Exton, Adam (HC/SC)

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To: gphin / rmisp (PHAC/ASPC)

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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 01 November 2020 at 19:00 EDT, a total of 236,841 cases have been recorded in Canada including 10,179 deaths. The cases are reported in Newfoundland and Labrador (291 confirmed cases, 4 deaths), Prince Edward Island (64 confirmed cases), Nova Scotia (1,111 confirmed cases, 65 deaths), New Brunswick (344 confirmed cases, 6 deaths), Quebec (106,981 confirmed cases, 6,272 deaths), Ontario (76,707 confirmed cases, 3,145 deaths), Manitoba (6,034 confirmed cases, 75 deaths), Saskatchewan (3,218 confirmed cases, 25 deaths), Alberta (27,664 confirmed cases, 323 deaths), British Columbia (14,381 confirmed cases, 263 deaths), Yukon (23 confirmed cases, 1 death), Northwest Territories (10 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 November 02, 2020, 12:01 GMT, there were 46,931,907 cases of COVID-19 and 1,206,763 deaths reported globally. Top 10 countries with the highest number of cases, by alphabetical order are: Argentina (1,173,533 cases, 31,140 deaths), Brazil (5,545,705 cases, 160,104 deaths); Colombia (1,083,321 cases, 31,515 deaths); France (1,413,915 cases, 37,019 deaths); India 8,230,711 cases, 122,642 deaths); Mexico (929,392 cases, 91,895 deaths); Russia (1,655,038 cases, 28,473 deaths); Spain (1,264,517 cases, 35,878 deaths); United Kingdom (1,034,914 cases, 46,717 deaths); United States (9,475,872 cases, 236,501 deaths).

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

- On 31 October 2020, Council of Chief Medical Officers of Health issued a Statement, indicating that goals of Canada's COVID-19 pandemic response are to minimize serious illness and overall deaths, while minimizing societal disruption. Council of Chief Medical Officers of Health are asking all Canadians, individuals, organizations and communities to continue to protect themselves and those most at risk are the same across the country. We need to adopt prevention strategies that are sustainable in the longer term, and support all factors that influence health.
- On 01 November 2020, the Chief Public Health Officer issued a statement emphasizing that as hospitalizations and deaths tend to lag behind increased disease activity by one to several weeks, the concern is that we have yet to see the extent of severe impacts associated with the ongoing increase in COVID-19 disease activity. The official reminded to continue with regular health visits and get the influenza (flu) shot. Canada needs a collective effort to sustain the public health response through to the end of the pandemic, while balancing the health, social and economic consequences.
- On 01 November 2020, Minister of Public Safety and Emergency Preparedness, and the Minister of Health, announced the Government has extended the Mandatory Isolation Order and temporary travel restrictions for all non-US travellers, unless their travel is for non-discretionary reasons, to November 30, 2020. The government has also made some practical adjustments to provisions allowing limited Canada-U.S. cross-border travel, in a few specific circumstances. Effective October 31, 2020, residents of Campobello Island, New Brunswick; Stewart, British Columbia; Northwest Angle, Minnesota; and Hyder, Alaska will be exempt from mandatory 14-day quarantine only to access the necessities of life from the nearest Canadian or American community. In addition, students from Canada and the U.S. who regularly cross the border to attend school, along with one driver, and children who are subject to shared custody arrangements, along with one parent, are exempt from mandatory 14-day quarantine. In addition, the government is allowing limited exemptions to mandatory quarantine to enable COVID-testing pilot projects, in

coordination with provincial authorities. Anyone experiencing symptoms of COVID-19, or who has recently come into close contact with someone infected with COVID-19, should continue to quarantine or isolate for 14 days. At all Canadian ports of entry, border services officers will make the final determination of eligibility to enter Canada for non-citizens and non-permanent residents.

- Despite a partial lockdown imposed on Montreal on September 2020, the number of COVID-19 outbreaks in the city's schools has jumped by 20 to 93 since the week of 19 October, with the public health department ordering the closing of a school for two weeks starting on 29 October 2020. Hospitalizations due to the pandemic respiratory illness climbed by 17 to 156 in Montreal, but the number of intensive-care stays decreased by nine to 26. What is more, the alleged reproduction number of the coronavirus has risen from below 1 to 1.06, signalling an increase in community transmission. In total, Montreal is battling 236 outbreaks, up by about 30 from a week ago. In addition to those in schools, there are 25 clusters in daycares, 62 in the workplace, 14 in community settings and 23 in health-care institutions.
- The COVID-19 pandemic has caused the closure of at least 20 schools on Saskatchewan First Nations, according to the Federation of Sovereign Indigenous Nations. The Federation expects more closures as case counts rise on 30 October 2020.
- Yukon has reported its first death from COVID-19 after an outbreak in the small community of Watson Lake. The Chief medical health said the person who died was "older" and had underlying health conditions.
- Agnico Eagle Mines Ltd. says another worker at its Meliadine gold mine in Nunavut has a presumptive positive case
 of COVID-19. The company stated the worker was tested on 28 October before flying to the mine site from Quebec.
 The test result came back positive, though the person had shown no symptoms. The presumptive case will be
 confirmed by follow-up testing in the worker's home province.
- On 30 October 2020, the Minister of Innovation, Science and Industry announced \$796,000 in funding from the
 National Research Council of Canada (NRC) through the Pandemic Response Challenge program, as well as
 challenge winners and new contracts under the Innovative Solutions Canada (ISC) Testing Stream. The NRC, under
 the Pandemic Response Challenge program that is aimed at specific COVID-19 gaps and challenges identified by
 Canadian health experts, is providing research and development funding to six collaborative projects. In addition, the
 Minister announced the latest Phase 1 recipients under the ISC Challenges program for two COVID-19 challenges
 launched in May 2020. If accepted into Phase 2, companies could receive up to \$1 million to develop a working
 prototype.
- On 30 October 2020, the Minister of Health, and the Minister of Digital Government, announced that the COVID Alert app has been updated to send notifications based on a more precise timeline. With this update, users who have tested positive for COVID-19 and have entered a one-time key from their respective public health authority will now have the option to enter the date of their symptom onset or their testing date. This will provide a better estimation of the period when they may have been most infectious to others. This will align more closely with current <u>public health</u> <u>guidance</u>, as individuals are likely to be most infectious from two days prior to symptom onset for symptomatic individuals.
- On 30 October 2020, the Minister of Labour and Member of Parliament for Hamilton West-Ancaster-Dundas, on behalf of the Minister of Health announced that the Government of Canada will invest \$2.5 million in a study that will help us better understand the rate of COVID-19 infection among international travellers. The study will also review the importance of public health measures for travellers and assess the benefits and risks of an airport-based COVID-19 testing and surveillance program. First initiated in September 2020, the Canadian International COVID-19 Surveillance Border Study is being conducted by McMaster HealthLabs (MHL) in partnership with Air Canada and the Greater Toronto Airport Authority. The funding from the Government of Canada, provided through a partnership between Health Canada and the Canadian Institutes of Health Research, will allow the MHL team to increase the number of participants to approximately 17,000, recruited from international travellers arriving at Toronto's Pearson Airport.
- On 30 October 2020, the Prime Minister announced over \$200 million in new funding to provide support to Indigenous peoples and communities. The funding includes: \$120.7 million to help Indigenous early learning and child care facilities safely operate during the pandemic; \$59 million for First Nations to adapt their on reserve community infrastructure; \$25.9 million to provide immediate support to Indigenous post-secondary institutions in 2020-21.
- The Winnipeg Metro Region is being moved to the red or critical restriction level. The Manitoba's chief public health officer, also announced that the rest of the province, which includes the Southern Health Region, the Prairie Mountain Health Region, and the Interlake-Eastern Health Region, will all be moved to orange or the restricted level on the pandemic response system. This will also come into effect on 02 November, and these regions are joining the Northern Health Region which is already at this level.
- The government released forecasts on 30 October indicating that at current rates of socializing in person, Canada could see COVID-19 case counts increase to 8,000 per day come early December. New federal projections suggest that Canadians need to cut a quarter of their contacts to keep the COVID-19 outbreak under control, as several provinces wrestle with how far their lockdown measures should go to reinforce that message.

• The federal government has lifted the 14-day quarantine requirement upon entry to Canada for residents of several isolated border communities. The new rules apply to residents of Stewart, B.C., Hyder, AK., Campobello Island, N.B. and the Northwest Angle of Minnesota. Under the changes, residents of those communities will be able to cross the border in order to "access the necessities of life (e.g. food, medical services) from the nearest Canadian or American Community. The change does not include Point Roberts, a Washington state community of about 1,300 people just south of Metro Vancouver that also lacks road access to the U.S. and has been pleading for an exemption.

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

- The International Air Transport Association has claimed only 44 Covid cases have been transmitted during a flight out of 1.2 billion passengers. The figures translate to one case for every 27 million passengers, or 0.0000036%. IATA admitted there was no precise way to establish the exact number of aircraft transmissions, which published data occurred before the widespread wearing of face masks on aircraft and in airports. New insight into why the numbers are so low emerged following research conducted by Airbus, Boeing and Embraer. All three plane makers claimed aircraft airflow systems control the movement of particles in the cabin, limiting the spread of viruses.
- A team of pulmonologists has synthesized the clinical and imaging characteristics of COVID-19 in children, and has devised recommendations for ordering imaging studies in suspected cases of the infection. The review in Pediatric Pulmonology by Researchers from Boston Children's Hospital, and colleagues also included useful radiographic findings to help in the differential diagnosis of COVID-19 pneumonia from other respiratory infections. The researchers reported that current recommendations from the American College of Radiology do not include chest computed tomography (CT) or chest radiography (CXR) as a upfront test to diagnose pediatric COVID-19, but they may still have a role in clinical monitoring, especially in patients with a moderate to severe disease course. The benefits of utilizing radiologic evaluation, such as establishing a baseline for monitoring disease progression, must be balanced with potential drawbacks, which include radiation exposure, and reduced availability of imaging resources owing to necessary cleaning and air turnover time.
- Regeneron Pharmaceuticals said that it has paused a clinical study of its antibody drug to treat some of the sickest COVID-19 patients because of a potential safety concern. Regeneron said it is pausing enrollment of hospitalized COVID-19 patients receiving mechanical ventilation or intense oxygen after the independent monitoring committee observed "a potential safety signal and an unfavorable risk/benefit profile at this time." The monitoring board recommended collecting additional data on the patients already enrolled. The pause does not impact other studies of Regeneron's antibody drug, which is under consideration for emergency use authorization in mild-to-moderate outpatients at high risk for poor outcomes.
- On 30 October 2020, the Centers for Disease Control and Prevention (CDC) issued a Framework for Conditional Sailing Order that introduces a phased approach for the safe and responsible resumption of passenger cruises. The Order establishes a framework of actionable items for the cruise line industry to follow so they can resume passenger operations with an emphasis on preventing the further spread of COVID-19 on cruise ships and from cruise ships into communities, and to protect public health and safety. The Order applies to passenger operations on cruise ships with the capacity to carry at least 250 passengers in waters subject to U.S. jurisdiction.

IHR Announcement - WHO Medical Product Alert N° 6/2020 regarding falsified Fluzone® Quadrivalent Influenza Vaccine identified in the WHO Region of the Americas

Please find an update to a WHO **Medical Product Alert N° 6/2020** regarding falsified Fluzone® Quadrivalent Influenza Vaccine identified in the WHO Region of the Americas. Three different falsified batches have been identified to date.

IHR Announcement - Additional health measures in relation to the COVID-19 outbreak 30 October 2020 As of 30 October 2020, there has been no new State Party that reported on additional health measures that significantly interfere with international traffic since the last announcement published on 23 October 2020. A total of 194 out of 196 States Parties reported to date with Mexico and Nicaragua not reporting any measure. Moreover, 14 countries provided updates to their previously implemented measures. The distribution by WHO Regions is as follows: AFR: 0 (0 updates), AMR: 0 (1 updates), EMR: 0 (0 updates), EUR: 0 (13 updates), SRO: 0 (0 updates), WPR: 0 (0 updates).

IHR Announcement - Statement on the fifth meeting of the International Health Regulations (2005) Emergency Committee regarding the coronavirus disease (COVID-19) pandemic

The WHO Assistant Directors-Generals for Emergency Response and for Emergency Preparedness and International Health Regulations provided an overview of the current context and an update on the implementation of the 1 August 2020 temporary recommendation. WHO continues to assess the global risk level of the COVID-19 pandemic as very high. The Committee expressed strong appreciation for WHO's leadership and activities throughout the global response. In particular, the Committee appreciated WHO's critical role in developing evidence-based guidance and recommendations; providing countries with technical assistance and operational support; communicating clear information and addressing misinformation; and convening the Solidarity Trials and the Access to COVID-19 Tools (ACT) Accelerator. The Committee commended WHO's sustained efforts to strengthen national, regional, and global responses to the COVID-19

pandemic. After ensuing discussion, the Committee unanimously agreed that the pandemic still constitutes an extraordinary event, a public health risk to other States through international spread, and continues to require a coordinated international response. As such, the Committee considered the COVID-19 pandemic to remain a public health emergency of international concern and offered advice to the Director-General. The Director-General determined that the COVID-19 pandemic continues to constitute a PHEIC. He accepted the advice of the Committee to WHO and issued the Committee's advice to States Parties as Temporary Recommendations under the IHR (2005). The Emergency Committee will be reconvened within three months, at the discretion of the Director-General.

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

- The World Health Organization warns nearly 18 million people in Yemen are unable to get treatment for deadly diseases because years of war, economic distress and a chronic shortage of money have led to a collapse of the country's healthcare system. More than five years of escalating conflict have devastated Yemen's economy and ability to provide enough food and medical care to keep its population healthy. World Health Organization officials report only half of the country's health facilities are fully functioning. And those that remain open suffer from severe shortages of qualified staff, essential medicines and supplies. WHO spokesman stated that for three years, appalling socio-economic conditions in Yemen have caused a spiraling of deadly diseases including the worst cholera outbreak in modern times, as well as epidemics of diphtheria, dengue, measles and malaria.
- There is a real risk of cross-border coronavirus transmission through the \$1.5 trillion global agri-food market, according to a scientist who has studied the phenomenon. It is possible that contaminated food imports can transfer the virus to workers as well as the environment, stated an infectious diseases physician at Singapore's National University Hospital. Frozen-food markets are thought to be one harbor in the first part of a chain of transmission. The expert who also chairs the Global Outbreak Alert and Response Network, declared that it is not to be confused with supermarket shelves getting infected. It's really at the marketplace, before there's been a lot of dilution. In recent months China has been vocal about finding traces of the SARS-CoV-2 pathogen on packaging and food, raising fears that imported items are linked to recent virus resurgences. Beijing has ordered a range of precautionary steps, creating major disruptions with its trading partners.
- On 31 October 2020, <u>UK Prime Minister declared the latest stay-at-home rules for England to at least December 2.</u> The UK Prime Minister stressed that a complete lockdown was the only answer to prevent the overrunning of the country's state-funded National Health Service (NHS), which would be a "medical and moral disaster" beyond the raw loss of life. The new rules, which will be debated in the Parliament before a vote on 4 Nov., will be enforced from midnight on 5 Nov. The new restrictions apply across England, the largest of the four nations that make up the United Kingdom, with the other three devolved nations of Scotland, Wales and Northern Ireland already under varying degrees of complete lockdowns.
- On 01 November 2020, <u>Israel began human trials for its COVID-19 vaccine candidate</u> which, if successful, could be ready for the general public by the end of next summer. Eighty volunteers will initially take part in the trial that will be expanded to 960 people in December. Should those trials succeed a third stage with 30,000 volunteers is scheduled for April/May.

PAHO - Indigenous and Afro-descendant voices must be front and center of COVID-19 response in the Americas (Official)

On 30 October 2020, Deputy Director of the Pan American Health Organization stated that efforts must be stepped up to ensure a strong and coordinated response with indigenous organizations and leaders. According to her, the Region of the Americas is characterized by its rich multicultural and multiethnic heritage, yet indigenous and Afro-descendent populations are often subject to discrimination and exclusion, leading to health inequities. Representatives from PAHO, Ministries of Health and indigenous groups proposed a series of actions in the meeting to ensure that the unique needs of indigenous populations are integrated in country COVID-19 response plans. These include guidelines for quarantine and physical distancing that take into account cultural traditions and customs; the availability of information and risk communications material in indigenous languages; greater recognition of the social and environmental determinants of health; and increased and systematic collection of disaggregated data to identify priorities and monitor actions. The high-level meeting is the first of two virtual meetings that convenes public health experts from Ministries of Health of the Americas with representatives from Indigenous and Afro-descendent groups to propose intercultural strategic approaches as a central component of COVID-19 response. The second, High-Level meeting on the impact of COVID-19 on Afro-descendant populations in the region will bring together Afro-descendent organizations and leaders on 17 November to discuss the specific needs of this population relating to COVID-19 response.

ECDC - The challenge of winter during COVID-19 for poor families (Official)

On 30 October 2020, European Center for Disease Prevention and Control stated that the colder months bring challenges for less affluent households to heat their homes adequately, thus increasing their exposure to health risks. Households need to anticipate possible restrictions on movement or lockdowns in addition to home schooling and home office work. This will increase the time spent in the home and further enhance the impact of low indoor temperatures as well as

potential indoor air pollution, especially for low-income families. Good ventilation of indoor environments will add to people's protection, particularly at this time of the year. Local authorities can increase their awareness of the distribution of housing problems related to thermal comfort, energy use and crowding, all of which affect health and well-being for disadvantaged households and may contribute to increased transmission risk during lockdown periods.

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

- The research published on 30 October in the journal <u>Occupation and Environmental Medicine</u> based on a study of 104 adults who were working at a grocery store in the Boston area in May, when they underwent mandatory testing over three days. <u>According to it</u>, <u>workers at a grocery store in the U.S. tested positive for the novel coronavirus at a rate well above the rest of their community.</u> Use of gloves and masks didn't seem to make a difference in how likely a worker was to test positive. Neither did social distancing, using public transit or believing COVID-19 to be a greater or lesser threat than others. What did matter, the researchers found, was what the workers did, and how often their duties brought them into contact with shoppers. Workers who had "significant direct customer exposure" cashiers, cart attendants, supervisors and those working with fresh food were found to be five times more likely to test positive than the receivers, cleaners and stockers who rarely if ever interacted with customers. Only five of the 21 workers who tested positive were displaying symptoms of COVID-19 at the time. With the vast majority of cases both asymptomatic and involving personnel who interact with shoppers, the researchers suggest that this puts both other workers and the public at large at risk.
- In a recent study researchers in British Columbia tested for <u>antibodies in a small sample of Vancouver residents earlier this year, they found that less than one per cent had definitely been exposed to COVID-19.</u> That was a surprise, especially at a time when the virus was not spreading widely in the city. But when the scientists delved further, their conclusions were striking. The authors found a large proportions of people who seemingly had never come in contact with the coronavirus, they said, had antibodies that reacted to parts of the bug that recognized some of the "antigens" in SARS-CoV-2 that switch on a body's immune system. The B.C. Children's Hospital scientist who headed the study concluded this information could have implications for the effectiveness and safety of vaccines.
- A study lead by an immunologist of the Complutense University of Madrid found that the DTP vaccine
 (Diphtheria, Tetanus and Whooping Cough) which is administered to children can protect infants against covid19, as it can cause cross-immunity. The study conducted using computational methods identified, that there is
 extensive cross immunity between Sars-CoV-2 and the antigens present in the DTP vaccine, the protective
 response against the new virus was made through cd8 and CD4 T cells, so children will not be the first to receive
 the coronavirus vaccine.
- Veterinary researchers at the University of Chile conducted a study that confirmed that humans infected their cats with Covid-19. The scientists sequenced the virus and showed that there was a transmission from one of the humans to the cats. Something super important is that to date, there is no evidence that the cat transmits the virus to humans, besides that the current pandemic spreads through humans. The authors reported that there are fewer than 100 positive pet cases. Cats in general show no clinical signs, are asymptomatic and do very mild, for example, may feel lethargic, depressed, may have a little cough, in our study in cats 2 out of 3 were asymptomatic and the other had signs of coughing and was decayed for a couple of days.
- Health officials have said it is too early to know the significance of a new coronavirus variant identified by researchers, which accounts for the majority of new Covid-19 cases in Ireland. The new variant was initially identified among Spanish farm workers, and has spread rapidly through much of Europe since the summer, according to new research published by an international team of scientists on 29 October 2020. Because each variant has its own genetic signature, it can be traced back to the place it originated. The research said the new variant of the virus now accounted for 60 per cent of new cases in Ireland, and 80 per cent of those in Spain and the UK.
- Studies have confirmed that vitamin D deficiency is associated with various health problems, such as increased risk of cardiovascular disease, diabetes and cancer. In addition, researchers have also found that people who are deficient in vitamin D are more likely to develop COVID-19. A new study shows that more than 80% of patients infected with Wuhan pneumonia (new coronavirus disease, COVID-19) have insufficient vitamin D in their blood. A study published in the Journal of Clinical Endocrinology and Metabolism showed that 82.2% of the 216 Wuhan pneumonia patients in a hospital in Spain were vitamin D deficient, and the vitamin D content of men was lower than that of women. The researchers also pointed out that COVID-19 patients with low vitamin D content also have increased serum inflammation indicators such as ferritin index, which is related to a poor prognosis. Researchers recommend vitamin D therapy for patients because this method may be beneficial to both the musculoskeletal and immune system.
- According to a new study published in *The New England Journal of Medicine*, COVID-19 (coronavirus) patients
 who were administered a novel antibody had fewer symptoms and were less likely to require hospitalization or
 emergency medical care than those who did not receive the antibody. The multisite, Phase II clinical trial tested
 three different doses of LY-CoV555, a monoclonal antibody derived from the blood of a recovered COVID-19

patient. While the trial is ongoing, results from the interim analysis indicated a reduced viral load in outpatients with mild to moderate cases of COVID-19 at the 2,800-milligram dosage level, along with reduced rates of hospitalization and emergency medical care among patients at all dosage levels.

- Researchers at Beth Israel Deaconess Medical Center are testing a new approach to fighting COVID-19, using a
 repurposed antiviral AIDS drug for at-home treatment during the first days of symptoms in hopes of slowing the
 virus early and heading off hospitalization, intensive care, and death. The nationwide clinical trial is being led
 Harvard Medical School and Beth Israel Deaconess Medical Center, along with investigators at Vanderbilt
 University and the University of Colorado. They are hoping to enroll 600 volunteers with early COVID-19
 symptoms for the study to see whether daily doses of Kaletra, a widely used AIDS drug that combines the
 antiretrovirals lopinavir and ritonavir, can reduce the number of COVID-19 cases that become serious enough to
 require hospitalization.
- In rapidly spreading epidemics such as the current coronavirus pandemic, it is usually expected that a majority of
 the population will be infected before herd immunity is achieved and the epidemic abates. The estimate of when
 the threshold for this is reached is usually based on models that assume all individuals in a population are
 identical. Researchers at the Max Planck Institute for the Physics of Complex Systems in Dresden have used a
 new model to demonstrate that herd immunity can be achieved at a lower threshold if some individuals are more
 easily infected than others.
- The University of Oxford will take part in a new pilot scheme to assess the use of Lateral Flow Tests (LFTs), a new COVID-19 test designed to identify asymptomatic individuals with the virus. The Lateral Flow Test (LFT) is one of a number of new testing technologies for COVID-19 currently being trialed across the UK. It is hoped it will help identify those most at risk of spreading COVID-19 (those who are infectious, but not aware of this) and enable them to alter their behavior accordingly, thereby breaking the chains of transmission and reducing the infection rate. The pilot scheme, developed by Oxford in partnership with the Department of Health and Social Care, Public Health England and Durham University, will help us understand how best to use the technology and how it could be operationalised in the real world as part of broader COVID-19 testing strategies beyond the polymerise chain reaction (PCR) test.

Domestic Events of Interest

Canada, ON - Salmonella outbreak at restaurant in Sarnia under investigation (Media)

A salmonella outbreak is being investigated by Lambton Public Health (LPH). The outbreak is in relation to people who recently ate at the Barakat Restaurant in Sarnia between 21 – 29 October 2020. There are currently four confirmed cases of salmonella involving guests who reportedly ate at Barakat between those dates. LPH is following up with others who became ill after eating at the same restaurant. The owners of Barakat are cooperating with LPH and have voluntarily shut their restaurant for the time being to prevent ongoing risk.

International Events of Interest

Poliomyelitis (Circulating vaccine-derived poliovirus and Wild Poliovirus) - Global update

Between 1 January and 28 October 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 22 and 28 October 2020, there have been no WPV1 in Acute Flaccid Paralysis (AFP) cases and 20 WPV1 positive environmental samples reported in Afghanistan and Pakistan. Moreover, during the same period, there have been 57 cVDPV2 in AFP cases and 2 cVDPV2 positive environmental samples reported in Afghanistan, Pakistan, Cameroon, Chad, Côte d'Ivoire, Democratic Republic of the Congo, Mali, Nigeria, and South Sudan.

United Kingdom - A bacterial virus helped the spread of a new Salmonella strain (Media)

Salmonella is associated with a large number of cases of foodborne infection resulting in diarrhea and in some cases severe complications. Half of all Salmonella infections in the European Union are linked to pigs, and a new strain called ST34 is dominant in this livestock animal. ST34 has now spread in pig populations worldwide and is pandemic. New strains are known to have emerged repeatedly since surveillance records began over 60 years ago. The ST34 strain is a type of Salmonella called Typhimurium, which accounts for a quarter of all Salmonella infections. In the UK over half of all Typhimurium infections are now caused by the ST34 strain. Typhimurium has been increasing as a proportion of all Salmonella infection for more than a decade, largely due to the emergence of this new strain.

Netherlands - Avian flu threat looms large in EU after cases detected in Netherlands (Media)

The detection of several cases of avian influenza in the Netherlands has set the EU on red alert for the possibility of spread elsewhere, leaving the country itself on 'high alert' and preparing a mass culling of animals. According to media reports, it is this highly pathogenic strain of avian flu that was diagnosed at a poultry farm in the Netherlands on 29 October. The diagnosis comes after the discovery of the virus in two wild mute swans last week. A mass culling of 35,700 animals is now to be carried out by the Dutch Food and Consumer Product Safety Authority in an attempt to prevent the

spread of the virus, according to a statement on the government website. The statement adds that there are nine other poultry farms in the immediate vicinity of the farm, which are currently undergoing sampling and examination for avian flu. In addition, there are also 25 other poultry farms in the 10-km zone around the farm, and that transport ban has been applied to this zone. The risk for Dutch commercial poultry farming of becoming infected with highly pathogenic avian influenza (HPAI) has now been rated as high, especially in areas with many wild waterfowl, according to an analysis by Wageningen Bioveterinary Research (WBVR) this month.

Germany - Schistosomiasis case reported in Germany, Travel history to Corsica (Media)

According to the reports on 30 October 2020, officials in Munich informed on a case of urogenital schistosomiasis in a 49-year-old German man with no history of travel outside the European continent. The case presented with symptoms of macrohematuria (gross blood in the urine) this past summer and was diagnosed with Schistosoma haematobium/S. bovis hybrid. While he had no travel history outside Europe, he did travel to Corsica Island, southeast of mainland France twice, in 2019 and 2013. An outbreak of schistosomiasis was first reported in Corsica in 2014. However, he did not swim in the same river that was linked to the previous outbreak (Cavu River). He did bath in the Solenzara River, which is not connected to the Cavu. Officials say the parasite strain in this case is the same as identified during the previous outbreak, suggesting the transmission in Corsica is ongoing.

Nigeria - At Least 15 Persons die from Mysterious Disease in Delta (Media)

On 01 November 2020, the state Commissioner for Health confirmed in an interview that at least 15 people have died mysteriously within the last two weeks in Ute Okpu and Idumesa communities in Ika North East Local Government Area of Delta State. The official noted that he already led a team of public health officials including the representative of the World Health Organisation in the state to the affected communities with unravelling the mysterious disease. According to the commissioner, there is a high suspicion of viral haemorrhagic fever, or drug intoxication. The test results will give clearer information on the disease and will lead to the next line of action, he added.

Researches, Policies and Guidelines

Study- Wistar creates a new synthetic DNA vaccine against Powassan virus (Media)

Scientists at The Wistar Institute have designed and tested the first-of-its-kind synthetic DNA vaccine against Powassan virus (POWV), targeting portions of the virus envelope protein. A rapidly reemerging tick-borne disease, POWV has been reported to be fatal in 10% of infected people with detrimental neurological consequences including encephalitis and meningitis. This new POWV vaccine candidate, described in a paper published today in <u>PLOS Neglected Infectious</u> <u>Diseases</u>, is one of many emerging infectious disease DNA vaccine discoveries being advanced by the Vaccine and Immunotherapy Center at The Wistar Institute. Unlike the widely recognized Lyme disease, POWV causes a little known, potentially deadly infectious disease that is transmitted through tick bites during fall and spring seasons. POWV is an RNA virus belonging to the flavivirus family, the same as Zika virus, but passed to people by ticks instead of mosquitoes.

<u>United States - Vaccine-preventable disease outbreaks were sustained at ICE detention centers</u> (Media)

More than a dozen U.S. Immigration and Customs Enforcement (ICE) detention centers experienced large, repeated outbreaks of vaccine-preventable illnesses in the last three years, according to a new study by researchers at UC San Francisco. Between 1 January 2017 – 22 March 2020, the researchers identified 1,280 cases of influenza, 1,052 cases of chickenpox, and 301 cases of mumps. There were 41 flu outbreaks, 26 chickenpox outbreaks, and 12 mumps outbreaks. Given how widespread the outbreaks were, researchers said federal authorities should offer vaccination to both adult and child migrants as soon as they are brought to the detention centers, which is not currently being done.

Japan - Tokyo 2020 Athletes' Village to have health base for COVID-19 infections (Media)

According to the media, a health-base is set to be established at the Athletes Village for the Tokyo 2020 Olympic and Paralympic Games in case of potential COVID-19 infection. A coronavirus countermeasures taskforce, formed of officials from the Japanese Government, Tokyo Metropolitan Government and Tokyo 2020, decided to implement a health base following their fourth meeting. The base, separate from the general clinic in the Village, will be responsible for monitoring athletes' health, selecting medical institutions to hospitalise those who contract the virus and organising transportation for patients. The panel also agreed to set up an "infectious disease control centre" in the Tokyo 2020 main operation centre. It is expected Authorities to announce policies for the Games by the end of the year, with other measures set to include a mechanism for lifting the entry ban on foreign tourists, which is currently in place for 159 countries and regions, a health-checking app, mandatory testing, health insurance and exclusive health centres for tourists.

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

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