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**Sent:** 2020-08-21 8:28 AM  
**To:** gphin / rmisp (PHAC/ASPC)  
**Subject:** GPHIN Daily Report (21 August 2020)  
**Attachments:** GPHIN Daily Report 20200821 IH2\_.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 20 August 2020 at 19:00 EDT, a total of 123,873 cases have been recorded in Canada including 9,054 deaths. The cases are reported in Newfoundland and Labrador (268 confirmed cases, 3 deaths), Prince Edward Island (44 confirmed cases), Nova Scotia (1,076 confirmed cases, 64 deaths), New Brunswick (186 confirmed cases, 2 deaths), Quebec (61,402 confirmed cases, 5,730 deaths), Ontario (41,048 confirmed cases, 2,793 deaths), Manitoba (796 confirmed cases, 12 deaths), Saskatchewan (1,590 confirmed cases, 22 deaths), Alberta (12,604 confirmed cases, 228 deaths), British Columbia (4,825 confirmed cases, 200 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 21 August 2020, 11:23 GMT, there were 22,891,681 cases of COVID-19 and 797,671 deaths reported globally. Top 10 countries with the highest number of cases, by alphabetical order are: Brazil (3,505,097 cases, 112,423 deaths); Chile (391,849 cases, 10,671 deaths); Colombia (513,719 cases, 16,183 deaths); India (2,910,032 cases, 55,002 deaths); Mexico (543,806 cases, 59,106 deaths); Peru (567,059 cases, 27,034 deaths); Russia (946,976 cases, 16,189 deaths); South Africa (599,940 cases, 12,618 deaths); Spain (404,229 cases, 28,813 deaths); United States (5,746,534 cases, 177,438 deaths).

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

- The [Canada's Chief Public Health Officer has issued a following statement](#) indicating that, as public health authorities and Canadians continue with their collective effort to limit the spread of COVID-19, health officials are closely monitoring disease activity indicators including daily case counts, number of cases hospitalised and the percentage of people testing positive in order to inform, adjust and adapt our actions as needed. Because COVID-19 in any age group can build a reservoir for the virus, people need to consider where the virus might spread next and continue with efforts to protect individuals and settings at higher risk for severe outcomes. Authorities are closely monitoring for increased incidence in older age groups and possible increases in hospitalisation or critical care admissions that could indicate a shift in transmission patterns.
- [In less than two weeks, a fifth OC Transpo operator has tested positive for COVID-19](#). The driver last worked in the afternoon and into the evening on 13 August. Health officials are also notifying anyone who may have taken those routes on 12 August to be on the look out for symptoms of the virus.
- [Thirteen employees who were sent home from the Olymel facility in Red Deer after a co-worker tested positive for COVID-19, have tested negative](#). One employee was at work on 10 August after having symptoms. The employee was immediately sent home, was tested for COVID-19 and got a positive test result.
- On 20 August, [the Ontario's Health Minister stated that the province is confirming 76 cases of the novel coronavirus, but reports information from a number of health units is missing due to an issue with their Integrated Public Health Information System](#).
- [Maple Leaf Foods Inc. reports, it has temporarily suspended pork exports to China after a few dozen workers at one of its plants tested positive for COVID-19](#). The Mississauga, Ont.-based company stated, it continues to have rigorous safety measures at the Brandon, Manitoba plant to prevent workplace transmission, and the plant continues to operate. It notes public health officials have stated there is no sign the coronavirus was spread in the

workplace. The company indicates it voluntarily suspended its pork exports to China after the Chinese government adopted new protocols that require Canadian processors who report a positive COVID-19 case to do so.

- [Member of the Legislative Assembly \(MLA\) on the province's Standing Committee on Health report that there are pressing issues that need to be addressed before the possible arrival of a second wave of COVID-19 in Prince Edward Island](#). The committee met to lay out their priorities for the fall. Those included looking at how the start of the school year could push P.E.I.'s testing capability, and how the availability of mental health services has been affected by the pandemic. MLAs on the committee also want to ask government when P.E.I. will we see the roll out of the mobile mental health crisis units, as well as when Unit 9 will reopen.
- [Post-secondary students coming to Nova Scotia from outside the Atlantic bubble will need to get tested for COVID-19 in addition to self-isolating for 14 days](#). The students will be tested three times within their self-isolation period. This measure applies to students living in residence and within the larger community. Even with a negative result, the students will still be required to complete their 14-day isolation period. Students from inside the Atlantic bubble will only need to self-isolate if they've been outside the bubble within the last 14 days.
- [Six additional flights, two domestic and four international have been added to B.C.'s COVID-19 exposure list](#). All of the flights either departed from or arrived in Vancouver. The newly added flights include: 8 August: Philippine Airlines Flight 116, Manila to Vancouver, Rows 56-62. 9 August: Air China Flight 992, Vancouver to Hohhot, Rows 55-61, 10 August: Air Canada Flight 295, Winnipeg to Vancouver, Rows 12-15, 10 August: Air Canada Flight 296, Vancouver to Winnipeg, Rows 26-32, 14 August: Air India Flight 1143, Delhi to Vancouver, No row information, 16 August : All Nippon Airways Flight 115, Vancouver to Tokyo, Rows 35-41.
- The [Manitoba government is tightening COVID-19 restrictions in Brandon, Dauphin and other communities in the western part of the province because of rising case numbers and some people who are ignoring health guidelines](#). Starting 24 August, indoor and outdoor public gatherings in Prairie Mountain will be limited to 10 people, with some exceptions that include religious gatherings. The rest of the province will continue to be allowed gatherings of up to 50 people indoors and 100 outdoors. Masks will also be mandatory in the region starting 24 August for indoor public places and any public gatherings. In the rest of the province, masks remain a government recommendation when physical distancing is not possible, although some businesses require customers to wear them. The restrictions in the Prairie Mountain region will be in place for at least two weeks.
- The [federal and Ontario governments have secured an agreement with 3M that will see it produce N95 masks at a Brockville, Ont., facility](#). Ottawa and the province will each contribute \$23.3 million to help increase production capacity. Under the agreement announced, the facility is expected to produce up to 100 million N95 masks a year.
- [The CEO of the Saskatchewan Health Authority reports the supply of personal protective equipment within the province's health system is solid, as international supply chains have opened up and orders are now coming in on a regular basis](#). The province is now preparing for a potential second wave of COVID-19, and has a data system in place to monitor the supply of personal protective equipment.
- [Some companies in the GTA are creating COVID-19 screening devices that are already in use in Canada](#). Juiceworks' COVID-19 Safe Entry Solutions are powered by Predictmedix COVID-19 mass screening AI technology. The stations use multi sectional cameras to screen people for symptoms of COVID-19 such as cough, fever exhaustion, congestion, sweat gland activation, eye, redness and headache. The data gathered is analyzed instantly by medial artificial intelligence and a red light indicates if the person is at a higher likelihood of having COVID-19 or influenza. At that point the establishment will have protocol in place that could include a more rigorous secondary screening, or denial of entry to that person. The stations are already in use at the Flow Water facility in Ontario, A Juiceworks production facility, and a 24-hour pharmacy in Montreal. The devices would also work in commercial facilities such as shopping malls. The stations can also be adjusted to detect impairment by drugs or alcohol.
- [The Ontario government has extended its emergency orders](#). The province states it will let some orders lapse, including one that allowed school boards to redeploy workers to health care facilities to respond to the pandemic. The government reports there are ongoing reviews to determine which remaining emergency orders are necessary. The emergency orders can be extended for up to 30 days at a time.
- The [Toronto District School Board \(TDSB\) has a new plan for bringing elementary students back to classrooms after the Ontario government rejected a previous proposal](#). In an update provided by a TDSB spokesperson, trustees approved a variety of motions and initiatives. For neighbourhoods where there is a higher risk of contracting COVID-19, schools in those areas will see JK and SK classes capped at 15 students and students between Grades 1 and 8 will be capped at 20 students. For all other schools, JK and SK classes will be capped at 26 students, students between Grades 1 and 3 will be capped at 20 and students between Grades 4 and 8 will be capped at 27. For students who participate virtually, there will be caps of 29 students in JK and SK classes, 20 students between Grades 1 and 3 and 35 students between Grades 4 and 8. Trustees approved spending more than \$30 million to hire 366 more teachers and redeploy 400 teachers to lower class sizes and to help improve student and staff safety in our schools. Meanwhile, all students and staff returning to school will be required to

wear face masks or coverings. Extra outdoor breaks will be learn given to students to allow a break for students. The school year is set to begin on 15 September and different grades will see a staggered start over the course of a few days.

- [Outbreak protocols will kick into gear in an Alberta school if there are two or more confirmed cases linked to each other or confirmed within a 14-day period](#), according to a guide released by the government. One case will trigger alert status, and the school will need to work with Alberta Health Services (AHS) on contact tracing and send a message to parents and guardians to let them know. If two cases are confirmed within 14 days or are epidemiologically linked, parents will get a letter, and a decision about whether or not to go online or close the school will be made by the government, along with public health officials. An outbreak will be publicly reported if there are five or more confirmed cases. AHS will inform school administration when an outbreak is declared over.

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

- On 20 August 2020, the Centers for Disease Control and Prevention (CDC) updated its [Air Travel Toolkit for Airline Partners](#). CDC created this communication toolkit for our airline partners to help them reach their travelers and employees with COVID-19 prevention messaging. This toolkit provides messages, graphics and products to: support timely messaging to travelers and employees; share CDC resources with airline partners; and help airline partners develop additional COVID-19 materials. Airline partners can also access other CDC communication resources for specific audiences in their [Communication Resources page](#), which includes [resources specific to travelers](#).
- On 20 August 2020, the Centers for Disease Control and Prevention (CDC) updated its [Operating schools during COVID-19: CDC's Considerations](#). Updates have been made to align with new school resources and tools that were released on 23 and 24 July 2020 and latest COVID-19 information. The Considerations are intended to help school administrators: (1) promote behaviors that reduce the spread of COVID-19, (2) maintain healthy environments, (3) maintain healthy operations, and (4) prepare for when someone gets sick. CDC is providing a list of changes to the considerations as of 21 August 2020: Expanded considerations on planning and preparing schools before opening; Updated considerations on ventilation; Updated considerations on food service; Updated considerations for students who may be unable to wear cloth face coverings; Updated considerations for students with special healthcare needs and disabilities; Updated considerations on cohorting, staggering, and alternating strategies; Updated considerations on recognizing signs and symptoms of COVID-19 and screening; Updated considerations on coping and support; Updated considerations on making plans for accommodations; and Updated considerations for Direct Service Providers (DSPs).
- [A saliva-based COVID-19 test developed by the University of Illinois has received emergency authorization from the U.S. Food and Drug Administration, creating the potential for widespread use of a test experts report is faster, cheaper and simpler](#). According to the governor of Illinois, this has potentially game-changing implications for the statewide testing complex as well as for testing on a national level, particularly for high-risk communities and settings.
- [The Department of Health and Human Services has leveraged the Defense Production Act \(DPA\) to apply priority rated orders for contracts with Becton Dickinson \(BD\) and Quidel Corporation](#). These acquisitions will fulfill a large-volume purchase of diagnostic systems and assays for COVID-19 testing and will expedite shipments of these systems and assays to every nursing home certified by the Centers for Medicare & Medicaid services (CMS) with a Clinical Laboratory Improvement Amendment (CLIA) Certificate of Waiver, approximately 14,000 nursing homes in the United States. The tests can diagnose SARS-CoV-2 infection in approximately 15 minutes.

#### **[WHO - WHO, UNICEF urge safe school reopening in Africa](#) (Official)**

World Health Organization (WHO) and UNICEF are urging governments in Africa to promote the safe reopening of schools while taking measures to limit the spread of the virus. A WHO survey of 39 countries in sub-Saharan Africa found that schools are fully open in only six countries. They are closed in 14 countries and partially open (exam classes) in 19 others. Around a dozen countries are planning to resume classroom learning in September, which is the start of the academic year in some countries. However, the impact of extended education disruption is significant. It includes among others: poor nutrition, stress, increased exposure to violence and exploitation, childhood pregnancies, and overall challenges in mental development of children due to reduced interaction related to school closures. The long-term social and economic impact of extended school shutdown is also concerning. According to a World Bank modelling, school closures in sub-Saharan Africa could result in lifetime earning losses of US\$ 4500 per child. This may also be worsened by reduced earning of the parents who are forced to stay at home to take care of the children especially in households that cannot afford child care services. Just as countries are opening businesses safely, schools can reopen. This decision must be guided by a thorough risk analysis to ensure the safety of children, teachers and parents and with key measures like physical distancing put in place. WHO, UNICEF and the International Federation of Red Cross have issued guidance on COVID-19 prevention and control in schools. WHO and UNICEF also recommend a range of hygiene and disinfection measures for schools to reopen and operate safely.

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

- The [World Health Organization \( WHO\) has updated its draft landscape of COVID-19 candidate vaccines](#). WHO has listed 30 candidate vaccines in clinical evaluation, and 139 candidate vaccines in preclinical evaluation. For all 169 candidate vaccines, information is provided for the name of the developer and the type of candidate vaccine.
- [A church in South Korea's capital Seoul has become a new epicenter of coronavirus infections with a total of 676 cases traced to it, raising concern about the virus' spread in the greater capital region and beyond](#). South Korea reported 288 new cases of the virus, 276 of them domestically acquired. Out of the 276, 135 were traced back to Seoul and 85 to the surrounding Gyeonggi Province, according to the Korea Centers for Disease Control and Prevention. More than 3,200 people from the church have so far been tested for the virus, and the public health agency is closely monitoring those who visited a rally in Seoul as some church members also took part in it. The country has seen a triple-digit rise in virus cases every day for the past week. The government has already tightened social distancing rules in the metropolitan area, while ordering karaoke parlors and clubs to shut. Church services were banned in the metropolitan region except for those conducted online.
- [A massive pool party attended by thousands of people at the epicentre of the coronavirus pandemic showed how well China had dealt with disease, authorities insisted, despite images from the event prompting outrage around the world](#). But China noted the pool party showed the city's strategic victory against the outbreak, and that the images were proof the country's approach to controlling the virus had been successful.
- [According to China's latest national guideline on diagnosis and treatment of COVID-19 published on 19 August](#), the incubation period for COVID-19, the time between exposure to the virus and the onset of symptoms, is about three to seven days for most people and can be up to 14 days, during which these pre-symptomatic patients can be contagious. The five days after symptoms occur is when the disease becomes highly transmissible, the guideline indicated. Respiratory droplets and close contact with infected patients and contaminated objects are the primary methods of transmission, it added. The guideline called for new measures including publishing the status of suspected or confirmed patients online within two hours after their discovery, as well as the administration of anti-viral medicines at the early stages of the disease, especially for severe patients.
- [Mass testing of Russia's first potential COVID-19 vaccine to get domestic regulatory approval will involve more than 40,000 people and will be overseen by a foreign research body when it starts week of 24 August](#). These were the first details on the shape and size of the upcoming late-stage trial of the vaccine given by its developers, who are aiming to allay concerns among some scientists about the lack of data provided by Russia so far. Western experts have been more skeptical, warning against its use until all internationally approved testing and regulatory steps have been seen to be taken and proved a success. The vaccine data will be published in an academic journal later in August.
- The [World Health Organization's Europe office indicates it has begun discussions with Russia to try to obtain more information about the experimental COVID-19 vaccine the country recently approved](#). A senior emergency official at WHO Europe noted the agency had begun direct discussions with Russia and that WHO officials have been sharing the various steps and information that's going to be required for WHO to take assessments. WHO's Europe director reported the agency welcomed all advances in vaccine development but that every vaccine must submit to the same clinical trials. Russia's vaccine has so far only been tested in a few dozen people.
- [A week after the European Commission reached its first agreement with the British pharmaceutical company AstraZeneca to purchase a potential vaccine against the Coronavirus of at least 300 million doses on behalf of the EU](#), it has now concluded exploratory talks with CureVac to purchase another potential vaccine against COVID-19. The talks with CureVac have been confirmed by the EU Commission, which has also noted that the move follows positive steps with Sanofi-GSK on 31 July and Johnson & Johnson on 13 August, aside from the agreement reached with AstraZeneca on 14 August. According to a press release of the Commission, the planned contract with CureVac would provide the Member States with the chance to buy the vaccine for their citizens and also to donate it to lower and middle-income countries.
- [Airbnb is banning house parties worldwide as it tries to clean up its reputation and comply with coronavirus-related limits on gatherings](#). The San Francisco-based home sharing company reports it will limit occupancy in its rental homes to 16 people. It may offer exceptions for boutique hotels or other event venues. Airbnb may pursue legal action against guests and hosts who violate the ban.

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

- [According to a new study, some pregnant moms may be passing the COVID-19 an infection to their unborn infants](#). Chinese scientists followed 33 pregnant women with COVID-19 pneumonia, who contracted the virus within the metropolis of Wuhan. The scientists found that three infants, all boys, had been contaminated with the contagion at delivery. The findings were published in the [Journal of the American Medical Association Pediatrics](#). In this cohort, 3 of 33 infants (9%) presented with early-onset SARS-CoV-2 infection. Because strict infection control and prevention procedures were implemented during the delivery, it is likely that the sources of SARS-CoV-2 in the neonates' upper respiratory tracts or anuses were maternal in origin. Although 2 recent studies have shown that there were no clinical findings or investigations suggestive of COVID-19 in neonates born to affected

mothers, and all samples, including amniotic fluid, cord blood, and breast milk, were negative for SARS-CoV-2, the vertical maternal-fetal transmission cannot be ruled out in the current cohort. Therefore, it is crucial to screen pregnant women and implement strict infection control measures, quarantine of infected mothers, and close monitoring of neonates at risk of COVID-19.

- [University of California researchers studying the breast milk of 18 women with COVID-19 found coronavirus RNA but not live virus in 1 of 64 samples, suggesting that babies aren't likely to be infected through that route.](#) The research letter, published in *JAMA*, described studying self-collected and mailed samples and clinical data gathered through phone interviews from 27 March to 6 May. The mothers' babies ranged in age from newborn to 19 months, and each mother provided 1 to 12 breast milk samples. All but one woman had COVID-19 symptoms. The one sample with coronavirus RNA tested positive only on the day of symptom onset; the ones tested 2 days before and 12 and 41 days later tested negative. The researchers were unable to culture live virus from the positive sample.
- [One in five U.S. nursing homes faced severe shortages of protective gear like N95 masks in summer 2020 even as the White House administration pledged to help, according to a study that finds facilities in areas hard-hit by COVID 19 also struggled to keep staff.](#) Significantly, there was no improvement from May to July in the shortages of personal protective equipment, or in the staffing shortfalls, according to the analysis of federal data by academic researchers. The summer has seen the coronavirus surge across the South, and much of the West and Midwest.
- [Dutch Hercules Pharmaceuticals has published pre-clinical data demonstrating in-vivo results of its Aryl Hydrocarbon Receptor \(AHR\) inhibitor HP163 against viral diseases, including Zika and Covid-19.](#) The promising pre-clinical results of HP163 in Covid-19 were published in *Research Square*. It is believed that the reason why AHR inhibitors are effective against Covid-19, as well as other viral diseases, is because virus infection triggers activation of the AHR, which limits the production of type I interferons involved in antiviral immunity. According to the Hercules CEO, a remedy is urgently needed to treat zika and dengue infection, but mentioned studies also suggest that AHR inhibitors might be an effective oral treatment of patients with Covid-19.
- [An investigator in the Ragon Institute of MGH, MIT and Harvard and professor at Harvard Medical School \(HMS\),](#) recently published a paper in *Cell* showing that high levels of some cytokines seen in COVID-19 patients, as part of a cytokine storm, may prevent the development of long-term immunity to SARS-CoV-2. The team examined the spleens and lymph nodes of deceased COVID-19 patients and found that a lack of germinal centers, an essential part of a durable immune response. However, the lack of germinal centers could have major implications for development of herd immunity. This finding would likely not affect vaccine-induced immunity, as vaccines do not induce cytokine storms. A vaccine-induced immune response would likely include the development of a germinal center, and the ensuing creation and immortalization of high-quality antibodies that would provide long-lasting protecting against COVID-19.
- [Over 2,000 active cases of COVID-19 and 245 resident deaths as of August 19 have been linked to aged care homes in Victoria, spread across over 120 facilities.](#) The St Basil's cluster involves 191 cases. In New South Wales, 37 residents were infected at Newmarch House, leading to 17 deaths. New research suggests poor ventilation may be one of the factors. [RMIT researchers](#) are finding levels of carbon dioxide in some nursing homes that are more than three times the recommended level, which points to poor ventilation. Scientists now suspect the virus that causes COVID-19 can be transmitted as an aerosol as well as by droplets. Airborne transmission means poor ventilation is likely to contribute to infections. Research from Europe also indicates ventilation in aged care homes is poor.
- [US students are returning to school in person and online in the middle of a pandemic, and the stakes for educators and families are rising in the face of emerging research that shows children could be a risk for spreading the new coronavirus.](#) New research published in *the Journal of Pediatrics*, suggests that children can carry a high viral load, regardless of their susceptibility to developing a Covid-19 illness. This study reveals that children may be a potential source of contagion in the SARS-CoV-2 pandemic in spite of milder disease or lack of symptoms, and immune dysregulation is implicated in severe post-infectious MIS-C. The study found that [49 Massachusetts children and young adults 0 to 22 years with COVID-19 had significantly higher levels of virus RNA in their airways than did infected adults in intensive care units, suggesting that the novel coronavirus doesn't spare young people and that they could spread it just as easily.](#) In addition to the 49 subjects who tested positive for COVID-19, another 18 had the delayed, coronavirus-linked multisystem inflammatory syndrome in children (MIS-C). Regardless of a child's age, airway viral RNA load of those with COVID-19 was highest in the first 2 days of symptoms, much higher than in severely ill adults ( $P = 0.002$ ), and some had high viral loads even before symptoms appeared. But unlike subjects with COVID-19, those with MIS-C did not have high viral loads. The researchers didn't attempt to isolate live virus. A previous study published in *JAMA Pediatrics* also found that older children hospitalised with Covid-19 had similar levels of the virus in their upper respiratory tract as adults, but children younger than five carried significantly greater amounts. According to the authors, this finding suggests that despite their lower number of the virus receptors, children can still carry a high viral load and are therefore more contagious. A recent South Korean study found that people were most likely to contract the new

coronavirus from members of their own households, with children aged nine and under least likely to be the first identified case. Since most children infected with the coronavirus have very mild symptoms, they were largely overlooked as a demographic in the earlier stages of the pandemic.

- [Loss of smell associated with infection with Covid-19 is much more profound compared to a bad cold or flu, scientists from the University of East Anglia have found.](#) The researchers report that their findings could help to develop smell and taste tests as a quick, alternative way to check if people have the virus. The main differences which the team found were that, although Covid-19 patients also lose their sense of smell, they can breathe freely, do not tend to have a runny or blocked nose, and they cannot detect bitter or sweet tastes. The findings, published in *Rhinology* journal, lend weight to the theory that Covid-19 infects the brain and central nervous system. The research team hopes the work could help develop smell and taste tests for fast Covid-19 screening in primary care and emergency departments.
- [WHO regional director for Europe is very concerned that younger age groups regularly appearing among new recorded cases,](#) amid growing evidence that younger generations are driving spikes in infections across Europe. In England, the most recent data from Public Health England shows that the 15-44 age group currently has the highest rate of infection of any other group, excluding those over 85. A recent pre-print study from Imperial College London also found that of some 120,000 swabs taken from people in England in May, the highest levels of infection were recorded among those aged 18-24. Similar developments have been reported in Luxembourg and Croatia, where incidence in young groups is clearly rising. There have also been slight increases in the infection rate among young people in Austria, Denmark, Slovakia, Spain and Estonia. On the basis of these trends, experts have warned that a second wave could target younger generations.
- [Contract tracing apps used to reduce the spread of COVID-19 are unlikely to be effective without proper uptake and support from concurrent control measures,](#) finds a new study by University College London (UCL) researchers. The systematic review, published in *Lancet Digital Health*, shows that evidence around the effectiveness of automated contact tracing systems is currently very limited, and large-scale manual contact tracing alongside other public health control measures such as physical distancing and closure of indoor spaces such as pubs is likely to be required in conjunction with automated approaches. The team found 15 relevant studies by reviewing more than 4,000 papers on automated and partially-automated contact tracing, and analyzed these to understand the potential impact these tools could have in controlling the COVID-19 pandemic. The authors suggest that even under optimistic assumptions where 75-80% of UK smartphone owners are using a contact tracing app, and 90-100% of identified potential close contacts initially adhere to quarantine advice automated contact tracing methods would still need to be used within an integrated public health response to prevent exponential growth of the epidemic.
- [In the UK and US, many websites are selling direct to user self-sampling and testing kits to detect SARS-CoV-2.](#) Recently, a cross-sectional observational study was carried out to check the completeness and accuracy of information provided by these websites. The study findings have revealed that users purchasing these kits online are provided with incomplete and misleading information regarding the accuracy of tests, interpretation of results, and intended use. The study by researchers at the University of Birmingham and the University of Warwick in the UK was published in the *medRxiv*.
- [Almost 30% of the population in India's capital of New Delhi likely have been infected by the novel coronavirus, according to a serological survey of 15,000 people conducted by the local government,](#) a figure that indicates infection numbers are much higher than those recorded. The survey, which tested a sample of the population for the presence of antibodies, was done in the national capital territory in the first week of August. Delhi has a population of 20 million and has recorded a total of 140,767 cases of COVID-19, out of India's total of 2.84 million. The findings of the survey are in line with what other cities like Mumbai and Pune have discovered, that a significant number of their people have been infected. [A similar survey in June-July showed that 23 per cent of people tested had been exposed to the virus in the city. Surveys in other Indian cities have also suggested more infections than the official numbers suggest.](#) In the western city of Pune, 51.5 per cent of respondents in five badly affected pockets had antibodies in their blood, a recent survey showed. Another in late July found 57 per cent of those tested in Mumbai's slums had the infection far more than official data suggests. Another survey released week of 17 August, testing sewage water in Hyderabad, estimated that some 6.6 per cent of the city of over nine million may have been infected also far higher than the official data suggests. India reported a record daily jump of 69,652 coronavirus infections on 20 August, data from the federal health ministry showed. Deaths rose by 977 to a total of 53,866.
- [Second-hand Smoke from Vapes and Cigarettes Can Spread Coronavirus.](#) Since the beginning of the coronavirus pandemic, researchers have stated that certain groups are more likely to contract the virus and develop a severe form of infection such as older adults. Recent research has further added that the infection is more prevalent in smokers who also tend to spread the virus to others via second-hand smoke. Experts are reporting second-hand smoke is more dangerous than ever since the start of the coronavirus pandemic around the world. Studies have shown that people who smoke or vape are not only at a higher risk of the infection but are also more likely to spread it to other people. The smoke that is released in the air during the process can help

in coronavirus transmission, as it is airborne. The smoke particles can transmit the virus at longer distances, an infected person who is smoking can then easily transmit the virus even if practicing social distancing and wears a mask normally. The director of Biomedical Research in the College of Nursing with specialization in airborne particulate matter, explains that, when a vaping cloud is exhaled, it contains an enormous amount of particles.

## Domestic Events of Interest

### [Canada, NB- Public Health declares salmonella outbreak after 13 cases confirmed \(Media\)](#)

New Brunswick Public Health has declared a salmonella outbreak after discovering 13 confirmed cases in the province and two that are still under investigation. The cases were founded in the north and eastern regions of the province but health officials haven't elaborated where in those regions. The cases were confirmed between 16 June and 27 July. The Department of Health doesn't know what caused the outbreak.

### [Canada, ON - Ontario hiring 200 additional OPP officers in response to concerns about understaffing, burnout and mental health \(Media\)](#)

The Ontario government reports it will hire 200 more Ontario Provincial Police officers (OPP) in response to a sweeping report on mental health, stress and officer suicides in the service. It is likely many of the new hires will be added to detachments in northern Ontario. The hiring is in response to an independent review panel, a coroner's expert panel and internal efforts that suggested burnout and post-traumatic stress were widespread among officers. Thirteen OPP officers took their own lives between 2013 and early 2019.

### [Canada, SK - Sask. seeing record amount of drug overdose deaths \(Media\)](#)

With four months left in 2020, Saskatchewan has already seen its most overdose deaths in a decade. The Saskatchewan Coroners Service has confirmed 40 people have died from drug toxicity deaths between 1 January and 6 August. The coroner's report also shows 139 deaths are suspected to have been due to drug toxicity. The 179 overdose deaths are more than any of the past ten years, the previous high was in 2018 with 171. The numbers have been climbing since 2010 when 78 people died of an overdose. Fentanyl and carfentanyl have been the main cause of the confirmed deaths, responsible for 28 in 2020. There were record highs of 52 deaths from the opioids in 2018 and 2019, increasing each year since two were reported in 2010.

## International Events of Interest

### **IHR Announcement - Poliomyelitis (Circulating vaccine-derived poliovirus and Wild Poliovirus) – Global update**

Between 1 January and 19 August 2020, several countries reported cases of poliomyelitis disease. Between 13 and 19 August 2020, wild poliovirus type 1 (WPV1) was reported in five cases with Acute Flaccid Paralysis (AFP) and three WPV1 positive environmental samples from Afghanistan and Pakistan. Moreover, during the same period, there have been 9 circulating vaccine- derived poliomyelitis type (cVDPV2) detected among AFP cases and 11 cVDPV2 positive environmental samples reported in Afghanistan, Pakistan, Côte d'Ivoire, Nigeria, Somalia, and Sudan. Furthermore, there have been 15 circulating vaccine- derived poliomyelitis type 1 (cVDPV1) reported in Yemen. Below is the description of the reported cases by country: Afghanistan: three WPV1 in AFP cases, one WPV1 positive environmental sample and five cVDPV2 positive environmental samples; Pakistan: two WPV1 in AFP cases, two WPV1 positive environmental samples and two cVDPV2 positive environmental samples; Cote d'Ivoire: four cVDPV2 in AFP cases; Nigeria: one cVDPV2 in AFP case; Somalia: two cVDPV2 in AFP cases and four cVDPV2 positive environmental samples; Sudan: two cVDPV2 in AFP cases; and Yemen: 15 cVDPV1 in AFP cases. WHO's International Travel and Health recommends that all travellers to polio-affected areas be fully vaccinated against polio. Residents (and visitors for more than 4 weeks) from infected areas should receive an additional dose of OPV or inactivated polio vaccine (IPV) within 4 weeks to 12 months of travel.

### [United States: Florida state government to release millions of GMO mosquitos despite public backlash \(Media\)](#)

Authorities in Florida have approved an experiment to release 750 million genetically engineered mosquitoes into the Florida Keys despite backlash from residents and environmental activists. In June, Florida issued an Experimental Use Permit for the project to deploy in 2021 and 2022 after seven state agencies unanimously approved the project. The project, which was approved by the Environment Protection Agency in May, will test whether a genetically modified mosquito is a better alternative than insecticides that can control the spread of *Aedes aegypti*, otherwise known as the yellow fever mosquito. The experiment mosquito, named OX5034, has been altered to produce female offspring that will die in the larval stage, preventing them from hatching and growing large enough to bite. Male OX5034 mosquitos have also been programmed to only kill female mosquitos, ensuring that the males will only pass along the modified genes to other male offspring.

## **United States - U.S. Takes Steps to Protect Older People for Flu Season and Increase Child Vaccination Rates**

### **(Media)**

The Department of Health and Human Services is giving permission to pharmacists nationwide to administer all scheduled shots to children as young as three including boosters for measles and other diseases a step that makes immunization more convenient for parents. The flu vaccine is also an available option for children. And the Centers for Disease Control and Prevention has indicated that a high-dose flu shot aimed at better protecting people 65 and older will guard against four strains of the virus in 2020, rather than three. The new emergency rule allowing state-licensed pharmacists to give federally scheduled vaccines to children ages 3 through 18 is supposed to encourage widespread immunization as schools open during the pandemic and to resolve a patchwork of state laws that govern shots and age limits.

## **Democratic Republic of Congo - Ebola infects 7 more in DRC outbreak; total climbs to 96 cases, 42 deaths**

### **(Media)**

Seven more Ebola cases have been confirmed in the Democratic Republic of the Congo (DRC) outbreak in Equateur province, raising the total to 96. Also, 5 more deaths were reported, raising the fatality count to 42. The outbreak has been growing at a slow but steady pace of about one or two cases a day, and it's unclear if the spurt of cases today reflects increased activity or the result of a recent 3-day strike by health workers in the region.

## **Namibia continues to battle with Hepatitis E cases as focus shifts to COVID-19 pandemic** (Media)

Namibia has recorded 7,853 Hepatitis E Virus (HEV) cases from September 2017 to July 2020, with the majority of cases still from informal settlements in Windhoek and Swakopmund. The Health Ministry reports 65 deaths have been recorded so far of which 26 are maternal deaths. According to the ministry, to contain the outbreak, there is a necessity to embark upon a pro-active, consistent, and sustained implementation of HEV response activities. Furthermore, the ministry notes, due to the COVID-19 pandemic outbreak, HEV response seems to have been scaled-down as the Health Ministry and partner organizations have repurposed their staff to focus entirely on the containment of COVID-19 and the National Health Emergency Management Committee meeting does not discuss HEV outbreak anymore.

## **Researches, Policies and Guidelines**

### **United States - CDC updates flu vaccine recommendations** (Media)

The CDC has published in [MMWR](#) the latest flu vaccination recommendations for the upcoming season from its Advisory Committee on Immunization Practices (ACIP), which covers updates based on discussions at ACIP's last three meetings. The CDC has urged all people who are recommended to receive the flu vaccine to be immunized to help reduce symptoms that might be confused with COVID-19 and to reduce the overall burden on the healthcare system over the fall and winter. The updated recommendations cover two new flu vaccines, both targeted to seniors. One is FluZone high-dose quadrivalent (four-strain), and the other is Fluvad Quadrivalent. Other updates include a discussion of using live attenuated influenza vaccine (LAIV) when patients are taking antiviral medications, which might interfere with the actions and effectiveness of the vaccine. The recommendations note that the newer antivirals peramivir and baloxavir have longer half-lives than other antivirals and could interfere with LAIV replication if given more than 48 hours before vaccination. People who receive LAIV the nasal spray vaccine during certain periods may need to be revaccinated with a different type of flu vaccine. Also, the recommendations for people with egg allergy say that additional measures for people with a history of severe reactions to egg are needed only if a vaccine other than Flucelvax or Flublok are used.

### **Japan - Human herpesvirus 6B (HHV-6B): Vaccine developed** (Media)

A research group led from the Center for Infectious Diseases, Kobe University Graduate School of Medicine, has revealed that the HHV-6B glycoprotein complex gH/gL/gQ1/gQ2 is an effective vaccine candidate for human herpesvirus 6B (HHV-6B). There are still no methods to treat nor prevent HHV-6B infection, and this study represents the first attempt in the world at developing a vaccine. The results were published online in the American scientific journal *PLOS Pathogens* on 23 July.

Best Regards | Sincères salutations  
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