

Exton, Adam (HC/SC)

From: Romanova, Svetlana (PHAC/ASPC) on behalf of gphin / rmisp (PHAC/ASPC)
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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 23 September 2020 at 19:00 EDT, a total of 147,753 cases have been recorded in Canada including 9,243 deaths. The cases are reported in Newfoundland and Labrador (272 confirmed cases, 3 deaths), Prince Edward Island (58 confirmed cases), Nova Scotia (1,087 confirmed cases, 65 deaths), New Brunswick (197 confirmed cases, 2 deaths), Quebec (69,088 confirmed cases, 5,809 deaths), Ontario (48,087 confirmed cases, 2,835 deaths), Manitoba (1,674 confirmed cases, 18 deaths), Saskatchewan (1,830 confirmed cases, 24 deaths), Alberta (17,032 confirmed cases, 260 deaths), British Columbia (8,395 confirmed cases, 227 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 24 September 2020, 11:38 GMT, there were 32,137,108 cases of COVID-19 and 982,718 deaths reported globally. Top 10 countries with the highest number of cases, by alphabetical order are: Argentina (664,799 cases, 14,376 deaths), Brazil (4,627,780 cases, 139,065 deaths); Colombia (784,268 cases, 24,746 deaths); India (5,737,197 cases, 91,204 deaths); Mexico (710,049 cases, 74,949 deaths); Peru (782,695 cases, 31,870 deaths); Russia (1,128,836 cases, 19,948 deaths); South Africa (665,188 cases, 16,206 deaths); Spain (693,556 cases, 31,034 deaths); United States (7,140,137 cases, 206,598 deaths).

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

- [On 23 September, the Canada's Chief Public Health Officer, issued a statement](#) on COVID-19 indicating that since the last modelling update in mid-August, the national daily case count has been increasing at an accelerated rate. Over the past seven days, an average of 1,123 cases were reported daily, compared to 380 cases reported daily in mid-August. Canada is at a crossroads with the COVID-19 epidemic trajectory. At the current rate of growth, the epidemiological analysis and modelling studies indicate that unless public health and individual protective measures are strengthened and people work together to slow the spread of the virus, the situation is on track for a big resurgence in a number of provinces. Throughout the summer, infection rates have been highest among young adults aged 20-39 years. While COVID-19 tends to be less severe among young people, ongoing circulation of the virus in younger, more mobile and socially connected adults builds a reservoir for the virus. This not only increases the risk for spread to individuals and populations at higher risk for severe outcomes, but it threatens our ability to keep COVID-19 at manageable levels. As well, it is important to know that young adults are not immune to the direct impacts of COVID-19, as serious or prolonged illness can occur at any age.
- On 22 September 2020, the Minister of Public Services and Procurement announced that the [Government of Canada has signed agreements with Sanofi and GlaxoSmithKline \(GSK\) to secure up to 72 million doses of their COVID-19 adjuvanted recombinant protein-based vaccine candidate](#). Based on recommendations from the COVID-19 Vaccine Task Force, the Government of Canada is signing agreements with a number of leading pharmaceutical companies to establish a guaranteed supply base of potential vaccine candidates. Agreements have previously been signed with Pfizer, Moderna, Johnson & Johnson and Novavax, and negotiations continue for access to other leading vaccine candidates. Once vaccines are ready, companies will need to make submissions for authorization to Health Canada. Health Canada will review the evidence of safety, efficacy and manufacturing quality for each vaccine to determine whether individual vaccines will be approved for use in Canada before they are made available to Canadians. At the

same time, the National Advisory Committee on Immunization, will provide federal, provincial and territorial governments with guidance for safe and effective vaccine use for Canadians. Minister announced that the Government of Canada has signed an agreement with Gilead Sciences and McKesson Canada to secure a supply of up to 150,000 vials of remdesivir, with deliveries beginning this month and continuing into early 2021. Currently, remdesivir is the only known anti-viral drug that has been shown to be effective in treating COVID-19 patients. The Government of Canada has also signed two contracts with SiO2 International Inc. to purchase syringes and vials for use in filling up to 80 million doses of vaccine, with deliveries beginning this month.

- The [Prime Minister has said that Canada has entered a second wave of the coronavirus pandemic](#) warning that the country was on the brink of a surge if people did not follow public health guidelines. Canada's COVID-19 cases have spiked in recent days. Canadians are now more worried about COVID-19 than they have been since April, an Abacus Data poll showed.
- [The union representing 3,500 school bus drivers in Quebec wants schools to inform their members if any of the children they are transporting have been diagnosed with COVID-19.](#) In a statement issued Wednesday, 23 September 2020, the Fédération des employées et employés de services publics (FEESP-CSN) noted that schools are already informing students and school personnel if a case has been detected.
- Since the earliest days of the COVID-19 pandemic, there has been a heightened level of concern for what might happen to [residents of Vancouver's Downtown Eastside](#) if the neighbourhood was exposed to an outbreak of the disease. Bloodwork from area residents taken by the Vancouver Infectious Disease Centre (VIDC) and sent to the B.C. Centre for Disease Control (BCCDC) for testing indicate that many have had the disease.
- The Ontario caucus of the federal Conservative Party made use of a [COVID-19 serological test that has not yet been approved by Health Canada](#), according to Conservative MP. He indicated that the caucus used the device "for safety" prior to a recent caucus retreat.
- [The Saskatoon Police Service's explosives unit and the fire department were called to a vaccine lab at the University of Saskatchewan](#) Tuesday, 22 September 2020, after the facility received a suspicious package. The university says the package was sent to the Vaccine and Infectious Disease Organization International Vaccine Centre (VIDO-InterVac) through the campus mail service. VIDO-InterVac is one of many research facilities in the world currently working to find a vaccine for COVID-19. The wing of the building where the package was located was cleared of all staff and closed.
- [The Ontario government is launching a recruitment campaign to increase its team of frontline health and safety inspectors by 98](#) and help ensure workplaces across the province are doing their part to prevent the spread of COVID-19. By adding more inspectors to our team, we can respond faster to situations as they arise and help make sure that every office, plant, store and job site in this province is safe, during COVID-19 and beyond. The new inspectors will play a key role in protecting workers by checking and enforcing that workplaces are following occupational health and safety legislation.
- [The drive-thru COVID-19 testing centre in Kitchener has closed for the day due to safety concerns, a Grand River Hospital \(GRH\) spokesperson confirmed.](#) The first person had lined up for testing at 2:30 a.m. and the line grew from there, with the testing centre reaching capacity by the time it had opened at 7:30 a.m., Evans confirmed. Within an hour, the decision was made to pull the plug for the day. She indicated that police were called in to help with a burgeoning traffic nightmare which had sprawled across the Belmont area of Kitchener.
- [For the first time during this pandemic, a resident at the City of Ottawa-run Garry J. Armstrong long-term care home has tested positive for COVID-19.](#) Even though the facility entered its fourth outbreak on 14 September, it had always been staff at the home dealing with the virus. Ottawa Public Health (OPH) says one staff member is also currently fighting COVID-19.
- [Another COVID-19 death has been connected with the growing outbreak at Calgary's Foothills Medical Centre](#), which is now linked to at least 22 cases, two deaths and has forced 88 into isolation. Alberta Health Services indicated that 16 patients and six staff members have been infected. The outbreak remains limited to two cardiac units.
- [Cases of COVID-19 may be on the rise in Saskatchewan overall, but the rise has been gradual enough that the provincial government isn't panicking over it just yet.](#) With almost two full weeks of classes down, they're reasonably pleased with early returns on back-to-school. The data for the first week back (albeit a shortened week due to the long weekend) was promising. That wasn't to suggest schools were out of the woods as cases climbed outside them. The cases in Saskatoon, some of which stem from a large social gathering and others of which stem from an outbreak at a local business, have been a cause for some concern. They have not yet led to outbreaks in the schools.
- [Ontario reported another 335 cases of COVID-19 on 23 September](#), marking considerable drop from last 2 days. The figure comes as the province's labs processed 35,400 test samples for the novel coronavirus, according to Ontario's Health Minister. The new cases are once again mostly concentrated in Toronto, Peel and Ottawa, with 102, 79 and 65 respectively.
- [Six people in Edmonton's homeless population have tested positive for COVID-19, linked to an outbreak at the Hope Mission Emergency Shelter.](#) This is the first reported COVID-19 outbreak among the city's homeless community. Alberta Health Services (AHS) spokeswoman confirmed the outbreak and indicated that anyone deemed to be at risk of contracting the virus has been referred to Edmonton's isolation shelter.

- According to the media, on 23 September 2020, [more than 400 schools in Quebec and another 153 in Ontario are reporting at least one case of coronavirus disease](#). The figures from the group COVID Ecoles Quebec and the Ontario government come as authorities across Canada battle a second wave of COVID-19. Data from Ontario showcases among people in their 20s have risen sharply in recent months. One expert attributes the increase among younger Canadians in part to the reopening of schools and universities. While older people and those with underlying health conditions are generally more susceptible to severe illnesses from SARS-CoV-2, younger people can spread the contagious disease often before showing any symptoms. Ontario data indicate the number of new cases among people in their 20s has reached similar levels to those seen among people in their 80s in mid-April.
- [The Ontario government is providing people with convenient and timely access to free COVID-19 testing at pharmacies in the province](#). As of 25 September 2020, up to 60 pharmacies in Ontario will begin offering testing by appointment only, with further locations coming online in the coming weeks. This initiative will expand testing capacity well beyond the province's 150 assessment centres. The expansion of COVID-19 testing to pharmacies is part of the province's comprehensive plan to prepare the health system for a second wave of COVID-19.
- [Ontario's education minister says he's considering shortening the list of COVID-19 symptoms that require kids to stay home from school](#). The minister stated that he's working with the province's medical officials to consider possible changes to the list, which right now includes sore throat, nasal congestion and abdominal pain. Those three symptoms are among the 10 that B.C. opted to remove from its checklist. Ontario's school reopening plan requires parents to screen their children for a list of COVID-19 symptoms and keep them home if they display signs of the novel coronavirus.
- [The B.C. teacher's union says it's concerned about inconsistent reporting of COVID-19 exposures in schools and a lack of transparency from one health region in particular](#). Since the province announced COVID-19 exposure alerts in schools would be made available online, Vancouver Coastal Health (VCH) has faced criticism for the way it has handled its alerts. The health authority had only posted one exposure at a school, despite there being others. However, VCH's Chief Medical Health Officer reassures that those who need to know about exposures are being informed, even if it isn't online.
- [An investigation into one of the Quebec's hardest-hit long-term care homes, CHSLD Herron, has concluded it suffered from "organizational negligence."](#) The report was released alongside another into CHSLD Sainte-Dorothée, which was also ravaged by COVID-19. In that case, the investigation found that problems stemmed from, among other things, a shortage of personnel.
- [Quebec has begun rolling out a COVID-19 advertising campaign aimed at putting a human face on the deadly virus and reaching those who discount its severity](#). The ads include testimonials of those impacted directly by COVID-19. With public health officials saying the province hit hardest by COVID-19 is experiencing a second wave, efforts have intensified to reach a segment of the population that has felt the virus's risk is overhyped. But some marketing experts do not believe the government is striking the right tone or that the message will reach the right people.

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

- On 23 September 2020, the [Department of Health and Human Services \(HHS\) announced upcoming action by the Centers for Disease Control and Prevention \(CDC\) to provide \\$200 million to jurisdictions for COVID-19 vaccine preparedness](#). Funding from the Coronavirus Aid, Relief, and Economic Security Act (CARES) will provide critical infrastructure support to existing grantees through CDC's immunization cooperative agreement. CDC is awarding \$200 million to 64 jurisdictions through the existing Immunizations and Vaccines for Children cooperative agreement. These funds, along with the previous support CDC has provided, will help states prepare for the COVID-19 vaccine.
- On 22 September 2020, the CDC published [a new COVID-19 Science Update](#). [These updates](#) are from the Office of the Chief Medical Officer, CDC COVID-19 Response, and the CDC Library, Atlanta GA and Intended for use by public health professionals responding to the COVID-19 pandemic.
- The U.S. Food and Drug Administration (FDA) issued an emergency use authorization (EUA) for the first serology (antibody) point-of-care (POC) test for COVID-19. The Assure COVID-19 IgG/IgM Rapid Test Device was first authorized for emergency use by certain labs in July 2020 to help identify individuals with antibodies to SARS-CoV-2, indicating recent or prior COVID-19 infection. EUA is [being reissued](#) to authorize the test for POC use using fingerstick blood samples. This authorization means that fingerstick blood samples can now be tested in POC settings like doctor's offices, hospitals, urgent care centers and emergency rooms rather than having to be sent to a central lab for testing.
- FDA has posted a [document summarizing updated evidence to support the emergency use of COVID-19 Convalescent Plasma](#). The agency will continue to review the circumstances and appropriateness of the authorization for emergency use. To make this information accessible to the public, the document posted on the web presents FDA's review in relatively plain language.
- [The U.S. Food and Drug Administration \(FDA\) will host a virtual Town Hall on 30 September for clinical laboratories and commercial manufacturers that are developing or have developed diagnostic tests for SARS-CoV-2](#). The purpose of this Town Hall is to help answer technical questions about the development and validation of tests for SARS-CoV-2.

- The [U.S. health officials have told the U.S. Senate that the number of new COVID cases in the country is down, while the number of people hospitalized with COVID-19 has fallen 54% and the number of COVID-associated deaths is down 32%](#). The CDC director also said the mortality rate in COVID-19 patients, particularly in the elderly, has been improving. He emphasized that the shifting trends in the age of new COVID-19 cases, pointing out that 18- to 25-year-olds now account for over 26% of new infections, more than any other group. In addition, the Food and Drug Administration (FDA) Commissioner sought to assure the public that a coronavirus vaccine will not be approved, or receive an emergency use authorization, until data from a phase 3 trials have demonstrated safety and efficacy in a "clear and compelling manner," and that politics will not play a role in the process.

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

- [ECDC has launched a new COVID-19 situation dashboard, providing users with a simpler, more user-friendly platform to explore the latest available COVID-19 data from Europe and worldwide](#). Through interactive maps, graphs and tables, users are able to easily view, compare and export data on COVID-19 cases and deaths by region or country, and within a specified timeframe. Since the beginning of the pandemic, ECDC's Epidemic Intelligence team has been collecting data on COVID-19 at the European and global level on a daily basis. The [COVID-19 situation dashboard](#) is updated every day to visualise and disseminate this data.
- [European airlines are pinning hopes on pre-flight COVID-19 tests that deliver results as fast as pregnancy tests](#) to help restore passengers' confidence in taking to the skies in confined spaces with shared air. Germany's Lufthansa is in talks with Swiss drugmaker Roche over deploying so-called antigen tests, as the airline aims to make them available in October. Italian operator Alitalia, meanwhile, indicated that it would add two flights from Milan to Rome, to the two it is already offering from Rome to Milan, exclusively for passengers with negative tests.
- [Saudi Arabia will allow pilgrims living inside the country to undertake the Umrah pilgrimage, beginning on 4 October](#), after a seven-month pause due to the coronavirus pandemic, state news agency Saudi Press Agency has reported.
- [France](#) is set to raise the coronavirus alert level in Paris and other top cities to "scarlet", the highest level, as part of efforts to stem a continuing rise in the daily number of infections.
- A [nonprofit patient safety organization has ECRI issued a high-priority hazard alert against KN95 masks after an analysis found that up to 70% of these masks imported from China did not meet these filtration standards](#). ECRI tested nearly 200 masks from 15 different manufacturer models purchased by some of the largest health systems in U.S. The ECRI's president said there was not only variability among the different brands but also inconsistencies among masks made by the same manufacturer. Besides the filtration concerns, public health experts criticized KN95 masks for their inability to create a tight seal on someone's face. N95 masks have head and neck straps; KN95s have ear loops.

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

- [A fourth Phase 3 clinical trial evaluating an investigational vaccine for coronavirus disease 2019 \(COVID-19\) has begun enrolling adult volunteers](#). The trial is designed to evaluate if the investigational Janssen COVID-19 vaccine (JNJ-78436725) can prevent symptomatic COVID-19 after a single dose regimen. Up to 60,000 volunteers will be enrolled in the trial at up to nearly 215 clinical research sites in the United States and internationally. The Janssen Pharmaceutical Companies of Johnson & Johnson developed the investigational vaccine (also known as Ad.26.COV2.S) and is leading the clinical trial as regulatory sponsor. Janssen, the National Institute of Allergy and Infectious Diseases (NIAID) and the Biomedical Advanced Research and Development Authority (BARDA), are funding the trial. U.S. and international trial sites part of the NIAID-supported [COVID-19 Prevention Network \(CoVPN\)](#) will participate in the trial. The CoVPN is composed of existing NIAID-supported clinical research networks with infectious disease expertise and designed for rapid and thorough evaluation of vaccine candidates and monoclonal antibodies for the prevention of COVID-19.
- [Protecting the Editorial Independence of the CDC From Politics](#). Whether this is true is unclear, but these reports are consistent with other reports of the actions of political appointees and their attempts to influence the scientific process. As former editors in chief of MMWR, we believe these media reports raise serious concerns that in the midst of the COVID-19 pandemic, scientific reports published in MMWR might have been delayed or altered for political purposes. As with all scientific manuscripts authored by CDC professionals or published by CDC, submissions to MMWR undergo a rigorous internal peer review clearance process by epidemiologists, laboratorians, and other technical experts.⁴ The goal of this process is to ensure that the content incorporates relevant input from experts across the agency and is scientifically valid and technically accurate. The extent of this internal review process depends on the range of issues covered, the complexity of the science, and the potential effects of the findings. Once COVID-19 vaccines are licensed by the US Food and Drug Administration (FDA), official recommendations for their use developed by the ACIP are expected to be published in MMWR, as they were during the 2009 H1N1 influenza pandemic. Any perception that these recommendations are inappropriately influenced by political considerations—or any other considerations aside from scientific evidence—could hinder delivery of COVID-19 vaccines by clinicians and acceptance of vaccines by the public.

- [Two studies published shed light on the so-called silent spread of Covid-19](#). One study, [published in the journal Thorax](#), reports that asymptomatic people can carry as much virus in their noses and throats as people showing symptoms of the illness. The second study, [a review published in Plos Medicine](#), found that while the majority of infected individuals do develop symptoms, they may test positive before those symptoms begin. Taken together, the research underscores the need for preventive measures to slow the spread of the coronavirus.
- [Scientists in Houston have released a study of more than 5,000 genetic sequences of the coronavirus that reveals the virus's continual accumulation of mutations, one of which may have made it more contagious](#). The new report, however, did not find that these mutations have made the virus deadlier or changed clinical outcomes. All viruses accumulate genetic mutations, and most are insignificant, scientists say. The new study, which has not been peer-reviewed, was posted the [MedRxiv](#). It appears to be the largest single aggregation of genetic sequences of the virus in the United States thus far.
- [The United Kingdom will host clinical trials where volunteers would be deliberately infected with the new coronavirus to assess the effectiveness of experimental vaccines](#). The government-funded project is expected to begin in January at a quarantine facility in London. Volunteers will be first inoculated with a vaccine and later receive a challenge dose of the coronavirus, without naming the vaccine that would be tested in the project.
- [Scientists indicated that a 'silent wave' of neurological illnesses could sweep Australia in years to come as brain damage caused by coronavirus may lead to other diseases](#). New research into the long-term effects of COVID-19 published on 22 September 2020 has found survivors may have an increased risk of developing Parkinson's disease. The virus creates inflammation on the brain, which can act as a trigger for the onset of more serious conditions. The links described were witnessed after the 1918 Spanish Flu pandemic, with Parkinson's disease cases tripling five years after the outbreak. The study, published in the [Journal of Parkinson's Disease](#), proposes a 'two-hit' hypothesis, in which an initial inflammation event occurs, such as the virus, with a second then fuelling the later development of the nervous system disorder. According to the experts, not every survivor will develop the disease, but it is still too early to know what percentage will. According to a Professor from the Florey Institute of Neuroscience and Mental Health Barnham, with 30 million people worldwide being diagnosed with SARS-CoV 2, even a small percentage would create a surge in Parkinson Disease cases.
- [Coronavac, an immunization against Covid-19 created by China's Sinovac and which will be produced jointly in Brazil by the Butantan Institute, proved safe in a phase 3 study done on 50,000 volunteers in China](#). The data of the study will be presented by Governor, the director of Butantan, and a representatives of the Chinese pharmaceutical. The results on efficacy, which in the previous phases were considered satisfactory, should be ready in November 2020. If this schedule remains, the expectation in the Government of São Paulo is to release it for vaccination in December 2020. According to the Chinese study, there were only 5.36% of side effects in the test participants, pain at the site of application (3.08%), fatigue (1.53%) and mild fever (0.21%). The rest had loss of appetite, headache and fever.
- Early in the pandemic, COVID-19 incidence was highest among older adults. In a study published on 23 September 2020, in the [Morbidity and Mortality Weekly Report](#), researchers analysed the changing age distribution of the COVID-19 Pandemic in the United States. During June–August 2020, COVID-19 incidence was highest in persons aged 20–29 years, who accounted for >20% of all confirmed cases. Younger adults likely contribute to community transmission of COVID-19. Across the southern United States in June 2020, increases in percentage of positive SARS-CoV-2 test results among adults aged 20–39 years preceded increases among those aged ≥60 years by 4–15 days. Strict adherence to community mitigation strategies and personal preventive behaviors by younger adults is needed to help reduce infection and subsequent transmission to persons at higher risk for severe illness.
- [Pets may be more susceptible to the coronavirus than previously thought, according to a study by scientists in France](#). A team from the French National Research Institute for Sustainable Development collected blood samples from 47 cats and dogs that lived with families in which at least one member had tested positive for Covid-19. They then ran three tests on the samples for Sars-CoV-2 antibodies. More than 20 per cent of the animals returned a positive result in all three tests and 53 per cent did so in at least one. Earlier studies put the risk of a family pet becoming infected at between zero and 15 per cent. The French study was published on the preprint website [bioRxiv.org](#), meaning its findings have not been peer-reviewed. Meanwhile, a separate study carried out by scientists in Spain found that the death rate among dogs suffering from respiratory disease soared during the pandemic. Based on data collected from vets between April and June, the team found that the death rate rose from a norm of 1 to 2 per cent to as high as 40 per cent. The team stated in a paper published on [bioRxiv.org](#) that it was unclear if the spike could be attributed to the health crisis affecting humans, but coronavirus antibodies were found in some of the 40 dogs that got sick or died in the period.
- [New research from Spain on two cats that caught the virus suggests felines are able to develop their own antibodies that effectively neutralize COVID-19](#). The findings is based on a four-year-old cat that tested positive for the virus in May after its owners also contracted the disease. After being brought to an animal hospital, the cat was diagnosed with hypertrophic cardiomyopathy, a condition not related to the cat's COVID-19 infection. The cat was euthanized, and a necropsy confirmed that the animal had no other lesions or symptoms compatible with a coronavirus infection. More significantly, scientists determined through testing that the cat had a very low viral load. Serological tests were then performed on him and another house cat, that lived in the same home. Researchers found that both cats had naturally developed antibodies against the virus. Researchers believe that both cats were infected by their owners.

Both animals had no contact with other cats, and researchers analyzed the one of the cat's genetic sequence and found that it had a 99.9 per cent similarity to the virus one of its owners had. The owner died of the virus.

- A [study released shows a 40% asymptomatic rate among healthcare workers \(HCW\) testing positive for SARS-CoV-2 at the time of screening raising concerns about silent transmission of SARS-CoV-2 in healthcare settings](#). A systematic review of 97 studies presented online at the European Society of Clinical Microbiology and Infectious Diseases (ESCMID) Conference on Coronavirus Diseases and published in the [American Journal of Epidemiology](#) found that 10% of HCW were positive via polymerase chain reaction testing and 7% by antibody tests. Nurses accounted for the most infections (48% of those infected), followed by physicians (25%) and other healthcare workers (23%). Five percent of healthcare workers with COVID-19 went on to develop severe clinical complications, and 0.5% subsequently died. An analysis of the 15 studies that screened HCW irrespective of symptoms and reported the percent testing positive found that 40% did not report any COVID-19-compatible symptom during screening.
- A study in [JAMA](#) shows that a [routine blood test predicts increased risk of COVID-19 death in hospitalized patients](#). The study points to elevated red blood cell (RBC) distribution width (RDW), a measure of RBC volume variation and a standard part of a routine complete blood count test, as a tool to identify patients at higher risk of COVID-19 complications.
- Fatality rates related to COVID-19 in Japan have been low compared to Western Countries and have decreased despite the absence of lockdown. In a study published in [medrxiv](#) researchers revealed that, COVID-19 infection may have spread widely across the general population of Tokyo despite the very low fatality rate. Given the temporal correlation between the rise in seropositivity and the decrease in reported COVID-19 cases that occurred without a shut-down, herd immunity may be implicated. They added that sequential testing for serological response against COVID-19 is useful for understanding the dynamics of COVID-19 infection at the population-level.
- [A new study from the University of Bristol suggests there's a druggable pocket in the SARS-Cov-2 spike protein that could help stop the coronavirus](#). The researchers published their findings in the journal *Science*. The researchers found "a small molecule, linoleic acid (LA), buried in a tailor-made pocket within the spike protein. LA can't be developed by humans. But it plays "a vital role in inflammation and immune modulation, which are both key elements of COVID-19 disease progression. LA is also needed to maintain cell membranes in the lungs so that people can breathe properly. The researchers said those with COVID-19 had low levels of LA, which is why they had trouble breathing and why they suffered from inflammation. Now, the researchers said seeing the pocket allows them to see whether they can turn the virus against it self.
- [A new study suggests that plastic face shields don't work](#). A computer simulation conducted at the Riken Centre in Japan, revealed almost 100 per cent of airborne droplets smaller than five micrometres in size — released when talking and breathing — escaped through the visor from plastic face shields . And half of larger droplets measuring 50 micrometres in size — given off by coughs and sneezes — found their way into the air, posing a risk to others. One micrometre is one millionth of a metre. The evidence follows on from research done at Florida Atlantic University's College of Engineering and Computer Science published on 1 September, which also found face shields are ineffective in halting the spread of coronavirus.

Domestic Events of Interest

[Canada - More microgreens recalled in relation to Salmonella outbreak \(Media\)](#)

A third recall has been initiated in Canada related to a *Salmonella* outbreak associated with fresh sprouts from Sunsprout. The recall covers micro-greens including alfalfa and onion, and alfalfa and radish. There is concern that consumers may have the recalled microgreens in their homes because of their relatively long shelf life. The sprouted greens named in the expansion of the Sunsprout product recall have best-before dates up to and including Oct. 5, according to the recall notice posted by the Canadian Food Inspection Agency. Previously recalled Sunsprout microgreens have best-before dates up to and including 13 October.

[Canada, AB - Opioid deaths spike in first half of 2020, Alberta cites pandemic as cause \(Media\)](#)

The Alberta COVID-19 Opioid Response Surveillance Report Q2 2020 says there were 449 unintentional opioid deaths in the first months of 2020 — an increase of 99 from the first half of 2019. The majority of the 449 deaths — 414 — came as a result of a fentanyl overdose. Unintentional opioid deaths saw a sharp incline during the second quarter, between April and June, with 148 deaths in the first quarter and 301 in the second. The province says it began to see a significant increase in March eventually resulting in "record levels not previously seen." The report shows opioid-dependence treatment went from 86 per cent in March to 52.6 per cent in April before it went back up to 84.2 per cent in June. Furthermore, supervised consumption sites saw a steep decline in visits from 114,430 in the first quarter to 40,755 in the second quarter at facilities in Edmonton, Calgary, Red Deer, Lethbridge and Grande Prairie. The majority of the unintentional deaths came in Alberta's biggest cities, especially Edmonton and Calgary.

[Canada - 1,068 lives lost to overdose \(Media\)](#)

British Columbia has now lost 1,068 lives in 2020 to drug overdose, following another 147 overdose deaths recorded in August. According to the [latest report from the BC Coroners Service](#), in August figures represented a 71% increase over

the number of deaths seen in August 2019, when 86 individuals died of drug overdose. Males are disproportionately represented in the provincial data, accounting for 862 of the 1,068 overdose deaths recorded in 2020 to date. BC Coroners Service reported post-mortem toxicology results suggesting that there has been a greater number of cases with extreme fentanyl concentrations in April-August 2020 compared with previous months. B.C. is on track to record the highest number of overdose deaths in a single year.

[Canada, ON - Lambton County sees first confirmed human case of West Nile virus in 2020](#) (Media)

Health officials say someone in Lambton County has tested positive for the West Nile Virus - the first confirmed human case in the region in 2020. Lambton Public Health says mosquito pools in Petrolia and Oil Springs tested positive for the virus in August. The agency says 24 human cases have been reported in Ontario this year so far.

International Events of Interest

[United States - Miami: 2nd locally acquired dengue case reported](#) (Media)

The Florida Department of Health in Miami-Dade County has reported an additional confirmed case of locally transmitted dengue fever in a Miami-Dade resident. There has been a total of two locally acquired dengue cases in 2020.

[Sudan - Eight people die of 'unknown' fever in northern Sudan](#) (Media)

Eight people have died in Sudan's Northern State of an unknown fever, the Sudanese Ministry of Health has revealed. Officials stated that the ministry received a report concerning 41 cases of fever in the Northern State, including eight deaths. It added that a medical team has been sent to investigate the cases and try to identify the disease that caused the deadly fever. Samples were taken for laboratory examination to confirm the diagnosis, and to strengthen interventions to prevent and control the disease. Sudanese doctors expect the cause to be found in the contaminated floodwater that has engulfed large parts of the country in recent weeks. Stagnant water can lead to outbreaks of serious diseases such as cholera, dengue fever or malaria.

Researches, Policies and Guidelines

[South Korea - Effect of COVID-19 on Tuberculosis Notification](#) (Official)

After South Korea raised its infectious disease alert to the highest level in response to coronavirus disease emergence, tuberculosis notification during the first 18 weeks of 2020 decreased significantly from the same period for each year during 2015–2019. Adequate measures to diagnose, control, and prevent tuberculosis need to be maintained.

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

Global Public Health Intelligence Network | Health Security Infrastructure Branch
Public Health Agency of Canada, Government of Canada
phac.gphin-rmisp.aspc@canada.ca
Réseau mondial d'information en santé publique | Direction Générale de l'infrastructure de sécurité sanitaire
Agence de la santé publique du Canada, Gouvernement du Canada
phac.gphin-rmisp.aspc@canada.ca