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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 28 September 2020 at 19:00 EDT, a total of 155,301 cases have been recorded in Canada including 9,278 deaths. The cases are reported in Newfoundland and Labrador (273 confirmed cases, 3 deaths), Prince Edward Island (58 confirmed cases), Nova Scotia (1,087 confirmed cases, 65 deaths), New Brunswick (200 confirmed cases, 2 deaths), Quebec (72,651 confirmed cases, 5,826 deaths), Ontario (50,531 confirmed cases, 2,840 deaths), Manitoba (1,919 confirmed cases, 20 deaths), Saskatchewan (1,892 confirmed cases, 24 deaths), Alberta (17,749 confirmed cases, 265 deaths), British Columbia (8,908 confirmed cases, 233 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 29 September 2020, 11:16 GMT, there were 33,585,721 cases of COVID-19 and 1,007,196 deaths reported globally. Top 10 countries with the highest number of cases, by alphabetical order are: Argentina (723,132 cases, 16,113 deaths), Brazil (4,748,327 cases, 142,161 deaths); Colombia (818,203 cases, 25,641 deaths); India (6,145,291 cases, 96,351 deaths); Mexico (733,717 cases, 76,603 deaths); Peru (808,714 cases, 32,324 deaths); Russia (1,167,805 cases, 20,545 deaths); South Africa (671,669 cases, 16,586 deaths); Spain (748,266 cases, 31,411 deaths); United States (7,361,889 cases, 209,815 deaths).

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

- On 28 September 2020, [Canada's Chief Public Health Officer](#) in lieu of an in-person update noted that the ongoing increase in Canada's daily case count is an indicator of accelerated epidemic growth in some regions of the country. While Canadians and public health authorities alike are rapidly responding to the COVID-19 pandemic, there is a need to be mindful that the work being done in the midst of an "infodemic." The officials urged everyone to consider the source of the information they share with others. And when one comes across new information, one needs to think critically about it, check the source and not share it further, if there any doubt about its credibility. False or misleading information can spread as fast as a virus. Just as we must be vigilant in keeping up proven, effective public health measures to slow the spread of COVID-19, we must also be vigilant in our efforts to end the "infodemic".
- On 28 September 2020, [Quebec reports 750 new cases of COVID-19 and one more death](#). The Quebec government has tightened criteria for who can get a COVID-19 test, announcing it will prioritize people who are showing symptoms or who have been in close contact with a positive case. The provincial health department stated in a news release that as cases rise, it's important to focus on testing those who are most likely to have COVID-19 in order to speed up contact tracing and prevent outbreaks. According to the Quebec Premier, [three regions are being moved to the highest COVID-19 alert level](#), and stricter health measures are now necessary to curb the rate of transmission. Those regions include Montreal, Quebec City and Chaudière-Appalaches, south of the provincial capital. The new restrictions are set to last for 28 days until 28 October in the red zone. Travel between different regions of the province is also strongly discouraged.
- On 28 September 2020, [Ontario Premier called the province's record-setting new COVID-19 case count deeply concerning](#), but announced no new public health measures, despite a group of doctors and medical experts

calling for a return to Stage 2. The province reported an additional 700 cases of coronavirus, the most on a single day since the outbreak began in late January. About 60% of new cases are people under 40 years old.

- [There are currently eight schools in Ottawa reporting an outbreak of COVID-19, meaning the school has more than one case of the virus and a confirmed transmission.](#) Meantime, the four school boards in Ottawa are reporting 58 schools with at least one case of the virus. The Ottawa-Carleton District School Board is reporting 12 schools with a case of the virus. In total, 11 students and one staff member are affected. There are 19 schools in the Ottawa Catholic School Board reporting cases. In total, 24 students and two staff members are affected. Conseil des écoles publiques de l'Est de l'Ontario is reporting 10 schools with cases of COVID-19, affecting 12 students and three staff members. And Conseil des écoles catholiques du Centre-Est is reporting 17 schools with at least one case of the virus, affecting 25 people.
- [Toronto Public Health reports that seven people who tested positive for COVID-19 recently, frequented the same Yonge St. restaurant.](#) The health department indicates that of the seven, five are staff members and two are patrons of the Yonge Street Warehouse with exposure dates between 10-17 September. On 27 September 2020, the agency stated that, three workers at Regulars Bar, located at 668 King St. W. also tested positive over the last few days. The potential exposure period is 13-22 September and the department estimates some 600 people may have been at the bar during this time.
- [Fresh projections suggest that Ontario's second wave of COVID-19 will peak in mid- to late October and will likely send enough patients to intensive care that hospitals will need to scale back non-emergency surgeries.](#) The forecasts come from the COVID-19 Modelling Collaborative, a joint effort of scientists and physicians from the University of Toronto, University Health Network and Sunnybrook Hospital. Based on how quickly Ontario's infection rate has been rising in recent weeks, the model projects the province is on track to exceed 1,000 new cases per day by the middle of October, unless stricter public health measures slow the accelerating spread.
- [Ottawa Public Health has released a neighbourhood-by-neighbourhood map of COVID-19 infections in the city.](#) The map was produced in partnership with the Ottawa Neighbourhood Study. OPH states the map was created and released in the interest of transparency but continues to stress that COVID-19 is prevalent across the city. The data used to create the map represent all cases reported from March to August 2020 and were extracted by Ottawa Public Health from the OPH COVID-19 Ottawa Database. It shows not only the total number of laboratory-confirmed cases of COVID-19 by neighbourhood but also the rate per 100,000 residents by neighbourhood.
- [Nunavut is reporting seven presumptive cases of COVID-19 at a mine](#) in the western region of the territory. The territory's chief public health officer stated in a news release that the seven cases are at Hope Bay gold mine, 125 kilometres southwest of Cambridge Bay. Nunavut confirmed two cases of the virus at Hope Bay on 19 September, but the government reports that there is no established link between them and the seven presumptive cases announced on 28 September. The release states the presumptive cases and all known contacts are isolating.
- [Manitoba Tataskweyak Cree Nation is under a lockdown](#) after a member tested positive for COVID-19 the week of 21 September. On 28 September 2020, the Manitoba First Nation, located about 700 kilometres north of Winnipeg, has issued a ban on trips to Winnipeg for its members, except for medical reasons, and non-residents are not allowed in the community for two weeks. The notice doesn't indicate whether exceptions will be made for essential workers. The community is also shifting to remote learning for students until further notice and has implemented an 8 p.m. curfew.

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

- On 28 September 2020, Centers for Disease control and Prevention updated [COVID-19 Travel Recommendations by Destination](#). With specific exceptions, several presidential proclamations restrict foreign nationals who have been in any of the following countries during the past 14 days from entering the United States. [China, Iran, Most European Countries](#) (Austria, Belgium, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland, Monaco, San Marino, Vatican City), [United Kingdom](#) (England, Scotland, Wales, Northern Ireland), [Republic of Ireland, Brazil](#).
- On 29 September 2020, the U.S. Food and Drug Administration (FDA) along with the Centers for Disease Control and Prevention's (CDC) National Institute for Occupational Safety and Health (NIOSH) and the Occupational Safety and Health Administration (OSHA), will host a [webinar on Respirators and Other PPE for Health Care Personnel Use](#) during the COVID-19 Pandemic.
- On 30 September 2020, the U.S. Food and Drug Administration (FDA) will host a virtual [Town Hall](#) 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.

WHO - Global partnership to make available 120 million affordable, quality COVID-19 rapid tests for low- and middle-income countries (Official)

A set of agreements to make available, for low and middle-income countries, affordable, high-quality COVID-19 antigen rapid tests were announced on 28 September by the Access to COVID-19 Tools (ACT) Accelerator. Organizations involved in the milestone agreement include the Africa Centres for Disease Control and Prevention (Africa CDC), the Bill & Melinda Gates Foundation, the Clinton Health Access Initiative (CHAI), the Foundation for Innovative New Diagnostics (FIND), the Global Fund, Unitaid, and the WHO. As part of this comprehensive, end-to-end effort, the Bill & Melinda Gates Foundation has executed separate volume guarantee agreements with rapid diagnostic test (RDT) producers Abbott and SD Biosensor. These two arrangements will make available to LMICs 120 million antigen rapid diagnostic tests (Ag RDTs) – priced at a maximum of US\$5 per unit – over a period of six months. These tests provide results in 15–30 minutes, rather than hours or days, and will enable expansion of testing, particularly in countries that do not have extensive laboratory facilities or trained health workers to implement molecular (polymerase-chain reaction or PCR) tests. The tests developed by Abbott and SD Biosensor are highly portable, reliable, and easy to administer, making testing possible in near-person, decentralized healthcare settings. Both companies' tests are faster and cheaper than laboratory-based tests, enabling countries to increase the pace of testing, tracing and treating people for COVID-19 at the point of care particularly in areas with under-resourced health systems. A number of other Ag RDTs are at various stages of development and assessment.

PAHO - PAHO has led regional response to COVID-19 while striving to protect long-term health gains (Official)

PAHO's technical cooperation between mid-2019 and mid-2020 are described in the 2020 Annual Report of the Director "Saving Lives and Improving Health and Well-Being." PAHO Director presented the report on 28 September to health authorities from throughout the Americas who are meeting virtually this week for the 58th PAHO Directing Council. The report summarizes PAHO's strategies, interventions, and achievements in its main areas of technical cooperation during the reporting period. These areas include health systems and services; communicable diseases and environmental determinants of health; health emergencies; family, health promotion, and life course; noncommunicable diseases and mental health; and evidence and intelligence for action in health. The report highlights special efforts to ensure improved health for all both during and beyond the pandemic, especially for those in conditions of vulnerability, reflecting the Organization's overarching commitment to leave no one behind. The report also describes PAHO's efforts to improve its internal efficiency and ensure continued transparency and accountability in all its operations.

PAHO - Health Ministers' meeting kicks off with call for unity, solidarity to face COVID-19 pandemic in the Americas (Official)

On 28 September 2020, the Director of the Pan American Health Organization (PAHO) indicated that the post-COVID world will be shaped by decisions being made in the fight against the virus. The Director-General of WHO highlighted the need to not wait for a vaccine and save lives with the tools available now. To achieve this, the official proposed that countries adopt four priorities: prevent amplifying events with a risk-based approach at a local level; protect the vulnerable to save lives and reduce the burden on health systems; educate and empower communities to protect themselves and others with a comprehensive approach; and get the basics right – find, test, isolate, quarantine cases and trace their contacts. Discussions on countries' response to the COVID-19 pandemic will be addressed in depth on 29 September.

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

- [On 28 September 2020, the Greek coastguard stated that a dozen crew members on the first cruise ship to dock in Greece after the coronavirus lockdown have tested positive.](#) The Maltese-flagged Mein Schiff 6 operated by German travel giant TUI, with 922 passengers on board, is currently moored off the Aegean island of Milos, the positive results surfaced after tests on 150 among the crew's 666 crew members, the affected have been isolated on board. The TUI ship was the first to return to Greek waters after lockdown measures imposed in March, docking at Iraklio in mid-September.
- [The Netherlands has introduced stricter measures](#) to combat rising coronavirus cases, banning spectators at professional sports matches and ordering bars and restaurants to close at 10pm for the next three weeks. The Prime Minister advised people to wear face masks when shopping in Amsterdam, Rotterdam and the Hague, the three cities with the highest rates of infections. The official also noted that people should work from home, no more than three visitors should be allowed in homes, and no more than four people should go out together.
- [On 28 September 2020, The British government tightened restrictions on socializing](#) in parts of northeast England, in response to high and increasing COVID-19 infection rates in the region. From 30 September, residents in seven areas including urban centers will be barred from socializing indoors with people from outside their household or strictly defined social bubble. The restrictions will apply in homes, pubs and restaurants, and people who fail to comply will face fines enforceable by law, the health ministry indicated in a statement. [Only a quarter of Australians with cold or flu-like symptoms are getting tested for coronavirus,](#) according to a Monash University survey. More than a third spent time in public while unwell. The latest results of the Survey of COVID-19 Responses to Understand Behaviour, found 27% of people with symptoms were tested for the virus.

The survey is in partnership with the Victorian government and the results were collected between late August and early September. The result is up from 15% in a previous survey.

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

- On 28 September 2020, Centers for Disease control and Prevention published an early release of [COVID-19 Trends Among School-Aged Children — United States, March 1–September 19, 2020](#) stating that children aged <10 years can transmit SARS-CoV-2 in school settings, but less is known about COVID-19 incidence, characteristics, and health outcomes among school-aged children (aged 5–17 years) with COVID-19. Implications for public health practice of this publication is importance for schools and communities to monitor multiple indicators of COVID-19 among school-aged children and layer prevention strategies to reduce COVID-19 disease risk for students, teachers, school staff, and families. These results can provide a baseline for monitoring trends and evaluating mitigation strategies.
- [Researchers at Children's Hospital of Philadelphia \(CHOP\) and the Perelman School of Medicine at the University of Pennsylvania](#) have identified a cellular pathway that can be targeted with a naturally occurring drug to stimulate lung tissue regeneration, which is necessary for recovery from multiple lung injuries. The findings, which were published in [Nature Cell Biology](#), could lead to better therapies for patients with lung disease, including acute respiratory distress syndrome (ARDS) due to COVID-19. Using cutting-edge technology, including genome-wide and single-cell analyses, the study has identified a specific cellular pathway involved in lung tissue regeneration and found a drug that enhances this process. These findings provide identification of precision targets and thus allow for rational development of therapeutic interventions for lung disease caused by COVID-19 and other illnesses. Patients with COVID-19 who develop ARDS become critically ill, and to date, no drugs have been developed specifically to treat ARDS in COVID-19 patients. Understanding which genetic targets and pathways are involved in regenerating epithelial tissue is critical in developing effective therapies for ARDS and similar conditions.
- According to an analysis published on 28 September by [JAMA Internal Medicine](#), more than half of all clinical trials evaluating vaccines and potential treatments for COVID-19 are at high risk for excluding older adults. [In addition, roughly one in four of the 847 trials reviewed by the researchers included an age cutoff that would exclude adults age 65 to 80, the data showed.](#) Older adults are generally considered to be at higher risk for severe COVID-19 and health complications related to the disease, research suggests. Based on the study, older adults, particularly those in their 70s and 80s, may be systematically excluded from the clinical trials necessary to develop and test COVID-19 vaccines and treatments. According to the authors, the biggest concern is that without clinical trial testing, older adults will ultimately be denied treatments and vaccines as a result, equitable distribution to this population will not be possible, and this will be an egregious oversight.
- The ability of health systems to cope with coronavirus disease (COVID-19) cases is of major concern. In preparation, researchers used clinical pathway models to estimate healthcare requirements for COVID-19 patients in the context of broader public health measures in Australia. The study was published on 28 September 2020 in the [Emerging Infectious Diseases Journal](#). An age- and risk-stratified transmission model of COVID-19 demonstrated that an unmitigated epidemic would dramatically exceed the capacity of the health system of Australia over a prolonged period. Case isolation and contact quarantine alone are insufficient to constrain healthcare needs within feasible levels of expansion of health sector capacity. Overlaid social restrictions must be applied over the course of the epidemic to ensure systems do not become overwhelmed and essential health sector functions, including care of COVID-19 patients, can be maintained. Attention to the full pathway of clinical care is needed, along with ongoing strengthening of capacity.
- Public mental health response to coronavirus disease is essential. After reviewing systemic and local efforts in China, the researchers found efficient coordination and human resources. We recommend better symptom assessment, monitoring of organizations, and basic needs protection. This recommendation can inform how other countries can overcome mental health challenges during this pandemic. The findings were published on 28 September 2020 in the [Emerging Infectious Diseases Journal](#).
- Cloth masks have been used in healthcare and community settings to protect the wearer from respiratory infections. The use of cloth masks during the coronavirus disease (COVID-19) pandemic is under debate. The study published on 28 September 2020 in the [Emerging Infectious Diseases Journal](#) notes that the filtration effectiveness of cloth masks is generally lower than that of medical masks and respirators; however, cloth masks may provide some protection if well designed and used correctly. Multilayer cloth masks, designed to fit around the face and made of water-resistant fabric with a high number of threads and finer weave, may provide reasonable protection. Until a cloth mask design is proven to be equally effective as a medical or N95 mask, wearing cloth masks should not be mandated for healthcare workers. In community settings, however, cloth masks may be used to prevent community spread of infections by sick or asymptomatically infected persons, and the public should be educated about their correct use.
- Less than 10% of a nationally representative sample of US dialysis patients had antibodies against COVID-19, showing that herd immunity will remain out of reach for quite some time, according to a study published in [The](#)

[Lancet](#). Researchers from Stanford University and Ascend Clinical Laboratories found that less than 10% US population has COVID-19 antibodies. The study findings are similar to those from other recent studies in hard-hit countries such as China and Spain, which have demonstrated low percentages of people with coronavirus antibodies, the authors indicated. Compared with people in predominately white neighborhoods, those from black- and Hispanic-majority communities were two to four times more likely to have had COVID-19 (4.8% vs 11.3% to 16.3%). Patients who lived in low-income areas were twice as likely as their peers to be infected, while those living in densely populated communities were at 10 times the risk. The authors noted that monthly antibody testing of dialysis patients, while not perfect, is a good way to monitor disease trends, resource allocation, and the efficacy of public health interventions. The authors recommended that COVID-19 public health measures focus on black and Hispanic populations living in low-income, densely populated areas.

- [On 28 September 2020, Australian biotech company Ena Respiratory reported that a nasal spray](#) it is developing to improve the human immune system to fight common cold and flu significantly reduced the growth of the coronavirus in a recent study on animals. The [study](#) on ferrets showed the product dubbed INNA-051, which could be used complementary to vaccines, lowered the levels of the virus that causes COVID-19 by up to 96%. The study was led by British government agency, Public Health England. [Ena Respiratory, indicated that it would be ready to test INNA-051 in human trials in less than four months](#), subject to successful toxicity studies and regulatory approval.
- [On 28 September 2020, Turkish doctors gave the first shot of the coronavirus vaccine to a health worker](#), the health worker volunteered for the phase 3 test of the vaccine developed by China.

Domestic Events of Interest

[Canada/ International - Trudeau urges largest countries in the world to support UN biodiversity plan](#)

Canadian Prime Minister, on 28 September at a special session of the United Nations via video conference on the sidelines of the virtual General Assembly meeting, is calling on countries with the largest land mass to do more to protect the biodiversity of their land and water. The Prime Minister was taking part in the Leaders Event for Nature and People that also featured the leaders of Costa Rica and Norway. The Prime Minister was pledging Canada's support for a UN initiative that aims to protect 30 per cent of land and oceans by 2030. But Canada is the only country in the top-10 largest countries by land mass that has joined the initiative. Canada will be working with Indigenous Peoples as necessary partners because they understand how important it is to be good stewards of these lands and these waters that sustain us, the Prime Minister indicated. The Prime Minister also noted the government will move forward with its plans to plant two billion trees, ban many single-use plastics and protect wetlands, indicating he wants Canadians, once again, to connect to their nature.

[Canada - Warning about higher number of drug overdoses in Sudbury \(Media\)](#)

Sudbury's Community Drug Strategy and Public Health Sudbury and Districts (PHSD) states that there has been a report of a higher number of suspected opioid overdoses in Sudbury. A news release included a warning about the inherent dangers of street drugs as concerns raised that some street drugs are laced with Fentanyl or carfentanyl.

International Events of Interest

[United States \(Update\) - Outbreak Investigation of Cyclospora \(Official\)](#)

As of 25 September 2020, CDC has announced the outbreak of Cyclospora infections linked to salad products is over. FDA's trace back investigation is complete, however the cause or source of the outbreak has not been determined. FDA's investigation is continuing, in consultation with the state agriculture and regional water board.

[United States - Shionogi Announces FDA Approval of FETROJA® \(Cefiderocol\) for the Treatment of Hospital-Acquired Bacterial Pneumonia and Ventilator-Associated Bacterial Pneumonia \(Official\)](#)

On 28 September 2020, Shionogi & Co., Ltd. announces that the U.S. Food and Drug Administration (FDA) has approved a supplemental New Drug Application (sNDA) for FETROJA® (cefiderocol) for the treatment of patients 18 years of age or older with hospital-acquired bacterial pneumonia and ventilator-associated bacterial pneumonia (HABP/VABP) caused by the following susceptible Gram-negative microorganisms: Acinetobacter baumannii complex, Escherichia coli, Enterobacter cloacae complex, Klebsiella pneumoniae, Pseudomonas aeruginosa and Serratia marcescens.

[China - Chinese county launches emergency response for the Plague after a three-year-old boy was infected with the Black Death \(Media\)](#)

Authorities from a south-western Chinese county have recorded a new case of bubonic plague over the weekend as officials have activated an emergency response to prevent the disease from spreading. A three-year-old boy from a remote village in Menghai county of Yunnan province was confirmed to have infected with the bubonic plague on 27 September. It comes as China's Inner Mongolia region, near the Chinese border with Mongolia, has reported two deaths

caused by the plague in August, prompting the authorities to impose partial lockdowns and quarantine residents. China is also facing the threat of the disease spreading from its neighbouring country Mongolia, which have declared at least 17 out of all 21 provinces in the country are at risk of bubonic plague. The Menghai authorities launched a level-four emergency response on 25 September after reporting the young patient as a suspected case of bubonic plague. The statement indicated that the patient had mild symptoms and was in stable condition after treatment. The officials did not specify how the child had been infected but noted that a rat plague had occurred in the county on 21 September after three rats were found dead for unknown reasons in a village. The boy was diagnosed during a county-wide screening for the disease following the rat plague, and was confirmed to have been infected with the bubonic plague. National and provincial officials had arrived in Menghai as part of the government's emergency response for the plague while teams of medical workers made inspections, imposed quarantines and screened suspected patients with fevers. The news comes after China has reported two deaths caused by the plague since January. On 6 August, the Baotou city health commission confirmed a resident died of a different form of the disease four days earlier. The city of Baotou, in northern China's Inner Mongolia Autonomous Region, indicated the victim had contracted the enteric plague. The enteric plague, also known as the pharyngeal plague, attacks a person's digestive system and can arise as a result of exposure to infectious aerosols or by ingestion of infected meat.

Researches, Policies and Guidelines

[WHO - Recommended composition of influenza virus vaccines for use in the 2021 southern hemisphere influenza season \(Official\)](#)

World Health Organization (WHO) flu vaccine advisors recently met to recommend the strains to include in vaccines for the Southern Hemisphere's 2021 season, which when compared with the Northern Hemisphere upcoming-season version swaps out the 2009 H1N1 strain. For the egg-based H1N1 vaccine component, the experts recommend replacing the A/Guangdong-Maonan/SWL1536/2019-like virus with an A/Victoria/2570/2019-like virus. And for the cell-based H1N1 vaccine component, recommend replacing the A/Hawaii/70/2019-like virus with an A/Wisconsin/588/2019-like virus. When compared with the Southern Hemisphere's current-season vaccine, the group's recommendation swaps out both the 2009 H1N1 strains and the H3N2 strain for egg-based vaccines, switching from the A/South Australia/34/2019-like virus to an A/Hong Kong/2671/2019-like virus. Recommendations for the other strains for both trivalent and quadrivalent formulations are the same as for the Northern Hemisphere.

[United States - FDA approved opioids for chronic pain despite lacking 'critical' safety data, analysis finds \(Media\)](#)

The U.S. Food and Drug Administration (FDA) approved nearly 50 new prescription opioid pain medications between 1997 and 2018, even though it lacked critical data on safety and effectiveness, an analysis published on 28 September by the journal *Annals of Internal Medicine* found. None of the 48 drugs granted agency approval during the more than 20-year period was evaluated in clinical trials that lasted longer than 12 weeks, and the trials often included narrowly defined groups of patients, researchers noted. And few included systematic assessments of risks associated with these medications, including addiction potential and non-medical use. Of the 39 drug applications approved for use in people with chronic pain during that period, only 21 included at least one new pivotal trial, while the remainder relied on previously approved opioids for evidence of effectiveness. In addition, among the trials for products approved for chronic pain, none extended beyond 84 days, despite the fact that many people take these medicines for much longer periods. Although the trials generally reported adverse health events and side effects, they frequently failed to collect other important information, such as opioid diversion or non-medical use of these drugs, the analysis showed.

[United States - Fecal transplant provides long-term C diff protection despite exposures \(Study\)](#)

Mayo Clinic researchers report that a fecal microbiota transplant (FMT) was 78% effective at preventing *Clostridioides difficile* infection (CDI) recurrence at 1 year despite subsequent exposure to the toxoid in 460 FMT patients. The retrospective study, published in *Clinical Infectious Diseases*, found that 76.8% of adult patients were exposed to the healthcare system after FMT, and 78.1% of 374 patients with risk factor exposure had a durable response at 1 year. The authors concluded that a majority of patients had a durable response to FMT despite exposure to CDI risk factors.

[Singapore - Smartphones to aid in treatment of dengue patients \(Media\)](#)

According to a new study, ordinary smartphone cameras are capable of accurately determining the hydration severity of dengue patients to determine care and management by analyzing the color of their urine samples. In the study, published in *PLOS Neglected Tropical Diseases*, images of urine samples from 97 patients aged 13–60 years, taken with a standard mobile phone but in a customized booth to eliminate ambient light and other factors, were processed using Adobe Photoshop to index urine color into the red, green, and blue (RGB) color bands. The RGB values were found to correlate with patients' clinical and laboratory hydration indices. As a point-of-care tool, a smartphone equipped with a downloadable application can be linked to physicians in tertiary care centers, the study reports. Adequate fluid intake at home could significantly reduce the risk of hospitalization and reduce the economic impact of dengue in countries

experiencing dengue epidemics. Given the ready availability of smartphones even in difficult-to-access rural areas, a hydration tracker application can be a valuable tool for both patients and medical personnel, the authors emphasized.

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

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