Exton, Adam (HC/SC)

From: Guerrero, Gerardo (PHAC/ASPC) on behalf of gphin / rmisp (PHAC/ASPC)

Sent: 2020-09-04 8:30 AM **To:** qphin / rmisp (PHAC/ASPC)

Subject: GPHIN Daily Report (04 September 2020) **Attachments:** GPHIN Daily Report 20200904 MP.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 03 September 2020 at 19:17 EDT, a total of 130,493 cases have been recorded in Canada including 9,141 deaths. The cases are reported in Newfoundland and Labrador (269 confirmed cases, 3 deaths), Prince Edward Island (46 confirmed cases), Nova Scotia (1,085 confirmed cases, 65 deaths), New Brunswick (192 confirmed cases, 2 deaths), Quebec (62,933 confirmed cases, 5,767 deaths), Ontario (42,686 confirmed cases, 2,812 deaths), Manitoba (1,264 confirmed cases, 16 deaths), Saskatchewan (1,634 confirmed cases, 24 deaths), Alberta (14,310 confirmed cases, 242 deaths), British Columbia (6,041 confirmed cases, 210 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 04 September 2020, 11:39 GMT, there were 26,502,317 cases of COVID-19 and 873,805 deaths reported globally. Top 10 countries with the highest number of cases, by alphabetical order are: Argentina (451,198 cases, 9,361 deaths), Brazil (4,046,150 cases, 124,729 deaths); Colombia (641,574 cases, 20,618 deaths); India (3,940,131 cases, 68,598 deaths); Mexico (616,894 cases, 66,329 deaths); Peru (670,145 cases, 29,405 deaths); Russia (1,015,105 cases, 17,649 deaths); South Africa (633,015 cases, 14,563 deaths); Spain (488,513 cases, 29,234 deaths); United States (6,335,653 cases, 191,060 deaths).

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

- On 03 September 2020, <u>Canada's Chief Public Health Officer (CPHO)</u> issued a statement indicating that people's homes, neighborhoods, schools, workplaces, and communities have a significant impact on their health. The environments where they live, work, study and play can impact their mental health; their access to exercise, nutrition, and healthcare; and sometimes their exposure to infectious diseases and hazardous materials. In order to get and stay healthy, Canadians must ensure that the physical and social environments in which they live are healthy places. To help support these efforts, the Government of Canada recently announced the <u>Canada Healthy Communities Initiative</u> to help governments and community partners advance the goal of healthier living environments during the COVID-19 pandemic. This initiative will provide funding to small-scale, local projects that help adapt public spaces and places to the healthy living needs of their communities during these unprecedented times. The CPHO reminds that to keep COVID-19 down, Canadians must keep up their public health practices.
- The National Research Council of Canada has announced Tronosjet Manufacturing Inc. is receiving advisory services and up to \$95,000 in research and development funding from the National Research Council of Canada Industrial Research Assistance Program (NRC IRAP). Using additive manufacturing technologies, Tronosjet Manufacturing Inc. is developing 3D-printed nasal testing swabs, which will be used in testing kits to detect COVID-19. If approved by Health Canada, the company is aiming to secure the materials and equipment to be able to produce 30,000 nasal testing swabs per day at their facilities in Charlottetown, Prince Edward Island.
- The Minister of Northern Affairs, on behalf of the Minister of Agriculture and Agri-Food has highlighted
 Government investment of up to \$10.8 million through the Surplus Food Rescue Program to the Fisher River
 Cree Nation (FRCN). The Fisher River Cree Nation of Northern Manitoba will rescue up to 1.4 million pounds of
 freshwater fish caught from inland lakes of Canada. Working with the Freshwater Fish Marketing Corporation, the
 surplus product will be distributed to more than 75 Indigenous communities throughout Manitoba, Saskatchewan

and the North. The innovative Surplus Food Rescue Program is a \$50 million federal initiative designed to address urgent, high volume, highly perishable surplus products falling under horticulture, meat and fish and seafood. More than \$15.5 million has been allocated for the fish and seafood industry. This means 2.6 million pounds of fish and seafood will be purchased and distributed to families and organizations across Canada. These surpluses were created because the COVID-19 pandemic largely shutdown the restaurant and hospitality industry, leaving many producers without a key market for their food commodities. Ten per cent of the food purchased through the program have been designated for Northern populations.

- The governments of Canada and Manitoba will invest \$399,647 in support of the Orthopaedic Innovation Centre, to help improve the supply chain of medical devices in Canada, in the fight against COVID-19. The Orthopaedic Innovation Centre (OIC), located in Winnipeg, will use this funding to improve the medical device supply chain in western Canada. Specialized equipment will be purchased by the OIC to give Canadian manufacturers and healthcare organizations access to accredited testing services for personal protective equipment (PPE) that has been purchased from overseas. With this equipment, the OIC will have the ability to perform numerous standard test methods for evaluating the performance of respiratory products, thereby certifying or approving a product for use in less than two weeks. The current wait time is twelve weeks. These efforts from the company will facilitate the availability of PPE for a safe return to work, return to school, the health and safety of front line professionals and ultimately all Manitobans.
- Ontario's Minister of Education and Federal Minister of Families, Children and Social Development have announced an additional investment through the one-year Canada-Ontario Early Learning and Child Care Agreement (ELCC) of nearly \$147 million to Ontario for 2020-21. This funding will help licensed childcare providers and EarlyON child and family centers. In 2020-21, ELCC funding supported measures to minimize the impacts of COVID-19. It will also continue to support initiatives outlined in the initial three-year agreement, including increased access for families and professional learning for staff. Funding provided through the ELCC is in addition to \$234.6 million being provided through the Safe Restart Agreement to keep children and staff safe in childcare and early years settings.
- On 3 September 2020, The Prime Minister and the Premier of Newfoundland and Labrador, announced that people in Newfoundland and Labrador can now receive one-time keys from their health authorities to use with COVID Alert. The app helps notify users if they may have been exposed to someone who has tested positive for COVID-19. The COVID Alert app is free and voluntary, and is another tool to help limit the spread of COVID-19. Users who test positive for COVID-19 will receive a one-time key from their health authority that they can enter into the app. COVID Alert is available for download to all Canadians, and the Government of Canada continues to work with the other provinces and territories to bring their health authorities on board in the coming weeks and months.
- Canadian Armed Forces members and their civilian colleagues in the Department of National Defence are being strongly encouraged to download the federal government's smartphone application for tracking potential exposure to COVID-19. The authorities affirm the app has been cleared by Defence Department experts and that while installing it is voluntary, using it is one way Military Personnel and Defence officials can help prevent a second wave of COVID-19.
- New Brunswick public health is warning people who travelled on two flights with an international traveler, who
 was recently diagnosed with COVID-19. According to Public Health, the individual "may have been infectious" on
 22 August while on the following flights: Air Canada Flight 0992 from Mexico City to Toronto; Air Canada Flight
 8918 from Toronto to Moncton.
- Quebec Premier has affirmed that there is no plan to change any rules after 03 September spike in cases in
 Quebec, the biggest single-day jump in cases since June. However, the official noted that there are no plans to
 re-confine any part of the province. In addition, if stricter measures have to be put in place, they will be imposed
 on regions or sub-regions, not on the entire Province.
- An Ottawa long-term care home is dealing with its largest COVID-19 outbreak in months. At least eight residents
 and one staff member at the Extendicare West End Villa have tested positive for COVID-19, with nearly 300 test
 results still outstanding. The outbreak was declared on 30 August after a resident who had returned to the home
 from the hospital tested positive for the virus.
- The <u>Calgary Drop-In Centre notes that five people staying in its main shelter downtown had tested positive for the novel coronavirus</u>. According to the Centre, more than 140 clients and 100 staff have been tested on-site since the shelter reported its first case a week ago. Programs and services are still open and available in the main building for clients who have been in the shelter since 8 August.
- An <u>outbreak has been declared at the Syncrude site north of Fort McMurray after 11 workers tested positive for the virus</u>. This includes six cases that were reported at the beginning of the week of 03 September. At the time, an outbreak was not declared because it was believed the workers contracted the virus off-site.
- On 3 September 2020, <u>British Columbia Provincial Health Officer and Health Minister confirmed in a news release that there are 104 new cases of COVID-19</u> (including six epi-linked cases). Currently, there are 1,127 active cases in B.C., and Public Health is now monitoring 2,786 people due to exposure to confirmed cases. The

- outbreak at a Metro Vancouver hospital are linked to potential COVID-19 exposure incidents at a Downtown Vancouver gym and on several flights.
- New rankings from the Canadian chapter of UNICEF showed that Canadian children have worse physical and mental health than their peers do in most other countries of comparable wealth. The report shows Canada ranks 30th out of 38 countries when it comes to the well-being of children and youth under 18. Meanwhile, a report from Children First Canada and the University of Calgary shows that the top 10 threats to childhood, which had been increasing over the past decade, are spiking further because of the pandemic. These include mental illness, food insecurity, physical and sexual abuse and poverty. Both reports argue all levels of government need to implement concrete policies to improve conditions for children across the country.
- On 3 September 2020, a group of Quebec parents was in court, fighting for access to an online learning option for all students in the Province's schools during the novel coronavirus pandemic. The parents are seeking an injunction for families who do not want their children to physically attend school to be able to keep them at home without a medical exemption. A prominent Human Rights Lawyer filed the challenge, which includes a motion for a safeguard order, two weeks ago in Quebec Superior Court. Requiring children to attend classes in person violates their parent's charter rights to make decisions that affect their health and safety. Quebec's most recent back-to-school plan only offers an online learning option to children with a medical exemption, although some parents reported having hard times securing notes for their kids. In Quebec, thousands of students started heading back to school in late August and early September.
- Some members of Prince Edward Island's Chinese community are asking the Island's Department of Health to expand options for COVID-19 testing, after the Chinese government imposed new requirements for travel. Starting on 9 September, anyone boarding a flight from Canada to China needs to provide proof of a negative COVID-19 test within the past 72 hours. Right now on P.E.I., testing is available only to those who have coronavirus symptoms or a close contact with symptoms. According to a member of the Island Chinese community, who has recently started a social media group advocating for a testing option on P.E.I. for travel purposes, at least 40 families have already joined the request. The group has reached out to the Association for Newcomers to Canada, the Island's Department of Health, an MP, and Chief Public Health Officer. The group is attempting to communicate with Health, and try to get them involved to have that exception for those travelers required to submit that kind of report so that they can present their ticket information or something, to have that test done. The passengers cannot get tests done privately, even if there were an available option, because the Chinese government specifies that for travel from Canada, the tests need to be administered by institutions designated or recognized by the Chinese Embassy or Consulates in Canada. In P.E.I., the only acceptable tests would be administered by the Queen Elizabeth Hospital in Charlottetown or the Prince County Hospital in Summerside.
- On 03 September, Air Canada announced that it has launched a voluntary COVID-19 study of international travelers coming into Toronto's Pearson Airport as part of a campaign to persuade the government to lift travel restrictions such as its 14-day quarantine. Under the study, set to begin on 03 September, participating passengers will provide samples to be analyzed for COVID-19 using polymerase chain reaction (PCR) tests upon arrival and in two follow-ups to establish how many travelers arrive infected.

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

- On 2 September 2020, the Centers for Disease Control and Prevention (CDC) Director signed a declaration determining that the evictions of tenants could be detrimental to public health control measures to slow the spread of SARS-Cov-2. The document will be publicly available on 4 September, and indicates that CDC announces the issuance of an Order under Section 361 of the Public Health Service Act to temporarily halt residential evictions to prevent the further spread of COVID-19. In the context of a pandemic, eviction moratoria (like quarantine, isolation, and social distancing) can be an effective public health measure utilized to prevent the spread of communicable disease. Eviction moratoria facilitate self-isolation by people who become ill or who are at risk for severe illness from COVID-19 due to an underlying medical condition. The Order also allows State and local authorities to more easily implement stay-at-home and social distancing directives to mitigate the community spread of COVID-19.
- On 2 September 2020, media indicated that an infectious disease specialist from Northwestern Medicine ousted claims that the CDC quietly updated its data to reflect that only 6% of 153,504 deaths were actually caused by COVID-19. The disputed information cites data from the CDC that said six percent of COVID-19 deaths (or roughly 9,000 Americans) were from the virus alone, but downplays the full data which show the remaining deaths had contributing causes in addition to the coronavirus. It comes as the United States surpasses six million coronavirus cases and 183,000 deaths, worse than many other nations.
- The U.S. Department of Health and Human Services (HHS), through the Health Resources and Services Administration (HRSA), is announcing \$2 billion Provider Relief Fund (PRF) performance-based incentive payment distribution to nursing homes. This distribution is the latest update in the previously announced \$5 billion in planned support to nursing homes grappling with the impact of COVID-19. Last week of August 2020, HHS announced it had delivered an additional \$2.5 billion in payments to nursing homes to help with upfront COVID-

- 19-related expenses for testing, staffing, and personal protective equipment (PPE) needs. Other resources are also being dedicated to support training, mentorship and safety improvements in nursing homes.
- The U.S. Food and Drug Administration (FDA)'s COVID-19-related consumer <u>updates</u> are now available in at least five languages.
- <u>Pfizer Inc confirms it could have results from its late-stage coronavirus vaccine trial available as early as October</u>.
 According to the CEO, 23,000 volunteers have been enrolled in the phase III trial, which began in July. The company affirms that if data shows the jab is safe and effective, it will submit an application for approval, along with its German partner BioNTech, immediately.
- Media indicated that Minnesota highest outbreaks per capita are not located in the urban core of Minneapolis and St. Paul, but rather in rural LeSeur County (at greater than 15% case positivity rate), and a strip of suburban and exurban counties north and west of the metro made up of Carver, McLeod, Sibley and Wright counties (all now between a 9-15% test positivity rate). Yet the uneventful nature of another half-thousand sick people at the lowest point of the week for new cases underscores a late-summer surge that has the mood at the State's regular coronavirus briefings morphing from concern to alarm.
- According to the media, the U.S. Centers for Disease Control and Prevention has told States to prepare to
 <u>distribute a possible coronavirus vaccine by 1 November</u>, just before the Presidential Election. CDC is also
 reportedly asking health officials in all 50 States to get rid of the bureaucracy that would prevent distribution sites
 from opening. Health experts have already expressed concern about rushing through a vaccine with committed
 safety.
- A U.S. State Department's statement issued on 3 September 2020 indicated that the United States was
 announcing the next steps with respect to the withdrawal from the WHO and the redirection of American
 resources. This redirection includes reprogramming the remaining balance of its planned Fiscal Year 2020
 assessed WHO contributions to partially pay other UN assessments. The statement also noted that Washington
 would scale down its engagement with the WHO through July 2021 and U.S. participation in WHO technical
 meetings and events will be determined on a case-by-case basis.
- The <u>US military has chosen five treatment facilities located in and around Washington, DC, San Antonio, Texas and San Diego, California to carry out the advanced testing phase for a new coronavirus vaccine.</u>
- A Florida Public School District will allow teachers who have been exposed to COVID-19 to return to school and teach if they are asymptomatic, according to a policy change. The change comes after reports that dozens of teachers and nearly 300 students are under quarantine at the schools, but the district has not released an official number on how many people are quarantined.
- The Penn State's Director of Athletic Medicine has revealed as the link between COVID-19 and myocarditis, particularly in Big Ten athletes. The official indicated that cardiac MRI scans shows that approximately a third of Big Ten athletes who tested positive for COVID-19 appeared to have myocarditis, an inflammation of the heart muscle that can be fatal if left unchecked. This data helped Big Ten Commissioner to postpone the Big Ten's 2020-21 fall sports season.

WHO - The World Health Organization convened its first Technical Advisory Group on Behavioural Insights and Sciences for Health (Official)

Director-General of WHO declared that the COVID-19 pandemic has taught the world that public health agencies and experts need a better understanding of how people and societies behave and make decisions in relation to their health. WHO wants to ensure that such understanding and evidence inform every policy, guideline and programme. Following a global call, which attracted over 200 applications from 47 countries, some 21 advisers have been selected to represent a variety of countries and expertise in related disciplines, to design and implement policies and programmes, not only in terms of COVID-19, but also on public health in general. The creation of the technical advisory group is part of a new behavioural insights and sciences initiative, expected to give a more prominent role and louder voice to disciplines that have social and behavioural sciences in common, in the context of health. The establishment of the Advisory Group is in line with WHO's 13th Global Programme of Work for the 2019-2023 period, which aims at 1 billion more people benefitting from universal health coverage; 1 billion more people better protected from health emergencies; and 1 billion more people enjoying better health and well-being.

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

- South Korea has difficulties controlling a second wave of COVID-19, declaring the emergency to double its
 <u>critical-care hospital beds amid a severe shortage</u>, highlighting the strain of the pandemic on even well-equipped
 countries. The spike in serious cases, as older people make up an increasing proportion of patients within a
 broader resurgence, marks a sharp turn for a country that was seen as successful in controlling one of the early
 outbreaks of the novel coronavirus outside China.
- The use of drug Avigan for treating patients suffering from COVID-19 infection in Kuwait has been showing
 positive and encouraging results in more than ten days of use. The sources indicated that the rate of recovery
 would increase in the coming period, adding that there are currently requests from other hospitals that contain

COVID-19 wards for this medicine, especially with those who feel shortness in breath and require oxygen. The statement declared that the use of Avigan by the Ministry of Health came in accordance with the guidelines for its use provided by Japan and based on the recommendations of the World Health Organization (WHO). The announcement highlighted that the majority of patients who were given the medicine tested negative for COVID-19 virus within five days of treatment, instead of the usual ten days with the use of other medications.

- Pakistan appears to have dodged the worst of the pandemic, baffling health experts and dampening fears its crowded urban areas and ramshackle hospitals will be overrun. Following an initial surge, the number of infections has plummeted in recent weeks, with COVID-19 deaths hovering in the single digits each day, while neighboring India tallies hundreds of fatalities. Pakistanis have proposed numerous hypotheses for their country's seeming ability to weather the pandemic, crediting everything from the young population and the hot and humid climate to unproven claims of natural immunity. Its median age is only 22 and the coronavirus is known to disproportionately impact older people with prior health complications. Observers state that with only limited testing the true number of infections is likely considerably higher. One testing exercise in Lahore suggested that as many as seven percent of the City's population had been exposed to the virus. However, anecdotal evidence from hospitals across Pakistan supports the downward trend. Pakistan has a long history of failing to contain myriad infectious diseases such as polio, tuberculosis and hepatitis, while successive governments have underfunded its healthcare sector for decades. Many Pakistanis also live in crowded, multi-generational homes or packed apartment buildings that favor rampant virus transmission.
- A prison inmate in Thailand has tested positive for the coronavirus in the country's first confirmed locally transmitted case in 100 days. The infected man lived in Bangkok and worked as a DJ in several bars.
- Following the announcement of production in Bolivia of the first Russian drug approved for the treatment of COVID-19 and its purchase by mayoralties to deal with the pandemic, the <u>Bolivian Government warned that the importation</u> was approved only for the specific use of H1N1 influenza and it is not approved for COVID-19.
- Amid fears the flu season will place additional burdens on health system, authorities are keen to see tests, which can distinguish coronavirus from other seasonal illnesses, notably flu. On 4 September 2020, Swiss pharmaceuticals Roche declared that its cobas SARS-CoV-2 & Influenza A/B test had won Emergency Use Authorization approval from the US Food and Drug Administration (FDA). The firm added the test would also be available for use in countries where the European CE certification mark applies. The test uses nasal or nasopharyngeal swab samples taken from people suspected of having a respiratory infection and will be used on fully automated cobas 6800 and 8800 diagnostic machines, which are common in hospitals and can carry out large-volume testing. According to Roche, for this, test the machines can provide up to 96 results in roughly three hours to offer "the fastest time to results with the highest throughput" for testing of SARS-CoV-2 (coronavirus) and Influenza A/B strands.

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

- A new study, from the University of Chicago found that people who had low levels of vitamin D in the year before getting tested for coronavirus were 60% more likely to test positive for the virus compared to those with higher levels of the vitamin D. And those who had been vitamin D deficient, but got treated, were less likely to test positive for COVID-19; however the study authors warn that it will take clinical trials to prove whether boosting levels of the vitamin will help prevent infection.
- The zoonotic origin of the SARS-CoV-2 pandemic is still unknown. Animal experiments have shown that non-human primates, cats, ferrets, hamsters, rabbits and bats can be infected by SARS-CoV-2. In addition, SARS-CoV-2 RNA has been detected in felids, mink and dogs in the field. In a study published on 1 September 2020 in the *bioRxiv*, researchers describe an in-depth investigation of outbreaks on 16 mink farms and humans living or working on these farms, in the Netherlands, using whole genome sequencing. The authors conclude that the virus was initially introduced from humans and has evolved, most likely reflecting widespread circulation among mink in the beginning of the infection period several weeks prior to detection. Now, despite enhanced biosecurity, early warning surveillance and immediate culling of infected farms, there is ongoing transmission between mink farms with three big transmission clusters with unknown modes of transmission. In addition, the investigators describe the first animal to human transmissions of SARS-CoV-2 in mink farms.
- Researchers reported in Clinical Infectious Diseases that HIV and tuberculosis were independently associated with an increased risk for COVID-19 mortality in a South African study that included more than 22,000 patients with the new disease. The researchers conducted a population cohort study that included data from more than 3.4 million adults who attended public health sector facilities in Western Cape, South Africa. The investigators analyzed the connections between HIV, TB and COVID-19 mortality between 1 March 2020, and 9 June 2020. They included active patients, defined as patients with one or more visits in the 3 years before March 2020, laboratory-diagnosed COVID-19 cases and hospitalized COVID-19 cases. The researchers found that, among patients with HIV who were on ART, tenofovir disoproxil fumarate was associated with lower COVID-19 mortality compared with other antiretrovirals. Other studies have found that COVID-19 outcomes are not worse among patients with HIV.

- Researchers at Google and Oxford University reported that contact tracing apps can sharply reduce the spread of the novel coronavirus even when only a few people use them, according to statistical modeling by the Alphabet Inc unit and Oxford's Nuffield Department of Medicine. An app used by 15% of the population together with a well-staffed contact-tracing workforce can lead to a 15% drop in infection rates and an 11% drop in COVID-19 deaths. With a 15% uptake of contact tracing apps alone, the researchers calculated an 8% reduction in infections and 6% reduction in deaths. The findings were based on data from a digital tracing system similar to one jointly developed by Google and Apple Inc.
- Researchers in the United States have demonstrated that a drug originally developed as a treatment for cancer exhibits antiviral activity against severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), the agent that causes coronavirus disease 2019 (COVID-19). The drug, which is called masitinib, potently inhibited the main viral protease 3CLpro that SARs-CoV-2 relies on for infection to proceed once the viral genome has entered the host cell cytoplasm. The study showed that masitinib directly bound to the active site of 3CLpro and blocked its ability to cleave the viral polyprotein into the individual proteins that are needed for infection to be successful.
- A study, published in the <u>Journal of Pediatrics</u> revealed that <u>cchildren may still have the potential to transmit the novel coronavirus even if they have a measurable immune response, since virus and antibodies can coexist in <u>young patients</u>. The U.S. National Children's Hospital signs this research focused on how long it takes pediatric patients to remove the virus from their system and when they start producing antibodies, indicating that the virus and antibodies can coexist in young patients. The researchers found that patients aged 6 to 15 years took longer to eliminate the virus (median of 32 days) compared to patients aged 16 to 22 years (18 days). Girls in the 6 to 15 year old group also took longer to eliminate the virus than boys (median of 44 days for them compared to 25.5 days for men).</u>
- Johnson & Johnson's potential coronavirus vaccine prevented severe illness in a small group of Syrian golden hamsters, the company has announced. J&J researchers vaccinated hamsters with a single dose and then exposed the rodents to the virus four week later. According to J&J, the vaccine elicited neutralizing antibodies, which researchers believe are necessary to build immunity to the virus, in hamsters who got the vaccine. Vaccinated hamsters also appeared to lose less weight than unvaccinated hamsters and did not experience severe clinical disease, like pneumonia and mortality. The results were published in the medical journal Nature Medicine.
- Researchers at Queen's University Belfast in UK reported that they have confirmed that an upset stomach is a symptom of COVID-19 in children, and revealed it appears to be a key sign of the disease. The study took place between 6 April and 3 July and involved more than 990 children of healthcare workers from across the UK aged between two and 15. None had been admitted to hospital with Covid-19. The team found that 68 children (6.9% of the total) had antibodies for the disease, suggesting they had had COVID-19, and half of these reported having had symptoms. Some symptoms were particularly common, with 31% of the 68 children reporting fever, 18% reporting headache and 19% reporting gastrointestinal symptoms such as diarrhoea, vomiting and stomach cramps. For children without antibodies the figures were 11%, 4% and 3% respectively. While only 34 children were symptomatic in the study, researchers said the findings were important, not least as diarrhoea and vomiting were clear and obvious problems to spot.
- Hydroxychloroquine and chloroquine are approved to treat autoimmune diseases and to prevent and treat malaria in the United States. Earlier in 2020, these drugs were widely reported to be of potential benefit in the prevention and treatment of COVID-19; however, current data indicate that the potential benefits of these drugs do not outweigh their risks. Although federal guidelines now recommend against using hydroxychloroquine or chloroquine for the treatment or prevention of COVID-19, dispensing policies and restrictions vary significantly by state. A study published on 3 September 2020 in the Morbidity and Mortality Weekly Report shows that new prescriptions by specialists, who did not typically prescribe these medications (defined as specialties accounting for ≤2% of new prescriptions before 2020), increased from 1,143 prescriptions in February 2020 to 75,569 in March 2020, an 80-fold increase from March 2019. The findings indicate that attention to updated clinical guidance, especially by nonroutine prescribers, will help safeguard supplies and ensure safe use of hydroxychloroquine and chloroquine for patients with approved indications.
- Patients who have survived even from relatively mild COVID-19 are experiencing health challenges that may last for weeks or even months. Some individuals, who survive other infectious diseases caused by coronavirus, including COVID-19, have named them COVID "long-haulers." More information is now emerging from the first detailed patient survey of post-COVID syndrome, also known as Long COVID. The survey is unique because has been issued by a group of individuals, who are struggling with the syndrome themselves. These scientists, who belong to the online Body Politic COVID-19 Support Group, decided to take matters into their own hands. The scientists know what sort of questions to ask, as well as online access to hundreds of long-haulers to whom they could pose the questions. The citizen scientists' group, known as the Patient-led Research for COVID-19, reside in the United States, Canada, and England, and are working on their patient-led research, and are now putting the final touches on a follow-up survey that will get underway in the next few weeks.

Domestic Events of Interest

Canada – Prime Minister says safer drug supply, not decriminalization, is focus of federal policy (Media)

On 2 September 2020, The Prime Minister of Canada stated that his government is moving forward aggressively on ensuring a supply of pharmaceutical alternatives to Canada's toxic street drugs as overdose deaths spike across the country. The British Columbia Premier and the Public Prosecution Service of Canada join those calling for alternatives to criminal penalties for simple possession cases. From January to July, at least 909 people died of illicit drug overdoses in B.C. A research fellow with the Canadian Institute for Substance Use Research at the University of Victoria noted that the federal government has a limited role in safe supply, due to the provision of health services is a provincial responsibility.

<u>Canada - Isolation intensifying risk factors for suicide</u> (Media)

According to the Canadian Mental Health Association, a new national survey reveals warning signs that more Canadians thought about suicide in 2020 than in 2019. The study confirms that in 2019, 2.5% of Canadians reported having had suicidal thoughts versus 6% in May of 2020 – 1 in 20 Canadians had recently experienced thoughts or feelings of suicide. The Executive Director at Waterloo Region Suicide Prevention Council (WRSPC) has stated that supporting suicide awareness, intervention, and prevention is a role everyone should consider, especially with current pandemic situation. The WRSPC Director indicated that COVID-19 forced them to explore a virtual environment authorities had not considered before. Because of this, they may be able to access individuals who were not previously engaged because of the stigma that is attached to mental illness and suicide.

Prince Edward Island - Influenza vaccine ordered early to avoid dual outbreak of flu and COVID-19 (Media)

Chief Public Health Officer of Prince Edward Island has stated that influenza vaccine is coming to the province earlier than usual in 2020 in the hopes of avoiding the flu causing even more problems during the COVID-19 pandemic. The vaccine will be also available in mist form in 2020.

International Events of Interest

IHR Announcement- Poliomyelitis (Circulating vaccine-derived poliovirus and Wild Poliovirus) – Global update Between 1 January and 3 September 2020, there have been several countries affected by poliomyelitis including circulating vaccine-derived poliomyelitis type 1 and 2 (cVDPV1 and cVDPV2) and wild poliovirus type 1 (WPV1) globally. This announcement is a weekly update on the status of cVDPV and WPV1 in these affected countries. Between 27 August and 3 September 2020, there have been three WPV1 in Acute Flaccid Paralysis (AFP) cases and six WPV1 positive environmental samples reported in Pakistan and Afghanistan. Moreover, during the same period, there have been 17 cVDPV2 in AFP cases and four cVDPV2 positive environmental samples reported in Afghanistan, Pakistan, Cameroon, Chad, and Democratic Republic of the Congo.

Democratic Republic of Congo - Ebola sickens 1 more in DRC outbreak (Media)

One more Ebola case has been reported in the Democratic Republic of the Congo (DRC) Equateur province outbreak, lifting the overall total to 110. No new deaths have been reported, keeping the outbreak's fatality count at 47.

Brazil - Brazil has more than 7,000 cases of measles in 2020 (Media)

While most of the attention on infectious diseases in Brazil is focused on the rapid rise in COVID-19 cases in the country, other outbreaks are making their mark in the largest South America country. This include more than 7,000 cases of measles in 2020. According to the Paulista Association of Medicine, 21 States had cases of measles in 2020 and five of them are with active circulation of the virus. Pará stands out in this sense, with 5,025 cases (65%) and the highest national incidence (91.15 infected per 100,000 inhabitants). States without confirmed cases for 90 days or more are: Alagoas, Amazonas, Bahia, Ceará, Goiás, Maranhão, Mato Grosso, Mato Grosso do Sul, Minas Gerais, Pernambuco, Rio Grande do Sul, Rondônia, Santa Catarina, Sergipe, Tocantins and Distrito Federal.

Researches, Policies and Guidelines

Brazil - Study identifies how infection by Zika virus during pregnancy can affect the fetal brain (Media)

Zika virus infection during pregnancy can cause severe abnormalities in the fetus, including malformations such as microcephaly. In a small proportion of cases, the disease may lead to miscarriage and perinatal death. A network of more than 30 Brazilian researchers set out to find the causes of these problems with the support of São Paulo Research Foundation (FAPESP) and obtained important results after half a decade of hard work. A paper describing their findings has been published in the journal <u>Science</u> <u>Signaling</u>. The study investigate the molecular basis of congenital Zika syndrome (CZS) in humans, using a systems biology approach to integrate transcriptomic, proteomic, and genomic data from the post-mortem brains of neonates with CZS. The authors observed that collagens were greatly reduced in

expression in CZS brains at both the RNA and protein levels and that neonates with CZS had several single-nucleotide polymorphisms in collagen-encoding genes that are associated with osteogenesis imperfect and arthrogryposis.

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

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