretical model for how one ventilator could be used to treat two patients.](#) Although splitting ventilators can be inherently dangerous, their model shows how some of the issues can be mitigated by using variable resistances and one-way valves. This new research, published in [Royal Society Open Science](#), develops an approach by which one ventilator could in theory help two patients with varying lung problems at the same time and that that the airflow (tidal volume) delivered to one patient could be manipulated independently of the other.
- In a recent study, [researchers found 81% of children aged 5-17 had experienced at least one trauma symptom during the early phase of COVID-19.](#) For instance, some children had trouble sleeping alone, or acted unusually young or old for their age. The unpublished research relied on reports from parents from Australia and the United Kingdom. Researchers also found increases in emotional problems were common. For instance, according to their parents 29% of children were more unhappy than they were before COVID-19. Importantly, their study found several parent and family factors that were important in predicting changes in children's mental health problems. Increased personal distress reported by parents was related to increases in their child's mental health problems during COVID-19. This distress refers to both general stress in addition to COVID-specific worry and distress. It also includes anxiety related to problems that existed before COVID-19. Higher levels of parental warmth and family cohesion were associated with fewer trauma symptoms in children.

Domestic Events of Interest

[Canada - Brandt brand sausage recalled due to possible *Listeria* \(Media\)](#)

G. Brandt Meat Packers Ltd. is recalling Brandt brand mini spicy cheese sausage because of possible *Listeria monocytogenes* contamination. This recall was triggered by the Canadian Food Inspection Agency's (CFIA) test results. The CFIA is currently conducting a food safety investigation, which may lead to more recalls. The product was distributed in Ontario, Quebec and Saskatchewan. The CFIA is verifying that the recalled product is removed from the marketplace. Consumers are being told not to consume the recalled product. So far, there have been no reported illnesses associated with the consumption of the recalled product.

[Canada - Vaping-associated lung illness: Latest national case information \(Official\)](#)

In Canada, as of 14 August 2020, 20 cases of vaping-associated lung illness have been reported to the Public Health Agency of Canada from Alberta (1), British Columbia (5), New Brunswick (2), Newfoundland and Labrador (1), Ontario (5), and Quebec (6). No deaths have been reported. Case information is available for 20 of 20 cases. Symptom onset was between May 2019 and April 2020. Sixteen (16) people required admission to a hospital. Five patients presented with respiratory symptoms only (shortness of breath, cough), while fifteen (15) presented with a combination of respiratory, gastrointestinal, and/or constitutional symptoms, such as fever or weight loss.

[Canada - New study calls for new approach to tackling overdose crisis \(Media\)](#)

A study, published on 24 August 2020 in the [Canadian Medical Association Journal](#), looked at 1,789 overdose deaths in British Columbia between 2015 and 2017 in which the coroner was able to determine the substances relevant to the deaths. The objective was to assess prescription history in the context of post-mortem toxicology among people who had a fatal illicit drug overdose in BC. The lead author and resident physician in public health and preventative medicine at the University of British Columbia, stated that the current approach is not working when it comes to tackling the overdose crisis. Men continue to dominate the overdose death toll, making up more than 80 per cent of deaths, with people between the ages of 31 to 49 making up the predominant number of deaths. The conclusions recommend that Canada needs a new approach to tackle its overdose crisis, says the lead author of a new study that highlights a prevalence of overdoses involving non-prescribed fentanyl and stimulants in British Columbia.

International Events of Interest

[Brazil - Researchers validate rapid tests to detect dengue, Zika, yellow fever, and other viruses \(Media\)](#)

A novel flavivirus identification test that is both fast and sensitive has been validated in Brazil by researchers at the Adolfo Lutz Institute, a leading epidemiological surveillance laboratory that reports to the São Paulo state government. [The research was supported by São Paulo Research Foundation—FAPESP via a Thematic Project, for a rapid identification of viruses and is recommended by the World Health Organization for diagnosing infection by SARS-CoV-2.](#) Until recently,

the main method used in Brazil to identify flaviviruses required inoculating the brains of newborn mice with suspected material sampled from human patients or animals

[Democratic Republic of Congo - Ebola infects 2 more in DRC; cases rise to 102, 44 fatal](#) (Media)

Tests confirmed Ebola infections in two more people in the Democratic Republic of the Congo (DRC) Equateur province outbreak, raising the total to 102. Also, 1 more death was reported, lifting the fatality count to 44.

[ECDC - Communicable disease threats to public health in the European Union - Annual Epidemiological Report for 2019](#) (Official)

ECDC has released a [surveillance report](#) that covers the events and threats detected by the ECDC epidemic intelligence (EI) team in 2019 and the actions taken in relation to these findings. This report is based on EI screening and data from 2019 retrieved from the Epidemic Intelligence Information System (EPIS), the Early Warning and Response System (EWRS) and the ECDC threat tracking tool (TTT).

[ECDC - Influenza virus characterisation - Summary Europe, July 2020](#) (Official)

As of week 30 / 16 4 8 8 7 influenza detections had been reported across the WHO European Region ; 73% type A viruses, with A(H1N1) pdm09 prevailing over A(H3N2), and 27% type B viruses, with 4 4 79 (98%) of 4 5 68 ascribed to a B/Victoria lineage Since the June 2020 characterisation report, three shipments of influenza positive specimens from EU/EEA countries have been received at the London WHO Collaborating Centre , the Francis Crick Worldwide Influenza Centre (WIC). In total (since week 40/2019) 2019), 1 6 61 virus specimens have been received , with collection dates after 31 August 2019.

Researches, Policies and Guidelines

NIL

Best Regards | Sincères salutations
The GPHIN Team / L'équipe du RMISP

Global Public Health Intelligence Network | Health Security Infrastructure Branch
Public Health Agency of Canada, Government of Canada

phac.gphin-rmisp.aspc@canada.ca

Réseau mondial d'information en santé publique | Direction Générale de l'infrastructure de sécurité sanitaire
Agence de la santé publique du Canada, Gouvernement du Canada

phac.gphin-rmisp.aspc@canada.ca