

GPHIN Daily Report for 2020-10-09

Special section on Coronavirus

Canada

Areas in Canada with cases of COVID-19 as of 08 October 2020 at 19:00 pm EDT

Source: Government of Canada

Province, territory or other	Number of confirmed cases	Number of active cases	Number of deaths
Canada	175,559	18,494	9,557
Newfoundland and Labrador	277	4	4
Prince Edward Island	61	3	0
Nova Scotia	1,089	3	65
New Brunswick	225	24	2
Quebec	82,992	8,492	5,915
Ontario	56,742	5,442	2,992
Manitoba	2,344	863	27
Saskatchewan	2,012	143	24
Alberta	19,718	2,097	283
British Columbia	10,066	1,423	245
Yukon	15	0	0
Northwest Territories	5	0	0
Nunavut	0	0	0
Repatriated travellers	13	0	0

A detailed [epidemiologic summary](#) is available.

<https://www.canada.ca/en/public-health/services/diseases/2019-novel-coronavirus-infection.html#a1>

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

Statement from the Chief Public Health Officer of Canada on October 8, 2020

From: [Public Health Agency of Canada](#)

Statement

On October 8, 2020, Dr. Theresa Tam, Canada's Chief Public Health Officer, issued the following statement on COVID-19.

October 8, 2020

Ottawa, ON

Public Health Agency of Canada

In lieu of an in-person update to the media, Dr. Theresa Tam, Canada's Chief Public Health Officer, issued the following statement today:

"There have been 173,123 cases of COVID-19 in Canada, including 9,541 deaths. Over the past week, labs across Canada have tested an average of over 71,000 people daily, with 2.5% testing positive. National daily case counts **continue to rise** with an average of 2,052 new cases being reported daily during the most recent 7 days. Over the past week, there have been on average 673 individuals with COVID-19 in Canadian hospitals each day and 18 deaths reported daily.

These national trends reflect a series of regional epidemics that will continue to unfold differently in communities across the country. **Canada's two most populous provinces are reporting over 80% of the cases being reported nationally in recent weeks. Both provinces have also observed a rise in the number of hospitalized cases over the past several weeks raising concerns about straining health system capacity if the upward trend continues. Although the numbers remain well below those observed in the spring, both provinces are also reporting a concerning increase in the number of outbreaks in long-term care facilities.**

The situation varies considerably in other parts of the country and can change rapidly. The territories and most Atlantic Provinces have not reported a case in many weeks. British Columbia and Manitoba, where relatively few cases were reported during the initial wave, now report daily case counts surpassing their peak daily case counts in the spring. New Brunswick had reported fewer than five cases daily since early June and is now rapidly responding to an outbreak at a long-term care home. We must all remain vigilant and ready to adapt and scale our collective response to address our local epidemiology.

Follow the guidance of your [local public health agencies](#) and departments. No matter where we live, it is up to all of us to follow the tried and true personal protective practices that we know are effective in preventing the spread of COVID-19.

- Keep your in-person contacts bubble small; connect with family and friends outside your household virtually.
- Practise physical distancing; wash your hands frequently; and wear a mask where distancing may be difficult; and
- Stay home and self-isolate if you have symptoms, even mild ones.

Downloading the [COVID Alert](#) app is another valuable tool in our toolbox. Keeping COVID-19 at manageable levels, while keeping public spaces open, requires all of us to redouble our efforts.

We must rise to the challenge again and work together to flatten the curve."

<https://www.canada.ca/en/public-health/news/2020/10/statement-from-the-chief-public-health-officer-of-canada-on-october-8-2020.html>

New Brunswick

Masks mandatory in indoor public places / exposure notification / changes to travel restrictions at Quebec border

Source: Government of New Brunswick - Health - Latest News

ID: 1008003706

Masks mandatory in indoor public places / exposure notification / changes to travel restrictions at Quebec border

08 October 2020

FREDERICTON (GNB) – The provincial government announced today that masks will become mandatory in most indoor public places effective at midnight tonight.

“Based upon what we are seeing in our neighbouring provinces and the outbreak in Moncton, we know how quickly the virus can spread through a community,” said Premier Blaine Higgs. “We must take every possible measure to prevent that from happening in our province.”

Masks will become mandatory in most indoor places. This includes:

- public spaces where the public and employees interact (retail businesses, malls, service centres, places of worship, restaurants and bars except while eating, etc.) and organized indoor gatherings in public spaces (e.g. weddings, funerals, etc.);
- common areas like lobbies, elevators and hallways, and public shared spaces including those in private sector and government workspaces; and public transportation.

Continuous mask use is still required in seated venues with one metre physical distancing. Previously existing mask policies continue to apply in hospitals, health care settings, public schools and early childhood learning facilities.

As approved by the Pandemic Task Force, children under two are exempt from wearing masks, as well as those with a medical condition that prevents them from wearing a mask.

Inspection and enforcement officers from the Department of Justice and Public Safety surveyed 600 public spaces across the province to assess how many people were using a mask. They estimated the average number of people wearing masks is 36 per cent.

“Unfortunately, there are too many people who are not wearing their masks when required,” said Higgs. “We recognize this is a major announcement and businesses and individuals may need time to adjust. We are asking for people to comply immediately. Peace officers will be monitoring to ensure people are wearing masks as required.”

There are resources for businesses available on the provincial government’s coronavirus website including signs that can be printed and posted.

“It is about respecting and protecting each other,” said Dr. Jennifer Russell, chief medical officer of health. “Wearing masks or face coverings helps prevent you from unknowingly spreading COVID-19 and helps prevent the people around you from spreading it to you.”

Three new cases

Public Health reported three new cases of COVID-19 today. The new cases are: an individual between 20 and 29 in Zone 3 (Fredericton region) related to international travel and self-isolating.

an individual between 30 and 39 in Zone 5 (Campbellton region). The case is under investigation and the individual is self-isolating.

an individual between 40 and 49 in Zone 2 (Saint John region) related to travel outside of the Atlantic bubble and self-isolating.

The number of confirmed cases in New Brunswick is 225 and 199 have recovered. There have been two deaths, and the number of active cases is 24. Three patients are hospitalized with one in an intensive care unit. As of today, 82,365 tests have been conducted.

Exposure notification

Public Health has identified a positive case in a traveller who may have been infectious on Oct. 4 while on the following flights:

Air Canada Flight 418 – from Toronto to Montreal; and

Air Canada Flight 8792 – from Montreal to Saint John.

Anyone who travelled on these flights should self-monitor for symptoms for 14 days after the flight. Should any COVID-19 symptoms develop, they are directed to self-isolate and take the self-assessment online or call 811 to get tested.

New Brunswickers are encouraged to download the exposure notification app COVID Alert. The app is available for free download through the Apple or Google Play app stores. It was built with strong privacy protection and uses the Google and Apple Exposure Notification technology.

“COVID Alert is a secure, reliable and user-friendly app and it is an additional tool to help limit the spread of COVID-19,” said Russell.

If a New Brunswicker chooses to download the app and then tests positive for COVID-19, they

will have the opportunity to receive a one-time key from Public Health that they can enter into the app. After the key is entered, within a day, the app will anonymously notify other users who may have come into close contact with that person. The app will direct users on next steps based upon public health advice.

New Brunswickers who use the app are reminded that it does not lessen the importance of measures such as physical distancing, regular handwashing, proper respiratory etiquette or wearing a face mask in public indoor spaces.

Changes to travel restrictions regarding a Quebec border community

Effective at midnight tonight, the twinning agreement that allowed for non-essential day trips by residents of Listuguj First Nation and Pointe-à-la-Croix, Quebec is suspended.

“We recognize the strong bonds on both sides of the Restigouche River and we intend to continue to work with municipalities in the Campbellton region, Listuguj First Nation and Pointe-à-la-Croix and with the Government of Quebec to help make sure that everyone is safe and has access to things they need,” said Higgs. “Given the situation in other provinces and in neighbouring areas of Quebec, we are being vigilant and frequently monitoring changes in those areas.”

At the entry point at Campbellton, residents of Listuguj First Nation and Pointe-à-la-Croix, Quebec, will be permitted entry to obtain groceries, prescription medications and essential goods and services not available to them in their own community, as it was prior to the twinning agreement.

Travel also continues to be permitted for work, medical appointments, to fulfill the terms of a child custody agreement and to obtain child care.

Students can continue to cross the border to attend school for kindergarten to Grade 8. High school students will be permitted entry on Friday, Oct. 9, but arrangements are being made to provide remote learning for high school students beginning on Tuesday, Oct. 13.

https://www2.gnb.ca/content/gnb/en/news/news_release.2020.10.0515.html

Canada

Ottawa wedding results in 22 COVID-19 cases, hundreds self-isolating: OPH

Source: Global News

Unique ID: [1008000430](#)

One person who showed up at an indoor wedding in Ottawa with mild COVID-19 symptoms kicked off a chain reaction of transmission that saw 22 people infected and more than 200 people forced to self-isolate in just 15 days, according to the local public health unit. Attendees were not physically distancing or wearing masks at the event, so when those symptoms were later confirmed to be COVID-19, 49 other high-risk contacts were created. Ottawa Public Health (OPH) shared a diagram on Twitter on Thursday morning to illustrate how quickly the novel coronavirus can spread in large group settings when precautions aren't taken.

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Ottawa Public Health (OPH) shared a diagram on Twitter on Thursday morning to illustrate how quickly the novel coronavirus can spread in large group settings when precautions aren't taken.

At a September indoor wedding with roughly 50 people in attendance, one person attended the event despite having mild symptoms of COVID-19, OPH said.

Attendees were not physically distancing or wearing masks at the event, so when those symptoms were later confirmed to be COVID-19, 49 other high-risk contacts were created.

In total, 22 people tested positive for the virus in connection with the event.

[Sign up for our Health IQ newsletter for the latest coronavirus updates]

Before those cases could be confirmed, however, those high-risk contacts also returned to their own homes to expose others in their household.

Even more worryingly, those contacts also passed on the risk to their school bus cohorts, schools and group homes.

OPH said one group home ended up in an outbreak in connection with the wedding exposure, while one

school had a confirmed case of the virus and another saw a presumptive case.

That prompted mass testing demands for the affected individuals' classmates or fellow residents in congregate living.

In total, 207 people had to self-isolate as a result of the wedding exposure.

"Kids missed school, their parents couldn't work & testing lines were longer. Our. Actions. Matter," OPH said on Twitter.

OPH has shared previous examples of transmission after large events, including friends meeting up at a cottage and a group of people attending an outdoor barbecue.

In each of the cases, OPH used the case study as a reminder of how quickly the virus can spread when people aren't physically distancing, wearing masks or staying home when sick.

Dr. Vera Etches, Ottawa's medical officer of health, said last week that residents need to do more to reduce their close contacts so the city's health-care system does not become overwhelmed.

<https://globalnews.ca/news/7385793/ottawa-wedding-coronavirus-transmission/>

Ontario

Wastewater tracking shows COVID-19 doubled in past month in Ottawa

ID: 1008000359

Source: ottawacitizen.com

Oct 08, 2020

Samples taken from Ottawa's sewage treatment plant show the concentration of COVID-19 in the city's wastewater has doubled in the past month and is ten times higher than it was in June.

The findings mirror the spike in cases seen in the city since the second wave of the pandemic began. Ottawa is considered a provincial hotspot.

The wastewater tracking system, developed by local researchers, is now being used daily by Ottawa Public Health to monitor the spread of COVID-19.

Wastewater tracking has been studied by researchers in Ottawa and elsewhere since the beginning of the pandemic. But at a time when cases are increasing and the system of testing, tracking and tracing is strained, it could have a new appeal across the province.

Wastewater sampling offers a measure of COVID-19 that is not influenced by how many people are being tested. Crucially, sampling wastewater measures virus that has been shed by people before they show symptoms and are less likely to seek, or qualify, for testing.

"We all contribute involuntarily," said Dr. Alex MacKenzie, senior scientist at the CHEO Research Institute. "It doesn't matter how many people are asymptomatic or how many people get tested. It is just there."

And researchers say monitoring COVID-19 concentration in sewage can do more to help health officials better understand and prevent its spread.

Researcher and uOttawa engineering professor Robert Delatolla, who developed the program along with MacKenzie and others at CHEO, said he is optimistic the monitoring system could soon be used province-wide to help catch outbreaks before they begin in vulnerable communities.

Those behind it want to see it and other similar projects expand across Ontario with government funding.

Delatolla said targeted wastewater monitoring can act as a kind of "smoke detector" for outbreaks in long-term care homes and other vulnerable institutions. It could allow targeted action to be taken before widespread transmission of COVID-19 takes place, or to raise an initial warning about an outbreak that

hasn't yet been identified. It could be done at less cost, using fewer resources, than other methods.

"We see wastewater tracking as a potential tool to help alleviate the strain on public health," he said.

The work on wastewater tracking began, said MacKenzie, because most other research went dormant last spring at the beginning of the pandemic.

"It is an example of a bunch of concerned Canadians who got their livelihoods taken away in terms of regular research who looked around and said, 'What else can we do?'" he said.

MacKenzie, who usually researches rare childhood diseases, has developed a means of tracking COVID-19 in wastewater by measuring proteins, rather than RNA, which is the current system. The technique, he said, was borrowed from his brother Malcolm who developed it at a biotech company in Boston. MacKenzie is part of a team that has submitted a research paper on protein testing for COVID-19 wastewater tracking. He believes it is the first time the technique has been used for tracking COVID-19 in wastewater and eventually could become a more sensitive tool for determining how much COVID-19 is in a community by testing wastewater.

Delatolla said the Ottawa team has collaborated with others across the province.

Delatolla said the case has been made to the province that wastewater testing helps in catching outbreaks before they spread to reduce COVID-19 cases in long-term care and other institutions.

In the U.S., sewage tracking has helped uncover COVID-19 in some university dorms, preventing widespread outbreaks. Officials at the University of Arizona, for example, tested more than 300 people after wastewater sampling found COVID-19. The tests identified two asymptomatic people.

Across Canada, though, it had mainly been used on an experimental basis until Ottawa Public Health recently began using the data daily.

The work being done at CHEO and uOttawa labs, in collaboration with other researchers around the province, has benefitted individual scientists, in addition to the broader community.

MacKenzie says the work he has done is "one of the more engaging chapters" in his research career.

"It could be as transformative as any work I have done in the last 40 years."

<https://ottawacitizen.com/news/local-news/wastewater-tracking-shows-covid-19-doubled-in-past-month-in-ottawa/>

Saskatchewan

Saskatchewan First Nation locks down after COVID cases spread from religious meetings

ID: 1008003418

Source: 660citynews.xom

REGINA — A northern Saskatchewan First Nation is on lockdown over concerns of COVID-19 transmission following a series of religious services where participants were unmasked.

The Peter Ballantyne Cree Nation has closed its three communities of Southend, Sturgeon Landing and an urban reserve in the city of Prince Albert.

Chief Peter Beatty says all vehicles entering the community will be searched and no parties would be allowed.

The band has also closed its two schools until at least Oct. 19, because of possible staff exposure to the virus.

Band education co-ordinator Greg Seib says the schools and school buses are being cleaned and sanitized.

The announcements came after the Saskatchewan Health Authority said it was investigating a community transmitted COVID-19 outbreak that involves contact tracing more than 100 people linked to a series of Full Gospel Outreach events in Prince Albert from Sept. 14 to last Sunday.

Six people who attended the events have tested positive and Saskatchewan health authority spokesman Doug Dahl says more are expected.

This report by The Canadian Press was first published Oct. 8, 2020

<https://www.660citynews.com/2020/10/08/saskatchewan-first-nation-locks-down-after-covid-cases-spread-from-religious-meetings/>

Quebec

Sherbrooke Phoenix become second QMJHL team to face COVID-19 outbreak

ID: 1008003417

Source: montreal.ctvnews.ca

LONGUEUIL -- **The Quebec Major Junior Hockey League has a team dealing with multiple positive COVID-19 tests for the second-time this week.**

The Sherbrooke Phoenix announced Thursday that eight members of their organization have tested positive.

The announcement comes one day after the Blainville-Boisbriand Armada announced they have 18 positive cases. The Phoenix and the Armada played twice last weekend as the QMJHL opened its season.

All Phoenix team activities are suspended and players and staff will be in isolation for 14 days.

Ten QMJHL games were postponed Wednesday, including four involving Sherbrooke over the next two weeks.

The QMJHL also has had to react to an announcement.

<https://montreal.ctvnews.ca/sherbrooke-phoenix-become-second-qmjhl-team-to-face-covid-19-outbreak-1.5138464>

Ontario

COVID-19 outbreaks declared at four new Ottawa schools

ID: 1008003416

Source: ottawa.ctvnews.ca

OTTAWA -- COVID-19 outbreaks have been declared at four Ottawa schools, while an outbreak at an Ottawa private school is now over.

Ottawa Public Health provided an update on the COVID-19 situation at Ottawa schools on Thursday.

New COVID-19 outbreaks were declared at Thursday at:
Berrigan Elementary School

Ecole elementaire catholique Sainte-Marie
Ecole elementaire publique Louis-Riel
Ecole secondaire catholique Garneau

Four students have tested positive for COVID-19 at Berrigan Elementary School. One class is closed due to the COVID-19 cases.

The Conseil des ecoles catholique du Centre-Est reports three cases of COVID-19 at ecole Sainte-Marie and three cases of COVID-19 at ecole secondaire Gatineau.

The Conseil des ecoles publiques de l'Est says two students have tested positive for COVID-19 at Louis-Riel.

Ottawa Public Health reported on Thursday that the COVID-19 outbreak is now over at Lycee Claudel private school.

There are still COVID-19 outbreaks at 12 Ottawa schools

Abraar Elementary School
Berrigan Elementary School
École secondaire catholique Franco-Cité
Ecole secondaire catholique Garneau
École élémentaire catholique Horizon-Jeunesse
Ecole elementaire publique Louis-Riel
École élémentaire catholique Sainte-Kateri
École élémentaire catholique Saint François d'Assise
Ecole elementaire catholique Sainte-Marie
École élémentaire publique Seraphin Marion
Lester B. Pearson Catholic High School
Prince of Peace Catholic School

On Thursay, the Conseil des ecoles catholique du Centre-Est said Franco-Cite would be closed for 14 days due to COVID-19 cases in the school.

<https://ottawa.ctvnews.ca/covid-19-outbreaks-declared-at-four-new-ottawa-schools-1.5138105>

Ontario

One-third of Toronto's community outbreaks related to bars and restaurants, says new COVID-19 data

ID: 1008003414

Source: www.orangeville.com

Of the 80 current community outbreaks of COVID-19 in the city, 27 of them are related to bars and restaurants, the Star has learned.

The latest data from Toronto Public Health, current to Oct. 7, shows that bars and restaurants in Toronto remain responsible for a significant number of outbreaks — 34 per cent — at a time when the city's top doctor has urged the province to intervene to reduce virus spread, including prohibiting indoor dining.

Previously, TPH had linked 44 per cent of outbreaks between Sept. 20 and 26 to bars, restaurants and entertainment venues. Of those, 18 were restaurants and bars, one was a nightclub and one was an adult entertainment club, the public health unit clarified Thursday.

The data TPH released Thursday doesn't include outbreaks in schools or congregate settings like long-

term-care homes.

Though health experts say time is of the essence to take measures to prevent exponential growth in new cases, the city and province still can't agree publicly on whose responsibility that is.

Speaking to reporters on Thursday, Mayor John Tory said lawyers for both governments had met and agreed the province is in a better position to prohibit indoor dining, group gym classes and unnecessary trips outside the home as recommended by Dr. Eileen de Villa, Toronto's medical officer of health.

"Our people came out of that meeting with the recognition having been extended on the part of the provincial people that the powers the city had were not as broad as had been suggested publicly earlier on, and that the most efficient, broad-reaching powers to do things in the interest of public health and to stop the spread of COVID-19 rested with the province of Ontario," he said.

De Villa has said she could be held personally liable for taking her recommended actions herself, and that such broad measures have not been attempted by other local officers of health.

But responding to a series of questions from the Star on Thursday, Premier Doug Ford's government outlined why it believes the city can impose these measures itself.

"Medical officers of health have the authority to issue individual or class orders under Section 22 of the Health Protection and Promotion Act where the legal test is met, which could include the closure of businesses like bars and restaurants," said the emailed statement from Carly Luis, spokesperson for Minister of Health Christine Elliott.

"There are multiple examples of medical officers of health doing so, including when Dr. de Villa ordered mandatory home quarantine for people with COVID-19, and anyone who has had close contact with someone infected."

The latest back-and-forth comes nearly seven days after de Villa made her request.

The Star earlier reported that a modelling study published in May in the journal Nature looked at how effective measures were, based on the timing they were implemented. When China had 114,325 cases on Feb. 29, intervening a week earlier could have meant a 66 per cent cut in cases, the authors estimated. Delaying action by even a week would have seen cases triple, they wrote.

Meanwhile, the Star reported Oct. 6 that approximately two-thirds of the city had a test-positivity rate higher than three per cent, which TPH considers a key threshold for measuring whether the virus could overwhelm hospital and public health capacity.

Already de Villa has said they are unable to keep up with contact tracing — an important tool for tackling the spread of the virus — at the city's current, growing case count.

The province did not directly respond to the Star's question about whether it would be willing to provide legal indemnification to de Villa to act herself or whether, despite Ford referencing a few "bad actors," if they have seen specific information suggesting that restaurant operators acting outside the rules are alone to blame for recent outbreaks.

According to TPH, investigations into bars and restaurants revealed varying adherence to public health rules, ranging from some that needed education on proper signage to physical distancing issues to requiring closure for transmission risk.

TPH also said, despite an earlier claim by Ford that the outbreaks had largely impacted staff, that case counts included both staff and patrons.

Dr. Vinita Dubey, Toronto's associate medical officer of health, said in a statement that those investigations are "incredibly resource intensive" and that bars and restaurants have large volumes of contacts to trace — some with more than 500 contacts and one with 1,700 patrons to reach.

Tory, faced with questions this week about whether the province is acting in good faith, has remained publicly optimistic.

"The discussion about the medical officer of health's request are still under active discussion," he said Thursday, saying there has been no communication about what the province plans to do.

But an email from the province to the Star Thursday made the clearest statement yet that it has no intention of acting on the de Villa's request soon.

"Recognizing the devastating impacts of shutdowns on small business owners, our government will exhaust every avenue to stop the spread of COVID-19 before implementing wholesale restrictions that would put countless restaurants out of business," the statement said. "This includes increasing labour inspections to educate business owners on how to operate in a way that stops the spread of the virus, while taking more severe action against bad actors."

Despite that, Tory said as recently as Wednesday the province had requested — and the city had provided — additional data after Ford said it lacked information to do what de Villa was asking.

Coun. Joe Cressy, who chairs the city's board of health, said he remains hopeful the province will act and that he wants to see the "critical measures implemented immediately."

"We are in the midst of an escalating second wave. If we are going to save lives, protect hospitals, keep schools open, and prevent a more severe lockdown later, there is an urgent need for action now."

<https://www.orangeville.com/news-story/10219682-one-third-of-toronto-s-community-outbreaks-related-to-bars-and-restaurants-says-new-covid-19-data/>

Nunavut

Nunavut declares COVID-19 outbreak at mine contained; some workers can travel home

ID: 1008003415

Source: www.thestar.com

IQALUIT, Nunavut - Nunavut's chief public health officer says an outbreak of COVID-19 at a gold mine has been contained.

Dr. Michael Patterson says there are 10 positive cases and six presumptive cases at the Hope Bay mine, about 125 kilometres southwest of Cambridge Bay.

But he says the cases will not be counted as the territory's, because the workers' home jurisdictions have chosen to record them.

That means the territory has yet to record a positive case.

Patterson earlier said there was evidence of transmission at the mine, but now says that it's not the case.

All travel to and from the site was halted Sept. 28, but Patterson says those who have finished their

isolation and those who are not considered high-risk contacts can travel home.

He says some contacts remain in isolation are expected to be cleared for travel within the week.

This report by The Canadian Press was first published Oct. 8, 2020.

<https://www.thestar.com/news/canada/2020/10/08/nunavut-declares-covid-19-outbreak-at-mine-contained-some-workers-can-travel-home.html>

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

United States

CDC's Interim Guidance for General Population Disaster Shelters During the COVID-19 Pandemic

Source: CDC

Unique ID: [1008000027](#)

Shelter staff providing medical care to clients with suspected or confirmed COVID-19 where close contact (within 6 feet) cannot be avoided, should at a minimum, wear eye protection (goggles or face shield), an N95 or higher-level respirator (or a facemask if respirators are not available or staff are not fit tested), disposable gown, and disposable gloves. If testing for COVID-19 is available, shelter staff, volunteers, and residents should be tested in accordance with state and local health department guidelines. NOTE: Masks should not be placed on babies or children younger than 2 years of age or anyone who has trouble breathing or is unconscious, incapacitated or otherwise unable to remove the covering without

This interim guidance is based on current information about the transmission and severity of coronavirus disease 2019 (COVID-19). The U.S. Centers for Disease Control and Prevention (CDC) will update this guidance as needed and as additional information becomes available. Please check the CDC COVID-19 website periodically for updated guidance. Because conditions vary from community to community, disaster shelter managers should look to their state and local health officials for information specific to their location.

Alternatives to opening disaster shelters, such as sheltering in place, should be considered during the COVID-19 pandemic.

Hotels/dormitories and small shelters (fewer than 50 residents) should be prioritized over larger shelters. Large congregate shelters should be a last

Officials should demobilize large congregate shelters as soon as possible after the emergency phase and relocate residents to hotels/dormitories or small shelters for better social

Shelter managers should maintain contact with state and local public health agencies and emergency management for updates on local COVID-19

Shelter health staff should monitor residents daily for symptoms of COVID-19 and other illness, including mental health concerns, and provide a daily status update to the local health department and other relevant agencies. View resources on daily life and coping .

Body temperature monitoring should be conducted for all persons entering the shelter and in food distribution

Shelters should provide separate areas, including restrooms, to isolate residents with symptoms of COVID-19.

Shelter staff and residents should wear a mask at all times except when not practical, such as when eating or showering. NOTE: Masks should not be placed on babies or children younger than 2 years of age or anyone who has trouble breathing or is unconscious, incapacitated or otherwise unable to remove the covering without

All shelter residents, even those without symptoms, may have been exposed to COVID-19 and should self- quarantine after leaving the shelter in accordance with state and local

If testing for COVID-19 is available, shelter staff, volunteers, and residents should be tested in accordance with state and local health department guidelines.

During disasters, resource availability may limit the ability to apply this guidance. Best efforts should be made to implement this guidance to the extent possible.

Target audience

This document is intended for use by federal, state, local, and tribal jurisdictions in the United States. It

should be used in conjunction with existing shelter operation and management plans, procedures, guidance, resources, and systems, and is not a substitute for shelter planning and preparedness activities.

Purpose

This document provides interim guidance to reduce the risk of introducing and transmitting COVID-19 in general population disaster shelters before, during, or after a disaster.

This document should not be applied to medical support shelters or functional needs shelters.

Medical support shelters and functional needs shelters should follow the Interim Guidance for Healthcare Facilities: Preparing for Community Transmission.

For the purposes of this document, “shelters” include small-, medium- and large-scale, organized, and temporary accommodations for persons displaced by disasters. Facilities may be residential (e.g., dormitories, campsites) or non-residential (e.g., sports stadiums, schools, churches), with varying degrees of sanitary infrastructure.

General population emergency shelters

Individuals housed in shelters share living spaces and sanitary facilities and may be exposed to crowded conditions. Emergency managers, shelter coordinators/managers, and public health professionals should understand the risk of introduction and subsequent transmission of COVID-19 and other infectious diseases in these settings. These recommendations were developed to assist shelter staff in taking appropriate actions for reducing the possibility of transmission among shelter staff, volunteers, residents, and visitors.

People who need to take extra precautions

View additional information for groups who need to take extra precautions.

People at higher risk for severe illness from COVID-19 may include:

People 65 years or older

Persons of any age with serious underlying medical conditions including chronic lung disease, serious heart conditions, and diabetes. See CDC’s website for a complete list of people at higher risk, and check regularly for updates as more data become available.

Higher risk shelter residents should be prioritized for COVID-19 testing and personal protective equipment if resources are available but limited.

Some staff and volunteers may be at higher risk for severe illness. Plan for alternative staffing resources to replace high risk staff and volunteers during the COVID-19. Consider pre-deployment of additional healthcare workers and mental health personnel to shelters.

Other people who may need to take extra precautions include:

People with disabilities

Pregnant or breastfeeding mothers

People experiencing homelessness

Racial and ethnic minority groups

Screening, monitoring, and isolation

Shelters should monitor and record possible COVID-19 cases and perform periodic assessments of all shelter policies and procedures related to lowering transmission on COVID-19 (e.g. isolation area, social distancing, meal service, cleaning, disinfection). Case numbers should be shared with local public health officials daily to alert them to increasing numbers.

Access to safe shelter from disasters is critical even during community spread of COVID-19. Disaster shelters should not exclude as residents people who are having symptoms or test positive for COVID-19. Screen all people entering the shelter (residents, staff, volunteers, and visitors) for signs of COVID-19 using the CDC recommended tool for screening for symptoms at entry to homeless shelters.

Staff, volunteers, and visitors who screen positive for COVID-19 symptoms should be sent home immediately, if feasible, and advised to follow CDC recommended steps for persons who are ill with COVID-19 symptoms. If staff or volunteers are also residents of the shelter, they should be directed to an isolation area.

Following medical screening, residents should be grouped as “not sick,” “sick,” and “requires immediate medical attention.”

If a resident is classified as “sick”

Provide a mask if available, and if the person can tolerate it. NOTE: Masks should not be placed on babies or children younger than 2 years of age or anyone who has trouble breathing, is unconscious, incapacitated or otherwise unable to remove the covering without assistance.

Advise the resident on cough etiquette and provide tissues if a mask is not tolerated.

Direct the resident to an isolation area in the shelter or at another location, according to a predesignated plan.

If a person “requires immediate medical attention”

Call emergency services for transport and tell the operator this is a probable case of COVID-19.

Intake area and waiting room

Provide handwashing stations or alcohol-based hand sanitizer that contains at least 60% alcohol, tissues, and wastebaskets. See additional information on CDC’s handwashing recommendations.

Utilize trained medical or healthcare staff to conduct medical screening.

Provide additional personnel for medical screening to decrease intake time.

Staff who are checking client temperatures should use a system that creates a physical barrier between the client and the screener.

Screeners should stand behind a physical barrier, such as a glass or plastic window or partition that can protect the staff member’s face from respiratory droplets that may be produced if the client sneezes, coughs, or talks.

If social distancing or barrier/partition controls cannot be put in place during screening, screeners should use PPE (i.e., facemask, eye protection [goggles or disposable face shield that fully covers the front and sides of the face], a single pair of disposable gloves) when within 6 feet of a client.

However, given PPE shortages, training requirements, and because PPE alone is less effective than a barrier, staff should try to use a barrier whenever possible.

Conduct thorough cleaning and disinfection of the area every 4-6 hours. See additional information on CDC’s entry screening

See additional information on CDC’s entry screening recommendations.

Isolation area

When possible, place sick residents in individual rooms for isolation.

If individual rooms are not possible, designate a separate isolation area for sick residents.

Let the resident know:

They should notify shelter staff immediately if their symptoms worsen.

They should not leave their room/isolation area except to use the restroom.

They should keep a distance of at least 6 feet away from other residents in the isolation area.

They must wear a mask at all times, except when eating or showering, unless they have trouble breathing.

Isolation areas or buildings should be separate from the rest of the shelter.

Isolation areas should be well-ventilated.

At least 6 feet of distance should be maintained between residents in isolation areas.

Cots should be placed at least 6 feet apart with temporary barriers between them.

Bathroom facilities should be near the isolation area and separate from bathrooms used by well residents.

Shelter staff providing medical care to clients with suspected or confirmed COVID-19 where close contact (within 6 feet) cannot be avoided, should at a minimum, wear eye protection (goggles or face shield), an N95 or higher-level respirator (or a facemask if respirators are not available or staff are not fit tested), disposable gown, and disposable gloves. Masks are not PPE and should not be used when a respirator or facemask is indicated. View infection control guidelines for healthcare providers.

Shelter staff who enter the isolation area for reasons other than providing medical care (e.g. delivering meals or other items) should wear N95 masks (or a facemask if respirators are not available or staff are not fit tested).

Additional comfort items, like tissues and blankets, should be provided for sick residents.

Discontinuation of isolation

The decision to discontinue isolation should be made in the context of local circumstances. Options include:

A symptom-based strategy (i.e., time since illness onset and time since recovery)

A test-based strategy

Time-based and test-based strategies for people who tested positive for COVID-19 but did not experience symptoms.

For additional information please refer to the CDC interim guidance Discontinuation of Isolation for Persons with COVID-19 Not in Healthcare Settings, which includes, but is not limited to, at home, in a hotel or dormitory room, or in group isolation facility.

Information in all common areas of the shelter

Post signage throughout the facility on:

Common symptoms of COVID-19

Importance of wearing a mask

The need to follow frequent handwashing and proper respiratory etiquette

Reporting symptoms to shelter staff if they feel ill

Reminding staff to wash their hands with soap and water after touching someone who is sick or handling a sick person's personal effects, used tissues, or laundry

Coping with stress

Ensure signage is understandable for non-English speaking persons and those with low literacy. Make necessary accommodations for those with cognitive or intellectual disabilities and those who are deaf, blind, or with low vision.

CDC print materials developed to support COVID-19 recommendations are available and free for download.

Social distancing

when possible, place groups or families in individual rooms or in separate areas of the facility.

Shelter facility should be large enough to provide space for distancing among residents.

Provide a distance of at least 6 feet between cots of people from different households and have residents sleep head-to-toe.

Food service

Serve pre-packaged meals or individual meals dispensed by food service workers when possible.

Food service workers should wear gloves and masks during meal preparation and service.

Cafeteria-style service is preferred over self-service, buffet, or family-style while maintaining a minimum of 6 foot spacing between individuals.

Maintain a minimum of 6 feet of distance between people of different households at mealtimes using increased table spacing and staggered mealtimes. Clean and disinfect the area between meal service times.

Encourage staff and shelter residents to not share dishes, drinking glasses, cups, eating utensils, towels, or bedding with other people.

Serve using disposable silverware, cups, and plates, if available. If these items are not disposable, the food contact surface should be protected from contamination and cleaned and disinfected after each use.

Provide handwashing stations and soap with disposable towels or alcohol-based hand sanitizer (minimum 60% alcohol) for use prior to entering food lines.

Residents should wear masks while in the food line.

Position shelter staff at handwashing stations to promote proper handwashing and to monitor for signs of illness. Staff should wear masks.

Implement illness screening, including fever monitoring, of residents entering the food distribution

Any temperature of 100.4 F or greater is considered a fever.

Staff and volunteers who are symptomatic should leave the facility as soon as possible.

Residents who are symptomatic should be directed to the isolation area.

Increase monitoring for symptoms among close contacts of people who become symptomatic.

Increased use of supplies

Plan for a significant increase in use of supplies including:

Masks, gowns, and gloves

Masks

Water and other fluids for hydration

Ice

Cups and other utensils

Facial tissues

Soap

Handwashing stations

Hand sanitizers containing at least 60% alcohol

Paper towels

Disinfection and cleaning agents and supplies

Bed linens/blankets

Materials to be used for barriers between cots in separation area(s)

Over-the-counter medications

Consult a healthcare provider when considering giving over-the-counter medications to children. Children younger than 4 years of age should NOT be given over-the-counter cold medications without first speaking with a healthcare provider. Do NOT give aspirin (acetylsalicylic acid) to children who appear sick; this can cause a rare but serious illness called Reye's syndrome.

Cleaning and disinfection

The risk of exposure to cleaning staff is inherently low. Train staff members who perform cleaning functions using CDC recommendations for cleaning and disinfection. These recommendations will be updated as additional information becomes available. Instructional materials for custodial and other staff should be provided in languages other than English as locally appropriate.

Cleaning staff should wear disposable gloves and gowns for all tasks in the cleaning process, including handling trash.

Solid waste (trash) such as tissues, food items, and drink containers should be considered as potentially "infectious waste."

Waste receptacles with non-removable, no-touch lids, should be placed a reasonable distance away from any populated areas.

Place a handwashing station or hand sanitizers containing at least 60% alcohol next to any waste receptacles. Disinfect the lids and handles of receptacles on a regular basis.

Outdoor waste receptacles should be covered with lids.

Areas and items that are visibly soiled should be cleaned immediately.

All common areas should be cleaned and disinfected every 4 hours with a focus on frequently touched surfaces like tables, doorknobs, light switches, handles, desks, toilets, faucets, and sinks.

Linens (such as bed sheets and towels), eating utensils, and dishes belonging to those who are sick do not need to be cleaned separately, but they should not be shared without having been thoroughly washed. Wash linens using laundry soap and tumble dry on the warmest setting possible.

Staff should wash their hands with soap and water or use hand sanitizer containing at least 60% alcohol immediately after handling dirty laundry or used eating utensils and dishes.

Air Filtration

If possible:

Locate disaster shelters in buildings with high ventilation capacity similar to healthcare facilities.

Shelters should be equipped with air exchange systems.

Shelters should be located in buildings with tall ceilings.

Utilize the highest efficiency filters that are compatible with the shelter's existing HVAC system.

Adopt "clean-to-dirty" directional airflows.

Select upward airflow rotation if using ceiling fans.

Special considerations for children

Educate parents and caregivers about how to reduce the spread of illness.

Help parents understand that children may feel stress and fear while in the shelter. Information on coping with stress can help parents manage their own stress and that of their children.

Encourage parents and caregivers to monitor children for symptoms of illness and to report any suspected illness immediately to shelter staff.

The symptoms of COVID-19 are similar in children and adults. However, children with confirmed COVID-19 have generally shown mild symptoms.

Reported symptoms in children include cold-like symptoms, such as fever, runny nose, and cough.

Vomiting and diarrhea have also been reported.

Instruct parents/guardians to assist children to stay at least 6 feet away from other residents.

If possible, at nap time, ensure that children's naptime mats (or cribs) are spaced out as much as possible, ideally 6 feet apart. Consider placing children head to toe in order to further reduce the potential for disease spread.

Assign the same mat/crib to one child or disinfect mat/crib between use by different children.

Thoroughly clean common play areas or temporary respite care areas every 4-6 hours with a focus on items that are more likely to have frequent contact with the hands, mouths, or bodily fluids of children (e.g., toys).

Clean and disinfect toys

Toys that cannot be cleaned and disinfected should not be used.

Toys that children have placed in their mouths or that are otherwise contaminated by body secretions or

excretions should be set aside until they are cleaned by hand by a person wearing gloves. Clean with water and detergent, rinse, disinfect with an EPA-registered disinfectant, rinse again, and air-dry. You may also clean in a mechanical dishwasher. Be mindful of items more likely to be placed in a child's mouth, like play food, dishes, and utensils.

Machine washable cloth toys should be used by one individual at a time or should not be used at all. These toys should be laundered before being used by another child.

Do not share toys with other groups of infants or toddlers, unless they are washed and disinfected before being moved from one group to the other.

Set aside toys that need to be cleaned. Place in a dish pan with soapy water or put in a separate container marked for "soiled toys." Keep dish pans and water out of reach of children to prevent risk of drowning. Washing with soapy water is the ideal method for cleaning. Try to have enough toys so that the toys can be rotated through cleanings.

Children's books, like other paper-based materials such as mail or envelopes, are not considered a high risk for transmission and do not need additional cleaning or disinfection procedures.

Require hand hygiene for children, parents, and staff before entering and leaving the children's temporary respite care area.

Hand sanitizer should be kept out of reach of children.

Find additional information on caring for children during the COVID-19 pandemic.

Animals in emergency shelters

These recommendations outline special considerations for lowering COVID-19 transmission risk in human shelters that also house animals. While the risk of transmission from animals to humans is believed to be low, precautions should be taken to prevent possible transmission. For more information, review CDC's Recommendations for Disaster Sheltering of Household Pets, Service Animals, and Support Animals during the COVID-19 Pandemic.

NOTE: Do not put masks or other face coverings on animals, even if they appear sick.

Companion animals (pets)

The scope of these recommendations is limited to special considerations for pet-friendly disaster shelters during the COVID-19 pandemic. Information on general shelter operations can be found in the FEMA Best Practice "Shelter Operations: Pet-Friendly Shelters" document. Detailed recommendations on handling exposed animals is available in the "Interim recommendations for intake of companion animals from households where humans with COVID-19 are present" developed by the American Veterinary Medical Association (AVMA), with support from CDC One Health.

Animal areas

Note: Recommendations for operating the human shelter should be applied by any person in the animal areas. Use of masks, frequent handwashing, social distancing, and frequent cleaning and disinfection should be maintained in the animal areas. Do not put any type of face covering on animals.

Identify an area to shelter companion animals away from the human living space.

Provide a separate area of the shelter for companion animals that had contact with a person with known or suspected COVID-19 and companion animals who show signs of illness.

Upon registration, ask if the animal may have been exposed to a person with known or suspected COVID-19 within the previous 14 days. Contact can result from:

Being within approximately 6 feet of the person.

Giving kisses or licks, and/or sharing food or bedding with the person.

Being snuggled, pet, coughed, sneezed, or spit on by the person.

If yes, the animal should be sheltered in the animal isolation area.

Collect information about COVID-19 exposure status of pets at entry, as well as any clinical signs in pets consistent with COVID-19, to aid in triaging and proper isolation.

Separate animals by a distance of at least 6 feet at all times, including during pet registration and exercise.

Limit access to animals to one healthy family member for the duration of the stay.

Provide handwashing stations at entry and exit to the animal areas.

All people should wash their hands with soap and water for 20 seconds upon entry and exit to the area.

Anyone handling animals who may have been exposed or show signs of illness should wear gloves and a mask. Gloves should be disposed of after each use.

If an animal gets sick while in the shelter:

Call a veterinarian and let them know the animal may have been exposed to a person with COVID-19.

Contact local animal health and public health authorities to determine if the animal should be tested and if other precautions should be taken.

Service animals

In accordance with the Americans with Disabilities Act (ADA), service animals must be allowed to stay with their handlers.

It is important to keep in mind that:

Service animals are approved under the ADA regardless of whether they are licensed or certified.

Persons with service animals cannot be isolated from other people or treated less favorably.

Persons with service animals cannot be asked to remove their service animal from the shelter unless:

Animal is out of control

Animal poses a direct threat

If the handler shows signs of illness:

If available, provide a separate room where the handler and service animal can isolate together.

If a separate room is not available, the handler and service animal should move to the group isolation area.

Service animal should remain at least 6 feet apart from other people in the isolation area.

To the extent possible, the handler should limit contact between themselves and their service animal (e.g., avoiding petting, snuggling, or other contact not related to the service animal's work or task).

Handler should wash hands frequently and before and after touching the service animal.

If possible, have someone who is not symptomatic walk, exercise, and feed the service animal.

If the service animal shows signs of illness:

Follow the recommendations in the bullets above, except if a separate room is not available the handler and service animal should remain in the general population area.

Do not put any type of face covering on the service animal.

The handler or other caretaker should wear gloves and a mask when walking, exercising, or feeding the animals. Gloves should be disposed of after each use.

Call a veterinarian and let them know the animal may have been exposed to a person with COVID-19.

Contact local animal health and public health to determine if the animal should be tested and if other precautions should be taken.

Guidance for Service and Therapy Animals outlines ways to keep your service and therapy animals safe while sheltering during COVID-19.

View additional information on what to do if an animal is sick and keeping animals protected against COVID-19.

<https://www.cdc.gov/coronavirus/2019-ncov/php/eh-practitioners/general-population-disaster-shelters.html>

United States

Characteristics Associated with Adults Remembering to Wash Hands in Multiple Situations Before and During the COVID-19 Pandemic — United States, October 2019 and June 2020

Source: CDC

Summary

What is already known about this topic?

Hand hygiene is one important measure to prevent the spread of COVID-19 and other pathogens.

What is added by this report?

U.S. adult Internet survey respondents in June 2020 were more likely to remember to wash their hands after experiencing respiratory symptoms, before eating in a restaurant, and before eating at home than were October 2019 survey respondents. Despite improvements, <75% of survey respondents reported remembering to wash their hands in these situations in 2020.

What are the implications for public health practice?

Public health efforts should promote frequent handwashing for all, with attention to tailoring messaging to men, young adults, and non-Hispanic White adults. Particular focus should be placed on encouraging handwashing at important times such as before eating and after experiencing respiratory symptoms.

https://www.cdc.gov/mmwr/volumes/69/wr/mm6940a2.htm?s_cid=mm6940a2_x

<https://www.cdc.gov/mmwr/volumes/69/wr/pdfs/mm6940a2-H.pdf>

United States

Trends in COVID-19 Incidence After Implementation of Mitigation Measures — Arizona, January 22–August 7, 2020

Summary

What is already known about this topic?

Community mitigation measures can help slow the spread of COVID-19.

What is added by this report?

The number of COVID-19 cases in Arizona stabilized and then decreased after sustained implementation and enforcement of statewide and locally enhanced mitigation measures, beginning approximately 2 weeks after implementation and enforcement of mask mandates and enhanced sanitations practices began on June 17; further decreases were observed during July 13–August 7, after statewide limitations and closures of certain services and businesses.

What are the implications for public health practice?

Widespread implementation and enforcement of sustained community mitigation measures, including mask wearing, informed by state and local officials' continual data monitoring and collaboration can help prevent transmission of SARS-CoV-2 and decrease the numbers of COVID-19 cases.

https://www.cdc.gov/mmwr/volumes/69/wr/mm6940e3.htm?s_cid=mm6940e3_x

<https://www.cdc.gov/mmwr/volumes/69/wr/pdfs/mm6940e3-H.pdf>

United States

Case Series of Multisystem Inflammatory Syndrome in Adults Associated with SARS-CoV-2 Infection — United Kingdom and United States, March–August 2020

Weekly / October 9, 2020 / 69(40);1450–1456

Summary

What is already known about this topic?

Multisystem inflammatory syndrome in children (MIS-C) is a rare but severe complication of SARS-CoV-2 infection in children and adolescents. Since June 2020, several case reports and series have been published reporting a similar multisystem inflammatory syndrome in adults (MIS-A).

What is added by this report?

Cases reported to CDC and published case reports and series identify MIS-A in adults, who usually require intensive care and can have fatal outcomes. Antibody testing was required to identify SARS-CoV-2 infection in approximately one third of 27 cases.

What are the implications for public health practice?

Clinical suspicion and indicated SARS-CoV-2 testing, including antibody testing, might be needed to recognize and treat adults with MIS-A. Further research is needed to understand the pathogenesis and long-term effects of this condition. Ultimately, the recognition of MIS-A reinforces the need for prevention efforts to limit spread of SARS-CoV-2.

https://www.cdc.gov/mmwr/volumes/69/wr/mm6940e1.htm?s_cid=mm6940e1_x

<https://www.cdc.gov/mmwr/volumes/69/wr/pdfs/mm6940e1-H.pdf>

United States

Coronavirus (COVID-19) Update: Daily Roundup October 8, 2020

Source: FDA

For Immediate Release:

October 08, 2020

The U.S. Food and Drug Administration (FDA) continued to take action in the ongoing response to the COVID-19 pandemic:

- Today, the FDA updated the dashboard on the [Coronavirus Treatment Acceleration Program](#) (CTAP) webpage. As of September 30, 2020, 550+ drug development programs were in planning stages, 350+ trials were reviewed by FDA and 5 COVID-19 treatments were currently authorized for emergency use.
- Testing updates:
 - 274 tests are authorized by FDA under EUAs; these include 216 molecular tests, 53 antibody tests, and 5 antigen tests.

The FDA, an agency within the U.S. Department of Health and Human Services, protects the public health by assuring the safety, effectiveness, and security of human and veterinary drugs, vaccines and other biological products for human use, and medical devices. The agency also is responsible for the safety and security of our nation's food supply, cosmetics, dietary supplements, products that give off electronic radiation, and for regulating tobacco products.

<https://www.fda.gov/news-events/press-announcements/coronavirus-covid-19-update-daily-roundup-october-8-2020>

WHO/PAHO

Some countries showing spikes in COVID-19 transmission, especially among young people:

PAHO - PAHO/WHO

Source: Pan American Health Organization

Unique ID: [1007999333](#)

PAHO has held more than 160 trainings, delivered more than 17 million COVID PCR tests, and millions more gloves, gowns and masks to keep health workers safe, she said, noting that “when hospitals are able to cope and manage patients, there are fewer deaths. Elderly people and those with diabetes or hypertension are still vulnerable, “So I urge people of all ages to continue to wear masks, practice social distancing to protect themselves and avoid exposing others, the PAHO Director said. Etienne gave credit to the work of governments which “acted quickly to expand laboratory networks, increase hospital beds, and hire and train health care workers” As well as health care workers “for their dedication and commitment,” under difficult conditions.

While Brazil and the US remain significant drivers of new cases, over the past 60 days, 11 countries and territories in the Caribbean have moved from moderate to intense transmission.

Washington D.C., October 7, 2020 (PAHO) – Transmission of COVID19 in the Americas remains very active, with some countries suffering recurrent spikes in cases and the virus spreading in new and different ways, Pan American Health Organization (PAHO) Director Carissa F Etienne, said today.

“While Brazil and the U.S. remain significant drivers of new cases in our region, we’re concerned by spikes in cases – including in places that had effectively managed outbreaks, like Cuba and Jamaica. In fact, over the past 60 days, 11 countries and territories in the Caribbean have moved from moderate to intense transmission, which is a concerning development as countries reopen airspace,” she told a news briefing today.

Over 17 million cases of COVID-19 have been reported in the Americas, with more than 574,000 deaths, representing half of all cases worldwide and more than half of all deaths, Etienne noted.

The new ways in which it is spreading is among younger people who have mild or no symptoms and are unaware they are infected. In the US, young people, especially those aged 20-29 years old, represent 20% of new cases. “While many young people won’t become ill or require an ICU bed, they are not immune to developing the serious effects of COVID-19,” she said.

Elderly people and those with diabetes or hypertension are still vulnerable, “So I urge people of all ages to continue to wear masks, practice social distancing to protect themselves and avoid exposing others, the PAHO Director said.

Rates of severe COVID-19 have reduced

Dr. Etienne said, “that rates of severe COVID illness have fallen across our region. Today, fewer people

are being hospitalized and fewer require intensive care than before, due in part to our growing knowledge of this virus and how to manage critically ill patients.“

PAHO has held more than 160 trainings, delivered more than 17 million COVID PCR tests, and millions more gloves, gowns and masks to keep health workers safe, she said, noting that “when hospitals are able to cope and manage patients, there are fewer deaths. These efforts have helped save thousands of lives and will continue to protect countless more.”

Etienne gave credit to the work of governments which “acted quickly to expand laboratory networks, increase hospital beds, and hire and train health care workers” As well as health care workers “for their dedication and commitment,” under difficult conditions.

Vulnerable groups at particular risk

Yet despite these efforts, Etienne highlighted that several groups remain at particular risk, particularly those “with limited access to prevention and care”, including black, Hispanic and Native American populations in the US which “are nearly three times as likely to contract COVID as their white counterparts. Etienne also underscored the importance of addressing the health of indigenous populations and migrants in the Region of the Americas. “Migrant and refugee populations may be increasingly exposed and are at higher risk,” she said. “PAHO has provided support to national authorities in Ecuador, Costa Rica, Brazil and Mexico to design strategies so migrant populations can continue to have access to the food, health care and mental health support they need,” she said.

“Our solidarity towards migrants is not only key for controlling transmission and preventing unnecessary deaths due to COVID-19, but a core reflection of our shared belief that everyone has a right to health and we must leave no one behind,” PAHO’s director added.

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Coronavirus Disease (COVID-19)

Press Releases

Coronavirus infections

<https://www.paho.org/en/news/7-10-2020-some-countries-showing-spikes-covid-19-transmission-especially-among-young-people>

WHO

One stillbirth occurs every 16 seconds, according to first ever joint UN estimates

Source: WHO

COVID-19-related health service disruptions could worsen the situation, potentially adding nearly 200 000 more stillbirths over a 12-month period

8 October 2020, Joint News Release, Geneva, Switzerland

Almost 2 million babies are stillborn every year – or 1 every 16 seconds – according to the first ever joint stillbirth estimates released by UNICEF, WHO, the World Bank Group and the Population Division of the United Nations Department of Economic and Social Affairs.

The vast majority of stillbirths, 84 per cent, occur in low- and lower-middle-income countries, according to the new report, *A Neglected Tragedy: The Global Burden of Stillbirths*. In 2019, 3 in 4 stillbirths occurred in sub-Saharan Africa or Southern Asia. A stillbirth is defined in the report as a baby born with no signs of life at 28 weeks of pregnancy or more.

“Losing a child at birth or during pregnancy is a devastating tragedy for a family, one that is often endured quietly, yet all too frequently, around the world,” said Henrietta Fore, UNICEF Executive Director. “Every 16 seconds, a mother somewhere will suffer the unspeakable tragedy of stillbirth. Beyond the loss of life, the psychological and financial costs for women, families and societies are severe and long lasting. For many of these mothers, it simply didn’t have to be this way. A majority of stillbirths could have been prevented with high quality monitoring, proper antenatal care and a skilled birth attendant.”

The report warns that the COVID-19 pandemic could worsen the global number of stillbirths. A 50 per cent reduction in health services due to the pandemic could cause nearly 200 000 additional stillbirths

over a 12-month period in 117 low- and middle-income countries. This corresponds to an increase in the number of stillbirths by 11.1 per cent. According to modeling done for the report by researchers from the Johns Hopkins Bloomberg School of Public Health, 13 countries could see a 20 per cent increase or more in the number of stillbirths over a 12-month period.

Most stillbirths are due to poor quality of care during pregnancy and birth. Lack of investments in antenatal and intrapartum services and in strengthening the nursing and midwifery workforce are key challenges, the report says.

Over 40 per cent of stillbirths occur during labour—a loss that could be avoided with access to a trained health worker at childbirth and timely emergency obstetric care. Around half of stillbirths in sub-Saharan Africa and Central and Southern Asia occur during labour, compared to 6 per cent in Europe, Northern America, Australia and New Zealand.

Even before the pandemic caused critical disruptions in health services, few women in low- and middle-income countries received timely and high-quality care to prevent stillbirths. Half of the 117 countries analyzed in the report have coverage that ranges from a low of less than 2 per cent to a high of only 50 per cent for 8 important maternal health interventions such as C-section, malaria prevention, management of hypertension in pregnancy and syphilis detection and treatment. Coverage for assisted vaginal delivery - a critical intervention for preventing stillbirths during labour – is estimated to reach less than half of pregnant women who need it.

As a result, despite advances in health services to prevent or treat causes of child death, progress in lowering the stillbirth rate has been slow. From 2000 to 2019, the annual rate of reduction in the stillbirth rate was just 2.3 per cent, compared to a 2.9 per cent reduction in neonatal mortality, and 4.3 per cent in mortality among children aged 1–59 months. Progress, however, is possible with sound policy, programmes and investment.

"Welcoming a baby into the world should be a time of great joy, but every day thousands of parents experience unbearable sadness because their babies are still born," said Dr. Tedros Adhanom Ghebreyesus, WHO Director-General. "The tragedy of stillbirth shows how vital it is to reinforce and maintain essential health services, and how critical it is to increase investment in nurses and midwives." The report also notes that stillbirth is not only a challenge for poor countries. In 2019, 39 high-income countries had a higher number of stillbirths than neonatal deaths and 15 countries had a higher number of stillbirths than infant deaths. A mother's level of education is one of the greatest drivers of inequity in high-income countries.

In both low- and high-income settings, stillbirth rates are higher in rural areas than in urban areas. Socioeconomic status is also linked to greater incidence of stillbirth. For example, in Nepal, women of minority castes had stillbirth rates between 40 to 60 per cent higher than women from upper-class castes. Ethnic minorities in high-income countries, in particular, may lack access to enough quality health care. The report cites that Inuit populations in Canada, for example, have been observed to have stillbirth rates nearly three times higher than the rest of Canada, and African American women in the United States of America have nearly twice the risk of stillbirth compared to white women.

"COVID-19 has triggered a devastating secondary health crisis for women, children and adolescents due to disruptions in life-saving health services," said Muhammad Ali Pate, Global Director for Health, Nutrition and Population at the World Bank and Director of the Global Financing Facility for Women, Children and Adolescents. "Pregnant women need continued access to quality care, throughout their pregnancy and during childbirth. We are supporting countries in strengthening their health systems to prevent stillbirths and ensure that every pregnant woman can access quality health care services."

The report link will go live after 00.01 GMT 8 October: <http://uni.cf/stillbirthreport>

[Download photos, the report and data files](#)

About UN IGME

The United Nations Inter-agency Group for Child Mortality Estimation or UN IGME was formed in 2004 to share data on child mortality, improve methods for child mortality estimation, report on progress towards child survival goals and enhance country capacity to produce timely and properly assessed estimates of child mortality. UN IGME is led by UNICEF and includes the World Health Organization, the World Bank Group and the United Nations Population Division of the Department of Economic and Social Affairs. For more information visit: <http://www.childmortality.org/>

For more information or to set up interviews with report authors, mothers and midwives, please contact the listed media contacts.

<https://www.who.int/news-room/detail/08-10-2020-one-stillbirth-occurs-every-16-seconds-according-to-first-ever-joint-un-estimates>

WHO

Testing only main symptoms risks missing most cases

Source: The Times

Unique ID: [1007996917](#)

The World Health Organisation says people should be considered to have suspected coronavirus if they have both a high fever and a cough, or acute onset of any three or more of fever, cough, general weakness and fatigue, headache, aching muscles, sore throat, stuffy nose, trouble breathing, decreased appetite, nausea, vomiting, diarrhoea and "altered mental status". In the case of university halls, it may be particularly relevant to test all students before they go home for Christmas." She suggested using pooled testing, where samples from multiple individuals are combined for analysis, "as negative pooled samples can quickly show a large group of people are not infectious". Irene Petersen, professor of epidemiology at UCL, and one of the paper's authors, said: "Future testing programmes should involve frequent testing of a wider group of individuals, not just symptomatic cases, especially in high-risk settings or places where many people work or live close together such as meat factories or university halls.

Testing only people with a cough, fever or loss of taste and smell, as per UK guidelines, may miss vast swathes of Covid-19 cases, a study has suggested.

The finding comes after an NHS boss said that routine testing of asymptomatic staff could become a priority. The study by University College London found that 86 per cent of people who tested positive for coronavirus during lockdown did not have those three virus symptoms. With a wider range of symptoms, including fatigue or shortness of breath, 76.5 per cent were deemed asymptomatic.

Researchers used data from the Office for National Statistics Covid-19 surveillance study, which took swabs from a representative sample of 36,061 people between April 26 and June 27. Of those, 115 had a positive test result.

The UCL study, published today in the journal *Clinical Epidemiology*, found that a more widespread testing programme was needed to catch cases of "silent" transmission.

Irene Petersen, professor of epidemiology at UCL, and one of the paper's authors, said: "Future testing programmes should involve frequent testing of a wider group of individuals, not just symptomatic cases, especially in high-risk settings or places where many people work or live close together such as meat factories or university halls. In the case of university halls, it may be particularly relevant to test all students before they go home for Christmas." She suggested using pooled testing, where samples from multiple individuals are combined for analysis, "as negative pooled samples can quickly show a large group of people are not infectious".

The World Health Organisation says people should be considered to have suspected coronavirus if they have both a high fever and a cough, or acute onset of any three or more of fever, cough, general weakness and fatigue, headache, aching muscles, sore throat, stuffy nose, trouble breathing, decreased appetite, nausea, vomiting, diarrhoea and "altered mental status". Many countries offer tests on that basis, and it is also common to have clinical professionals such as GPs involved in deciding who to test. In the UK people must book tests themselves on the government website.

Last month Matt Hancock, the health secretary, said that people should only get tests if they had the three symptoms, as the system came under pressure from a spike in respiratory illnesses when schools returned. Amanda Pritchard, chief operating officer for NHS England, told the NHS Providers conference that the health service in England had been guided on staff testing by the chief medical officer and chief scientific adviser.

"At the moment, asymptomatic staff testing is not in the list of priorities for testing," she said, although local hotspots were doing it. "I think the anticipation ... is that at some point [the chief medical officer] may well recommend a move to asymptomatic staff testing."

Research by King's College London based on the Covid Symptoms Study (CSS) app found that headache and fatigue were the most common early symptoms. However, only 1 per cent of people reporting those symptoms on the app went on to test positive.

Tim Spector, a professor of genetic epidemiology and the lead CSS researcher, said the UCL study was limited by the fact people were only asked if they had symptoms on the day of the test. "Our data from people using the CSS app, antibody testing and 20-plus symptoms show that only 19 per cent of people

are truly asymptomatic," he said.

A Department of Health and Social Care spokesman said: "An expert scientific group keeps the symptoms of Covid-19 under review. There is a balance to strike between capturing those most likely to have Covid-19 while not unnecessarily including people who do not have the virus."

Letters, page 22

<https://gphn.canada.ca/cepr/showarticle.jsp?docId=1007996917>

<https://www.thetimes.co.uk/article/testing-only-main-symptoms-risks-missing-most-cases-crqlrrnp7>

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

United States

Dead mink in Taylor County tests positive for COVID-19

ID: 1008003163

Source: fox6now.com

TAYLOR COUNTY, Wis. - **The National Veterinary Services Laboratories (NVSL) confirms that dead mink at a Taylor County mink farm have tested positive for SARS-CoV-2 infection, the virus that causes COVID-19 in humans. This is the first confirmed SARS-CoV-2 infection among Wisconsin's mink population.**

The Department of Agriculture, Trade and Consumer Protection (DATCP) has quarantined all animals on the farm, meaning no animals or animal products may leave the premise.

According to a press release, Wisconsin is the second state with confirmed SARS-CoV-2 at a mink farm; Utah confirmed its first cases on August 17. There is currently no evidence that animals, including mink, play a significant role in spreading SARS-CoV-2 to humans. However, people infected with the virus can spread it to mink and other animals.

<https://www.fox6now.com/news/dead-mink-in-taylor-county-tests-positive-for-covid-19>

India

'Rural Surge' Propels India Toward More Covid-19 Infections Than U.S.

ID: 1008003252

Source: nytimes.com

The contagion is hitting towns and villages where resources are scant and people are skeptical of lockdown efforts. If unchecked, Indian infections could exceed those in the United States.

Updated 1:54 p.m. ET

MASLI, India — Sliding out of their rickshaw, masks on, fresh sanitizer smeared across their hands, a team of health workers approached one of the mud-walled homes in Masli, a remote village in northeast India surrounded by miles of mountainous rainforest.

"Are you Amit Deb?" they asked a lean, shirtless man standing in his yard. Mr. Deb nodded cautiously. Five days earlier, he had tested positive for the coronavirus. Now his family members needed to be tested.

They all refused.

"We can't afford to quarantine," explained Mr. Deb, a shopkeeper. If anyone else in his family was found positive, they would all be ordered to stay inside, which would mean even more weeks of not working, which would push the family closer to running out of food.

The medical team moved on to the next house. But they kept meeting more refusals.

The defiance of the coronavirus rules is being reflected across rural India, and it is propelling this nation's virus caseload toward the No. 1 spot globally. Infections are rippling into every corner of this country of 1.3 billion people. The Indian news media is calling it "The Rural Surge."

<https://www.nytimes.com/2020/10/08/world/asia/india-covid-19-rural.html?action=click&module=Top%20Stories&pgtype=Homepage>

China

No adverse reactions in Chinese vaccine tests

ID: 1008003407

Source: hindustantimes.com

Trials have not led to antibody-dependent enhancement of the disease, team finds

The team behind a Chinese Covid-19 vaccine candidate say early phase trials suggest it is unlikely to cause a potentially harmful antibody-dependent enhancement (ADE) of the disease.

ADE is a concern for vaccine developers because the mechanisms that underlie antibody protection against a virus can also amplify the infection or trigger harmful immune responses.

Scientists at the Institute of Medical Biology, under the Chinese Academy of Medical Sciences, conducted phase 1 trials on 191 people aged 18 to 59 in May. All were from Sichuan province and had never been infected with the coronavirus.

According to the team's findings - published on Tuesday on the preprint website medRxiv.org and not peer-reviewed - in the first 28 days after vaccination, none of the subjects experienced a severe adverse reaction. The most common effects were mild pain, slight fatigue and redness at the point of injection, they said.

"Although we cannot conclude that this vaccine will not cause ADE, these observations at least suggest that the likelihood of ADE as a result of inoculation with this vaccine is small," the researchers said.

"All the data obtained in this trial support the safety and immunogenicity [the ability to provoke an immune response] of this inactivated vaccine and are encouraging with regards to further studies of its efficacy."

Phase 2 trials - involving 750 adults from southwest Yunnan province - began in June, and tests involving an over-60s group were continuing, Ying Zhang, who co-authored the study, said.

"We want to make sure the vaccine is not only effective but also will not cause hidden side effects, such as reproductive toxicity which might only be revealed later," she said.

Final trials involving about 25,000 to 30,000 people would take place outside China, where the coronavirus was more active, though the exact location had not yet been decided, Zhang said.

Professor Jin Dong-yan, a molecular virologist at the University of Hong Kong, said the risk with new vaccines was their potential to trigger ADE, which effectively made the virus more harmful than it was before inoculation.

If a vaccine produced such a reaction, it was not fit for use and its developers would have to identify and remove the part that was triggering ADE, Jin said.

Zhang said she and her team tested for an ADE response by incubating diluted immune serum samples from vaccinated people with the coronavirus to observe whether infection was magnified as the concentration of antibodies dropped.

"The scientists took a step further than other studies [to test for ADE in vitro]," Jin said. "There's merit in their work but it still does not provide a definite answer."

Headline of the Online Version: Coronavirus: risk of ADE low with new Chinese vaccine candidate, researchers say

<https://www.hindustantimes.com/health/china-s-experimental-covid-19-vaccine-appears-safe-no-adverse-reactions-study/story-SFWtJY7eI8NSYN0xjnxSZM.html>

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

Canada

COVID-19 antibodies can last up to three months, study finds

Source: CTV News

ID: [1008003326](#)

TORONTO -- People who have been infected with COVID-19 can have antibodies that last up to three months, a new study finds.

Researchers from the Lunenfeld-Tanenbaum Research Institute and the University of Toronto released the findings of their study on Thursday.

Participants in the study, who had previously been infected with COVID-19, provided both saliva and blood samples to measure antibody levels for three months after the onset of symptoms.

The study found that antibodies were detectable in both blood and saliva for at least 115 days, which represents the longest time interval that was measured.

Researchers said while there is "a lot they still don't know" about antibody response to COVID-19, the findings of this study could have "broader implications in the development of an effective vaccine."

"This study suggests that if a vaccine is properly designed, it has the potential to induce a durable antibody response that can help protect the vaccinated person against the virus that causes COVID-19," Jennifer Gommerman, professor of immunology at the University of Toronto, said about the findings.

According to researchers, most people who recover from COVID-19 develop antibodies that are specific to the disease. The antibodies are also useful to help indicate who has been infected, regardless of whether they had symptoms or not.

According to the researchers, the length antibody response to COVID-19 has been debated in recent months.

"This study led by the Toronto team is in agreement with findings from leading immunologists in the U.S. in describing the antibody response as longer lasting," the researchers said.

To date, there have not been any approved COVID-19 vaccines in Canada but there are several around the world in the final stages of testing.

<https://toronto.ctvnews.ca/covid-19-antibodies-can-last-up-to-three-months-study-finds-1.5138516>

Study

Study reveals prolonged COVID-19 symptoms in pregnant women

ID: 1008003266

Source: CIDRAP

Most pregnant women with COVID-19 experience mild disease, but many have prolonged symptoms lasting weeks after infection, according to a large nationwide study yesterday in Obstetrics & Gynecology.

Pregnant women have a higher risk of severe disease with other respiratory viruses, leading to concerns that COVID-19 infection during pregnancy may represent an increased risk. Recent reports show higher rates of intensive care unit (ICU) admission and ventilation among pregnant COVID-19 patients, but the clinical presentation and morbidity for pregnant patients is not fully understood.

The new study—the largest known to date that included non-hospitalized COVID-19 pregnant women—followed 594 geographically and demographically diverse US women who tested positive for SARS-CoV-2 during pregnancy and reported symptoms at the time of testing. Symptoms and symptom duration for pregnant COVID-19 patients were gathered from Mar 22 to Jul 10. Only 27 of the women (5%) were hospitalized, with 11 (2%) admitted to the ICU.

Primary first symptoms included cough (20%), sore throat (16%), body aches (12%), fever (12%), and loss of taste or smell (6%), although symptom data were complicated by overlap with symptoms of normal

pregnancy. The study found that almost half of the participants (48%) were still symptomatic after 3 weeks, with 60% reporting no symptoms after 4 weeks. For 25% of pregnant women, symptoms persisted for 8 weeks or longer. The median time for symptoms to resolve was 37 days (95% confidence interval, 35 to 39).

"Despite the potential risks of COVID-19 for pregnant people and their newborns, there are large gaps in our knowledge on the course of the disease and the overall prognosis," said lead author Yalda Afshar, MD, PhD, of the University of California-San Francisco (UCSF), in a UCSF press release. "Our results can help pregnant people and their clinicians better understand what to expect with COVID-19 infection." https://journals.lww.com/greenjournal/Fulltext/9900/Clinical_Presentation_of_Coronavirus_Disease_2019.2.aspx
<https://www.cidrap.umn.edu/news-perspective/2020/10/covid-19-scan-oct-08-2020>

Study

Coronavirus lasts on skin longer than the flu, study says

Source: Miami Herald

Unique ID: [1008000493](#)

Past research has shown that the coronavirus can live on copper for up to four hours, cardboard for about one day and plastic and stainless steel for about two to three days, according to an April letter to the editor published in The New England Journal of Medicine. New research out of Japan reveals that the novel coronavirus can survive on human skin for up to nine hours, suggesting that hand washing remains a vital tool in the fight against the pandemic. But studying how long the coronavirus survives on human skin has been excluded from research, mostly because it's unethical to intentionally slather live virus on someone's hand.

New research out of Japan reveals that the novel coronavirus can survive on human skin for up to nine hours, suggesting that hand washing remains a vital tool in the fight against the pandemic.

The study also shows the coronavirus lasts far longer on human skin and other surfaces compared to the influenza A virus, which causes the seasonal flu. Influenza A survived for just under two hours on skin.

The upside? Both pathogens were killed within 15 seconds upon contact with hand sanitizer, according to the study published Oct. 3 in the journal Clinical Infectious Diseases.

"Taken together, the determined long, 9-hour survival time of SARS-CoV-2 on human skin may increase the risk of viral invasion in the body or its transmission from the skin to other surfaces, with a potential impact in the acceleration of the pandemic," the researchers from the Kyoto Prefectural University of Medicine in Japan wrote in their study.

"Thus, appropriate hand hygiene using ethanol-based disinfectants leads to the quick viral inactivation and may reduce the high risk of contact infections," they said.

Past research has shown that the coronavirus can live on copper for up to four hours, cardboard for about one day and plastic and stainless steel for about two to three days, according to an April letter to the editor published in The New England Journal of Medicine.

But studying how long the coronavirus survives on human skin has been excluded from research, mostly because it's unethical to intentionally slather live virus on someone's hand.

To get around this, the team from Japan collected three human skin samples from autopsies just one day after death, which the researchers say is OK because skin functions are preserved. They then acquired mucus samples from three individuals to simulate how the virus sticks to surfaces and people via respiratory droplets from coughs and sneezes.

The researchers recorded how long the coronavirus particles remained infectious on skin, in a petri lab dish with mucus, stainless steel, borosilicate glass and polystyrene, a type of plastic.

While the coronavirus survived on human skin for a little over nine hours and influenza A lasted for about two hours, the researchers said the virus' lifetime was much longer on surfaces. This means "that human skin is less suitable for the survival of viruses."

And thrown into a glob of mucus, the coronavirus survived even longer at just over 11 hours, compared to about an hour and a half for influenza.

But both viruses were deactivated within 15 seconds when 80% ethanol, a type of alcohol, was applied.

The Centers for Disease Control and Prevention says the "primary and most important" way the coronavirus spreads is through close contact with an infected person. The agency also recently acknowledged that the virus can spread via the air when respiratory droplets from coughs and sneezes become smaller and travel greater distances over longer periods of time.

It's possible people can get infected touching surfaces or objects that have the virus on them before touching their mouth, nose or eyes — "but this isn't thought to be the main way the virus spreads."

<https://academic.oup.com/cid/advance-article/doi/10.1093/cid/ciaa1517/5917611>

<https://www.miamiherald.com/news/coronavirus/article246306620.html>

Study

Study: New viral mutations would not impact the efficacy of Covid-19 vaccine candidates

Source: news-medical.net

Unique ID: [1008000378](#)

This is good news for the hundreds of vaccines in development around the world, with the majority targeting the spike protein as this binds to the ACE2 receptors in our lungs and airways, which are the entry point to infect cells. Professor Seshadri Vasani, who holds an honorary chair in Health Sciences at the University of York, is leading the Dangerous Pathogens Team at CSIRO and is senior author of the paper. Vaccines currently being developed for Covid-19 should not be affected by recent mutations in the virus, according to a new study involving a University of York virologist.

Vaccines currently being developed for Covid-19 should not be affected by recent mutations in the virus, according to a new study involving a University of York virologist.

Most vaccines under development worldwide have been modeled on the original 'D-strain' of the virus, which were more common amongst sequences published early in the pandemic.

Since then, the virus has evolved to the globally dominant 'G-strain', which now accounts for about 85 per cent of published SARS-CoV-2 genomes.

There had been fears the G-strain, within the main protein on the surface of the virus, would negatively impact on vaccines under development. But the research by Australia's national science agency the Commonwealth Scientific and Industrial Research Organisation (CSIRO), found no evidence the change would adversely impact the efficacy of vaccine candidates.

The study tested blood samples from ferrets given a candidate vaccine against virus strains that either possessed or lacked this mutation (known as 'D614G').

Professor Seshadri Vasani, who holds an honorary chair in Health Sciences at the University of York, is leading the Dangerous Pathogens Team at CSIRO and is senior author of the paper.

This is good news for the hundreds of vaccines in development around the world, with the majority targeting the spike protein as this binds to the ACE2 receptors in our lungs and airways, which are the entry point to infect cells.

Despite this D614G mutation to the spike protein, we confirmed through experiments and modelling that vaccine candidates are still effective.

We've also found the G-strain is unlikely to require frequent 'vaccine matching' where new vaccines need to be developed seasonally to combat the virus strains in circulation, as is the case with influenza."

Seshadri Vasani, Study Senior Author and Professor, University of York

CSIRO Chief Executive Dr Larry Marshall said the research was critically important in the race to develop a vaccine.

Dr Marshall said: "This brings the world one step closer to a safe and effective vaccine to protect people and save lives.

"Research like this, at speed, is only possible through collaboration with partners in Australia and globally. We are tackling these challenges head on and delivering solutions through world-leading science."

The study is published in *npj Vaccines*.

<https://www.news-medical.net/news/20201008/Study-New-viral-mutations-would-not-impact-the-efficacy-of-Covid-19-vaccine-candidates.aspx>

Study

Regeneron asks for emergency FDA approval for COVID-19 antibody treatment

Source: UPI.com

Unique ID: [1008000290](#)

Regeneron, which asked the Food and Drug Administration for the emergency authorization, said it has doses available for 50,000 patients and will have enough for another 300,000 in the coming months. The REGN-COV2 treatment is a combination of two antibodies that's designed to "block infectivity" of the SARS-CoV-2 virus that causes COVID-19. 8 (UPI) -- Biotechnology company Regeneron has requested emergency use authorization from federal regulators for a COVID-19 antibody treatment.

Oct. 8 (UPI) -- Biotechnology Company Regeneron has requested emergency use authorization from federal regulators for a COVID-19 antibody treatment.

The REGN-COV2 treatment is a combination of two antibodies that's designed to "block infectivity" of the SARS-CoV-2 virus that causes COVID-19.

"The two potent, virus-neutralizing antibodies that form REGN-COV2 bind non-competitively to the critical receptor binding domain of the virus's spike protein, which diminishes the ability of mutant viruses to escape treatment and protects against spike variants that have arisen in the human population," the company said in a statement.

Regeneron, which asked the Food and Drug Administration for the emergency authorization, said it has doses available for 50,000 patients and will have enough for another 300,000 in the coming months.

"If [emergency use authorization] is granted the government has committed to making these doses available to the American people at no cost and would be responsible for their distribution," the company added.

President Donald Trump took a dose of the Regeneron cocktail last week after he tested positive for COVID-19, even though it hasn't been approved by the FDA.

Regeneron said if its request is approved, it will distribute the treatment in the United States and partner Roche will distribute overseas.

https://www.upi.com/Top_News/US/2020/10/08/Regeneron-asks-for-emergency-FDA-approval-for-COVID-19-treatment/6491602162671/

Study

Researchers identify a promising method to stop COVID-19 infection

Source: News Medical

Unique ID: [1008000273](#)

While the world waits eagerly for a safe and effective vaccine to prevent infections from severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), the virus behind the COVID-19 pandemic, researchers also are focusing on better understanding how SARS-CoV-2 attacks the body in the search for other means of stopping its devastating impact.

The key to one possibility -; blocking a protein that enables the virus to turn the immune system against healthy cells -; has been identified in a recent study by a team of Johns Hopkins Medicine researchers. Based on their findings, the researchers believe that inhibiting the protein, known as factor D, also will curtail the potentially deadly inflammatory reactions that many patients have to the virus.

Making the discovery even more exciting is that there may already be drugs in development and testing for other diseases that can do the required blocking.

The study is published in the Sept. 2, 2020, issue of the journal *Blood*.

Scientists already know that spike proteins on the surface of the SARS-CoV-2 virus -; making the

pathogen look like the spiny ball from a medieval mace -; are the means by which it attaches to cells targeted for infection.

To do this, the spikes first grab hold of heparan sulfate, a large, complex sugar molecule found on the surface of cells in the lungs, blood vessels and smooth muscle making up most organs.

Facilitated by its initial binding with heparan sulfate, SARS-CoV-2 then uses another cell-surface component, the protein known as angiotensin-converting enzyme 2 (ACE2), as its doorway into the attacked cell.

The Johns Hopkins Medicine team discovered that when SARS-CoV-2 ties up heparan sulfate, it prevents factor H from using the sugar molecule to bind with cells.

Factor H's normal function is to regulate the chemical signals that trigger inflammation and keep the immune system from harming healthy cells. Without this protection, cells in the lungs, heart, kidneys and other organs can be destroyed by the defense mechanism nature intended to safeguard them.

Previous research has suggested that along with tying up heparan sulfate, SARS-CoV-2 activates a cascading series of biological reactions -; what we call the alternative pathway of complement, or APC -; that can lead to inflammation and cell destruction if misdirected by the immune system at healthy organs. The goal of our study was to discover how the virus activates this pathway and to find a way to inhibit it before the damage happens."

Robert Brodsky, MD, Study Senior Author and Director, Hematology Division, Johns Hopkins University School of Medicine

The APC is one of three chain reaction processes involving the splitting and combining of more than 20 different proteins -; known as complement proteins -; that usually gets activated when bacteria or viruses invade the body.

The end product of this complement cascade, a structure called membrane attack complex (MAC), forms on the surface of the invader and causes its destruction, either by creating holes in bacterial membranes or disrupting a virus' outer envelope.

However, MACs also can arise on the membranes of healthy cells. Fortunately, humans have a number of complement proteins, including factor H, that regulate the APC, keep it in check and therefore, protect normal cells from damage by MACs.

In a series of experiments, Brodsky and his colleagues used normal human blood serum and three subunits of the SARS-CoV-2 spike protein to discover exactly how the virus activates the APC, hijacks the immune system and endangers normal cells.

They discovered that two of the subunits, called S1 and S2, are the components that bind the virus to heparan sulfate -; setting off the APC cascade and blocking factor H from connecting with the sugar -; and in turn, disabling the complement regulation by which factor H deters a misdirected immune response.

In turn, the researchers say, the resulting immune system response to chemicals released by the lysing of killed cells could be responsible for the organ damage and failures seen in severe cases of COVID-19. Most notably, Brodsky says, the research team found by blocking another complement protein, known as factor D, which works immediately upstream in the pathway from factor H, they were able to stop the destructive chain of events triggered by SARS-CoV-2.

"When we added a small molecule that inhibits the function of factor D, the APC wasn't activated by the virus spike proteins," Brodsky says. "We believe that when the SARS-CoV-2 spike proteins bind to heparan sulfate, it triggers an increase in the complement-mediated killing of normal cells because factor H, a key regulator of the APC, can't do its job."

To better understand what happens, Brodsky says think of the APC like a car in motion.

"If the brakes are disabled, the gas pedal can be floored without restraint, very likely leading to a crash and destruction," he explains. "The viral spike proteins disable the biological brakes, factor H, enabling the gas pedal, factor D, to accelerate the immune system and cause cell, tissue and organ devastation. Inhibit factor D, and the brakes can be reapplied and the immune system reset."

Brodsky adds that cell death and organ damage from a misdirected APC associated with factor H suppression is already known to occur in several complement-related human diseases, including age-related macular degeneration, a leading cause of vision loss for people age 50 and older; and atypical

hemolytic uremic syndrome (aHUS), a rare disease that causes clots to block blood flow to the kidneys. Brodsky and his colleagues hope that their work will encourage more study into the potential use against COVID-19 of complement-inhibiting drugs already in the pipeline for other diseases.

"There are a number of these drugs that will be FDA-approved and in clinical practice within the next two years," Brodsky says. "Perhaps one or more of these could be teamed with vaccines to help control the spread of COVID-19 and avoid future viral pandemics."

Source: Johns Hopkins Medicine

Journal reference:

Yu, J., et al. (2020) Direct activation of the alternative complement pathway by SARS-CoV-2 spike proteins is blocked by factor D inhibition. Blood. doi.org/10.1182/blood.2020008248.

<https://ashpublications.org/blood/article/doi/10.1182/blood.2020008248/463611/Direct-activation-of-the-alternative-complement>

Posted in: Medical Science News | Medical Research News | Disease/Infection News

<https://www.news-medical.net/news/20201008/Researchers-identify-a-promising-method-to-stop-COVID-19-infection.aspx>

United States

Enough doses of COVID-19 vaccine could be made for U.S. by March to April: HHS

Source: Reuters

Unique ID: [1008000272](#)

There could be up to 100 million doses of a COVID-19 vaccine by year-end, enough to cover especially vulnerable populations, Azar said at Goldman Sachs Healthcare virtual conference. (Reuters) - Enough doses of a coronavirus vaccine could be manufactured by March to April next year for every American who wants one, U.S. Health and Human Services Secretary Alex Azar said on Thursday. There could be up to 100 million doses of a COVID-19 vaccine by year-end, enough to cover especially vulnerable populations, Azar said at Goldman Sachs Healthcare virtual conference.

Azar also said tens to hundreds of thousand doses of Regeneron's antibody treatment could be ready for use this fall, pending the U.S. Food and Drug Administration's authorization.

<https://www.reuters.com/article/idUSKBN26T2MV>

Study

COVID-19 vaccine efficacy could depend on virus' mutation rate

Source: News Cleveland

Unique ID: [1007999935](#)

As the COVID-19 pandemic progresses, researchers say it is important to track how the coronavirus mutates because it could affect the efficacy of a vaccine. In viruses like the flu, that happens frequently, which is why every year there is a new vaccine to treat whatever strain is expected to circulate. As soon as it was detected, Dr. Lim started studying how the virus mutates and sent his findings to the World Health Organization.

As the COVID-19 pandemic progresses, researchers say it is important to track how the coronavirus mutates because it could affect the efficacy of a vaccine.

Like all living cells, viruses evolve their chemical make-up changes. In viruses like the flu, that happens frequently, which is why every year there is a new vaccine to treat whatever strain is expected to circulate. With COVID-19, however, those mutations happen much slower, according to research out of Arizona State University.

"One of the things we're still keeping an eye on is the evolution of this virus because that virus is still around in the community," said Dr. Efram Lim, an assistant professor at ASU. "Everyone is coming in blind to this. This is a novel virus. This isn't something we have seen before."

In March, Arizona State University played host to our country's fourth COVID-19 case. As soon as it was detected, Dr. Lim started studying how the virus mutates and sent his findings to the World Health Organization. It's something that still continues to this day.

"This virus, overall, mutates pretty slowly, which is a good thing," said Dr. Lim. "However, we can have

instances where the virus can have very large, dramatic, mutations, such as deletions in the genome." While rare, Dr. Lim says those mutations can be significant as it changes how the virus acts inside the body.

Currently, scientists are focusing much of their efforts on identifying ways to eliminate the function of the spike protein in COVID-19, as it is the way the virus binds to our cells and infects them (spike proteins are the stalks that protrude from the center of the virus that make it so recognizable).

"It is very good news that the virus is not changing rapidly," said ASU virologist Dr. Brenda Hogue. "We will have to see over time, as the virus continues to circulate, as we put a vaccine into play, whether or not there will be any issues."

Dr. Lim says right now there does not appear to be any issues because the virus mutates slowly, but he adds it could adapt to a vaccine once one begins to circulate.

He says more testing needs to be done to determine that, however.

<https://www.news5cleveland.com/rebound/covid-19-vaccine-efficacy-could-depend-on-virus-mutation-rate>

Study

R&D; Binary coronavirus/flu vaccine being developed in St. Petersburg

Source: **Interfax: Russia & CIS Health and Pharmaceutical Weekly**

Unique ID: [1007999923](#)

The genetically engineered vaccine is based on a flu vector, Sergeyev said, noting that he had discussed this project with President Vladimir Putin. The Institute of Experimental Medicine (St. Petersburg) is developing a binary vaccine against COVID-19 and influenza.

The Institute of Experimental Medicine (St. Petersburg) is developing a binary vaccine against COVID-19 and influenza.

"The Russian Academy of Sciences' Institute of Experimental Medicine is working to create a vaccine protecting against both SARS-CoV-2 and influenza," Russian Academy of Sciences President Alexander Sergeyev said at a press conference.

The genetically engineered vaccine is based on a flu vector, Sergeyev said, noting that he had discussed this project with President Vladimir Putin.

"The administered flu virus carries the SARS-CoV-2 protein, inducing an immune response to both influenza and COVID-19," Sergeyev said.

This vaccine is essential amid fears that the COVID-19 and influenza spread can overlap, he said. Sergeyev announced that the Institute of Experimental Medicine was implementing another original project at its Moscow branch. "They are developing a bacterial preparation, a bacterium, that will produce the COVID-19 protein," he said.

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Domestic Events of Interest

Canada

Unclear if respiratory outbreaks in Peterborough facilities linked

Source: Peterborough This Week

Unique ID: [1008001055](#)

Extendicare Peterborough has a declared outbreak of an unknown respiratory illness, as another outbreak at Riverview Manor Long-Term Care ends.

But Peterborough Public Health says they've tested for COVID-19, the flu and other illnesses and everything has come up negative. So they're not sure what the illnesses are, or even if they're the same one.

On Tuesday, Oct. 6, Peterborough Public Health updated the status of outbreaks in community facilities. According to the health unit, the onset of the first case of the illness at Extendicare started on Oct. 1. The recently-ended outbreak at Riverview Manor was declared on Sept. 28, when the unknown illness was discovered in the home.

Another unknown respiratory outbreak occurred at Peterborough Regional Health Centre on Sept. 21, ending on Sept. 26.

So far the health unit has not confirmed any link between these outbreaks and it's unknown if this is the same illness affecting multiple facilities.

Dr. Rosana Salvaterra says they've done testing for COVID-19 and more common illnesses but there are hundreds of respiratory illnesses, so it could be many things.

"We know it's none of those things but we don't know what it is," she says.

There is also an ongoing COVID-19 outbreak at Fairhaven Long Term Care, where a second outbreak was declared shortly after the first one ended on Sept. 28.

<https://gphin.canada.ca/cepr/showarticle.jsp?docId=1008001055>

<https://www.mykawartha.com/news-story/10218077-update-unclear-if-respiratory-outbreaks-in-peterborough-facilities-linked/>

Canada

Fentanyl warning in Akwesasne after one man dies, another revived following overdose

Source: Nation Valley News

Unique ID: [1007999388](#)

At a Snye, Quebec, residence after reserve police and the Akwesasne Mohawk Ambulance unit provided life-saving measures in an attempt to revive him, according to a press release issued today by the Mohawk Council of Akwesasne. AKWESASNE — Akwesasne Mohawk Police are warning about the presence of “fentanyl laced drugs” in their community after two men in their 30s were found unresponsive this week — one of whom died. A 38-year-old male was pronounced deceased yesterday (Oct.

AKWESASNE — Akwesasne Mohawk Police are warning about the presence of “fentanyl laced drugs” in their community after two men in their 30s were found unresponsive this week — one of whom died.

A 38-year-old male was pronounced deceased yesterday (Oct. 6) at a Snye, Quebec, residence after reserve police and the Akwesasne Mohawk Ambulance unit provided life-saving measures in an attempt to revive him, according to a press release issued today by the Mohawk Council of Akwesasne.

That fatality followed a Monday call (Oct. 5), again at a residence in Syne (also known as Tsi Snaihne). But in that case, first responders managed to revive a 30-year-old man who was then treated in hospital and released. His situation is titled an “overdose” in the release.

Snye is located on the south shore of the St. Lawrence River, roughly across from Glen Walter in South Glengarry Township and the east end of Cornwall. It comprises part of the Akwesasne reserve straddling two provinces and an American state (New York).

<https://nationvalleynews.com/2020/10/07/fentanyl-warning-akwesasne-one-man-dies-another-revived-following-overdose/>

Canada

Patients sue province over plans to end opioid therapy

Source: The Globe and Mail

Unique ID: [1007999517](#)

Government's move to stop drug addiction treatment puts lives at risk, plaintiffs say

A group of patients participating in Alberta's drug therapy for severe opioid addictions is suing the government in an effort to stop the province from shuttering the treatment program next year, arguing its closing would infringe on their constitutional rights by putting lives at risk.

Alberta's United Conservative Party government prohibited its injectable opioid agonist treatment, or iOAT, programs from accepting new patients in March, and said its existing 65 patients must be off the regime in a year's time. Eleven iOAT participants last week filed a lawsuit to thwart the government's plans, including the ban on new patients. In iOAT, patients control their withdrawal symptoms by injecting hydromorphone, an opioid analgesic, by prescription.

The lawsuit encapsulates the political battle over how to best manage the opioid addiction crisis in Alberta. The UCP shies away from treatment and harmreduction methods where the government condones and facilitates drug consumption, instead favouring recovery programs with abstinence as the end goal.

Government critics argue limiting or ending access to programs like iOAT and supervised drug-

consumption operations, where clients use illicit substances under the watch of health care professionals there to reverse overdoses, amounts to state cruelty and discrimination, and undermines the right to life, liberty and security for people with severe opioid addictions.

Amanda Frances Marie Ervin is among the 11 iOAT patients suing the government. She turned to hard drugs at 11 after a childhood of abuse, and later was in and out of jail. "I was dead inside, and so angry at the world. I didn't care if I lived any longer," she said in court documents. "I was hoping for death."

Ms. Ervin got into an iOAT program in November, 2018, which she said changed her life. She gained weight, cut her use of street drugs, found housing and purpose, according to documents filed in court. "Shutting down the iOAT program robs me of the hopes and possibilities I have for a better future," she said. "A life where I am able to better manage my opioid dependency or beat it entirely."

Injectable opioid drug therapy is reserved for patients who have unsuccessfully tried other treatment options, including oral opioid agonist therapy, where street substances are replaced with drugs such as suboxone and methadone. Alberta, when it announced its iOAT plans in March, said existing patients would be "transitioned" to other forms of treatment over the next 12 months. The government said it would review iOAT, which started as a pilot project, and then decide whether to continue funding it. The provincial government said it is proceeding with its transition strategy. More than 40 per cent of "active" iOAT clients have shifted to other treatment options, according to a statement from the office of Jason Luan, the associate minister for Mental Health and Addictions. The government expects to wrap up the transition by the end of March, 2021, the statement said.

The statement from Mr. Luan's office did not address the lawsuit.

Nanda & Co., a law firm with offices in Edmonton and Vancouver, is leading the iOAT group's case. The challenge over access to prescribed and injectable opioids is similar to one that played out years ago in British Columbia, which was related to prescribed and injectable diacetylmorphine, better known as heroin. The B.C. Supreme Court sided with patients and doctors, finding the injectable treatment program reduces the risks associated with severe heroin addiction and allowed it to continue.

Ms. Ervin, like her fellow plaintiffs, believes that if she no longer has access to iOAT, she will return to street drugs. These substances, she noted, are not as safe. She believes she will likely lose her housing. On the streets, she said, she will likely be raped, exploited, harassed and assaulted.

"I will likely die on the street," she said. "There is no future for me without iOAT."

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<https://www.theglobeandmail.com/amp/canada/alberta/article-alberta-sued-by-patients-over-shutdown-of-drug-therapy-program/>

International Events of Interest

IHR Notification

France | Oropouche virus disease

Core Details

Event ID: 2020-E000398

Date updated: Thursday, October 8, 2020 - 22:33

Region: [AM](#)

Country: [France](#)

EIS Status: [Current](#)

Hazard: [Infectious](#)

Disease: [Oropouche virus disease](#)

Verification Status: [WHO-NFP risk assessment ongoing](#)

Laboratory Confirmed: Yes

IHR Assessment: [Public Health Risk \(PHR\)](#)

WHO IHR Contact Point

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URL <http://www.paho.org/english/ad/dpc/cd/eer-ihrs.htm>

IHR Criteria

Serious Public Health Impact

Oropouche fever is caused by the Oropouche virus (OROV), a single-stranded RNA virus that is part of the *Peribunyaviridae* family, that has been found to circulate in Central and South America and the Caribbean. It is suspected that viral circulation includes both epidemic and sylvatic cycles. In the sylvatic cycle, primates, sloths, and perhaps birds are the vertebrate hosts, although a definitive arthropod vector has not been identified. In the epidemic cycle, humans are the amplifying host and OROV is transmitted primarily through the bite of the *Culicoides paraensis* midge, but *Culex* mosquitoes could also transmit the virus. No direct transmission of the virus from human-to-human has been documented. Oropouche fever causes dengue-like symptoms, with an incubation period of 4-8 days (range: 3-12 days). Symptoms include the sudden onset of high fever, headache, myalgia, rash, joint pain, and vomiting. Illness typically lasts 3-6 days. A brief recurrence of symptoms may occur in up to 60% of cases. Aseptic meningitis is an uncommon complication. In the Americas, outbreaks of OROV have been reported from rural and urban communities of Brazil, Ecuador, Panama, Peru, and Trinidad and Tobago, and now in French Guiana. With the global circulation of the virus causing COVID-19 and the current pandemic, there is a risk of disruption to healthcare access due to both COVID-19 related burden on the health system and healthcare workers, and decreased demand because of physical distancing requirements or community reluctance. On 25 July 2020, French Guiana reported 7,251 COVID-19 cases and 41 deaths and as of 6 October 2020, 10,057 COVID-19 cases and 68 deaths are reported.

Unusual or unexpected

This is the first detection of Oropouche virus in French Guiana. The population is therefore highly susceptible.

International disease spread

The affected population is small, localized, and isolated. The potential for an epidemic is small considering the sparsely populated area where the outbreak has occurred. While there is no significant risk of international disease spread, the competent vector is present within the Region of the Americas, and the possibility of additional cases occurring within the Region cannot be ruled out.

Interference with international travel or trade

WHO does not recommend any restrictions on travel and/or trade for French Guiana based on available information on this event.

Date first Published to EIS: Thursday, October 8, 2020 - 22:33

Updated status: new

Latest Bulletin / Situation report

[Event Update 2020-10-08](#)

Date / Time Published: 2020-10-08 22:34

On 30 September 2020, the French Guiana Regional Health Agency (ARS) reported the first detection of Oropouche virus (OROV) in French Guiana. The Pasteur Institute in Cayenne (a member of the French National Reference Laboratory for arboviruses) notified the France IHR National Focal Point of seven laboratory-confirmed cases of Oropouche virus infection in the village of Saül (in the center of the country) on 22 September 2020. These cases were identified following clinical investigation of an unusually high number of dengue-like illnesses in the village. Between 11 August and 25 September 2020, there were 37 clinically-compatible cases of Oropouche virus disease identified in Saül. Serology for dengue, chikungunya, and Zika were negative, and 7 of 9 cases tested positive for OROV by reverse transcriptase polymerase chain reaction (RT-PCR). Among the 37 clinically compatible cases, the majority of cases are male (60%) and the median age is 36 years (range 3-82 years). The most represented age range is 15 to 54-years-old (19 cases) followed by 0 to 14-years-old (10 cases). A peak in cases was observed in mid-September. The outbreak investigation remains ongoing.

Oropouche fever is caused by the Oropouche virus (OROV), a single-stranded RNA virus that is part of the *Peribunyaviridae* family, that has been found to circulate in Central and South America and the Caribbean. It is suspected that viral circulation includes both epidemic and sylvatic cycles. In the sylvatic

cycle, primates, sloths, and perhaps birds are the vertebrate hosts, although a definitive arthropod vector has not been identified. In the epidemic cycle, humans are the amplifying host and OROV is transmitted primarily through the bite of the *Culicoides paraensis* midge, but *Culex* mosquitoes could also transmit the virus. Both vectors are present in the region. No direct transmission of the virus from human-to-human has been documented.

The village of Saül is remote and is surrounded by Amazonian rainforest. The village can only be reached via the Saül Airport and is approximately a 45-minute flight from Cayenne. It is a popular destination for hiking. The official population of Saül is 150 persons; however, due to a drastic reduction in the frequency of flights to and from Saül during the COVID-19 pandemic, the population actually living in Saül during August-September was an estimated 50 to 80 persons. Therefore, given the 37 clinically compatible cases, the attack rate in this village could be as high as 70%. No cases of COVID-19 have been reported in Saül thus far.

Public Health Response

Public health measures that are planned or ongoing include the following:

- Entomological investigation mission planned for epidemiological week ending 3 October of 2020,
- Request for entomological expertise from the Pasteur Institute of French Guiana,
- Prevention messages targeting the population, tourists, or other visitors passing through Saül,
- Will convene an expert committee to discuss the implementation of a strategy for entomological and virological surveillance of arboviruses and vector competence studies for areas not yet affected.

WHO Risk Assessment

OROV circulates in Central and South America and the Caribbean. Oropouche fever causes dengue-like symptoms, with an incubation period of 4-8 days (range: 3-12 days). Symptoms include the sudden onset of high fever, headache, myalgia, rash, joint pain, and vomiting. Illness typically lasts 3–6 days. A brief recurrence of symptoms may occur in up to 60% of cases. Aseptic meningitis is an uncommon complication. In the Americas, outbreaks of OROV have been reported in rural and urban communities of Brazil, Ecuador, Panama, Peru, and Trinidad and Tobago, and now in French Guiana.

This is the first detection of Oropouche virus in French Guiana. Therefore, the population is highly susceptible. To date, there is no evidence of direct human-to-human Oropouche virus transmission. Cases of infection with Oropouche virus have been reported in other countries within the Region of the Americas, and therefore the competent vector, the *Culicoides paraensis* midge, is present in the region as is *Culex quinquefasciatus* which could be a vector as well. However, the extent to which this vector is present in French Guiana needs to be further established. Given the geographical distribution of the competent vector in the Region of the Americas, cases may be identified in other countries. The WHO Regional Office for the Americas and the Pan-American Health Organization continues to monitor the epidemiological situation based on the latest available information.

With the global circulation of the virus causing COVID-19 and the current pandemic, there is a risk of disruption to health care access due to both COVID-19 related burden on the health system and health care workers and decreased demand because of physical distancing requirements or community reluctance

Another aspect for consideration in the light of the current COVID-19 pandemic, is the capacity of the local laboratories and national reference laboratories to process samples due the over demand in processing COVID-19 samples and the absence of commercial diagnostic kits. As of 6 October, French Guiana reports 10.070 of COVID 19 cases and 69 deaths.

WHO advice

Given its clinical presentation, Oropouche fever should be included in the clinical differential diagnosis for other common vector-borne diseases in the region of the Americas (e.g., malaria, Zika virus, chikungunya, dengue, yellow fever-WHO recommends vaccination against yellow fever at least 10 days prior to the travel for all international travelers 9 months of age going to French Guiana. French Guiana requires a yellow fever vaccination certificate for travelers over one (1) year of age).

Development of prevention messages to reduce contact between midges and people targeting the local population, visitors and tourists in the Saul area.

The proximity of midge vector breeding to human habitation is a significant risk factor for Oropouche virus infection. Prevention and control rely on reducing the breeding of midges through source reduction (removal and modification of breeding sites) and reducing contact between midges and people. This can be achieved by reducing the number of natural and artificial water-filled habitats that support midge larvae, reducing the adult midge populations around at-risk communities and by using barriers such as insect screens, closed doors and windows, long clothing and repellents.

References and links:

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United States

Outbreak of *Salmonella* Newport Infections Linked to Onions

Source: CDC

- As of October 8, 2020, this outbreak appears to be over.
- A total of 1,127 people infected with the outbreak strain of *Salmonella* Newport were reported from 48 states. There were 167 hospitalizations and no deaths reported.
- Epidemiologic and traceback evidence showed that red onions from Thomson International Inc. were the likely source of this outbreak. Other onion types (such as white, yellow, or sweet yellow) were also likely to be contaminated because the onions were grown and harvested together.
- On August 1, 2020, Thomson International Inc. [recalled](#) all red, yellow, white, and sweet yellow onions because they may be contaminated with *Salmonella*.

Investigation Details

October 8, 2020

CDC, public health and regulatory officials in several states, FDA, and Canada investigated a multistate outbreak of *Salmonella* Newport infections linked to onions.

Public health investigators used the [PulseNet](#) system to identify illnesses that were part of this outbreak. PulseNet is the national subtyping network of public health and food regulatory agency laboratories coordinated by CDC. DNA fingerprinting is performed on *Salmonella* bacteria isolated from ill people by using a standardized laboratory and data analysis method called [whole genome sequencing](#) (WGS). CDC PulseNet manages a national database of these sequences that are used to identify possible outbreaks. WGS gives investigators detailed information about the bacteria causing illness. In this investigation, WGS showed that bacteria isolated from ill people were closely related genetically. This means that people in this outbreak were likely to share a common source of infection.

A total of 1,127 people infected with the outbreak strain of *Salmonella* Newport were reported from 48 states. A list of the states and the number of cases in each can be found on the [Map of Reported Cases page](#).

Illnesses started on dates ranging from [June 19, 2020, to September 11, 2020](#). Ill people ranged in age from less than 1 to 102 years, with a median age of 41. Fifty-eight percent of ill people were female. Of 705 ill people with information available, 167 people were hospitalized. No deaths were reported.

Whole genome sequencing analysis of 732 bacterial isolates from ill people did not predict any antibiotic resistance in 730 isolates; one isolate had predicted resistance to ampicillin, and one isolate had predicted resistance to tetracycline. Standard [antibiotic susceptibility testing](#) of eight clinical isolates by

CDC's [National Antimicrobial Resistance Monitoring System \(NARMS\)](#) laboratory showed no resistance. This resistance should not affect the choice of antibiotic used to treat most people.

Investigation of the Outbreak

[Epidemiologic and traceback evidence](#) showed that red onions from Thomson International Inc. were the likely source of this outbreak. Other onion types (such as white, yellow, or sweet yellow) were also likely to be contaminated because the onions were grown and harvested together.

In interviews, ill people answered [questions about the foods they ate and other exposures](#) in the week before they became ill. Ninety-one percent of people reported eating onions or foods likely containing onions in the week before their illness started. Of the 208 people who were asked what types of onions they ate, 137 (66%) ate red onions, 130 (63%) ate white onions, and 110 (53%) ate yellow onions. Most ill people reported eating more than one type of onion.

FDA and states reviewed records where ill people purchased or ate onions and foods containing onions. This traceback investigation identified Thomson International Inc. as the likely source of red onions. The Public Health Agency of Canada (PHAC) and The Canadian Food Inspection Agency (CFIA) also investigated an outbreak of *Salmonella* Newport infections in Canada that was related genetically by WGS to the U.S. outbreak. [Their investigation](#) identified red onions from Thomson International Inc. as the likely source of their outbreak.

On August 1, 2020, Thomson International Inc. [recalled](#) all red, yellow, white, and sweet yellow onions because they may be contaminated with *Salmonella*. Other companies also recalled onions or foods made with recalled onions. See the [full list of recalled products](#). Consumers, restaurants, and retailers should not eat, serve, or sell recalled onions and products.

As of October 8, 2020, this outbreak appears to be over. FDA is continuing their investigation to find the root cause of this outbreak.

<https://www.cdc.gov/salmonella/newport-07-20/index.html>

United States

A mumps epidemic has a lot to teach colleges about reopening safely in the time of coronavirus

Source: STAT News

Unique ID: [1007999529](#)

The response of higher ed institutions to the Massachusetts mumps outbreak — in particular, those in Boston, a city of 110 institutions of higher learning and 60 residential colleges — can serve as a blueprint for addressing the current situation with Covid-19. During and after the mumps outbreaks, our Harvard-based research team worked closely with the Massachusetts Department of Public Health and numerous affected colleges to generate genomic data to characterize the mumps virus, investigate its spread in the area, and develop a plan to keep vulnerable campuses — and the communities around them — safe. As a reportable disease that has been relatively manageable since a vaccine was approved in 1967, mumps serves as a warning of how viruses can spread rapidly — and in unexpected ways — with lessons for understanding SARS-CoV-2, the virus that causes Covid-19.

Mumps tore through the Harvard University campus in the spring of 2016. As a reportable disease that has been relatively manageable since a vaccine was approved in 1967, mumps serves as a warning of how viruses can spread rapidly — and in unexpected ways — with lessons for understanding SARS-CoV-2, the virus that causes Covid-19.

Dormitory residents, dining hall staff, athletes, and health services nursing staff all came down with mumps. A commencement event infected Harvard affiliates who went on to seed an outbreak in a neighboring community. Mumps continued to spread in 2017, rattling several college campuses across Massachusetts.

Colleges and universities across the country are now facing an existential threat from Covid-19. As institutions with so-called congregate living facilities — close living quarters, crowded classrooms, and communal dining facilities — not to mention a dose of risky social behaviors, administrators across the country shut their doors to students last spring. Many are now deep in efforts to reopen safely. The response of higher ed institutions to the Massachusetts mumps outbreak — in particular, those in Boston, a city of 110 institutions of higher learning and 60 residential colleges — can serve as a blueprint for addressing the current situation with Covid-19.

During and after the mumps outbreaks, our Harvard-based research team worked closely with the Massachusetts Department of Public Health and numerous affected colleges to generate genomic data to

characterize the mumps virus, investigate its spread in the area, and develop a plan to keep vulnerable campuses — and the communities around them — safe. We learned six key lessons from this experience that can also be applied to reopening colleges and universities in the time of coronavirus.

Transparency and cooperation are key. Our high-resolution picture of the mumps outbreak could not have been developed if universities had refused to share their data and viral samples. Their cooperation was essential for collecting and integrating the epidemiological and molecular data needed to rapidly investigate the outbreak. The three institutions with the largest numbers of reported cases — Harvard University, Boston University, and the University of Massachusetts, Amherst — all agreed to be named in our study as part of the public health response.

Through careful engagement in the ethical and regulatory process, each contributed data without identifying any affected students.

As champions of open-minded practices and data-sharing, institutions of higher learning have the opportunity to set the standard for transparency and cooperation to seek help and guidance when needed. A safe reopening of any university during the Covid-19 pandemic will require openness and due diligence from everyone, as well as a culture of praising and not shaming institutions that come forward to participate in studies — including those that are sites of super-spreading events.

Keep broader communities safe by keeping college communities safe. Young and more immune-fortified students are often less susceptible to the most severe effects of a disease. But university campuses do not exist in bubbles. When staff members at Harvard contracted mumps and returned home, they unintentionally transmitted the disease into their communities, including the largely unvaccinated and more vulnerable community of East Boston.

Conversations about reopening schools aren't just about students: They are also about the communities that support and surround them. Including families and communities of all students, staff, and affiliates in response efforts is vital for ensuring the safety of everyone. Inclusion efforts should extend to several degrees of separation to cast the widest net of support for the communities in which colleges exist.

Support should also include regularly engaging with the community to gather feedback and build trust, provide reliable diagnostic and care options, and encourage symptom-reporting and contact-tracing programs that can further enhance community care.

Supplement traditional contact tracing with genome epidemiology. The Massachusetts Department of Public Health and university public health teams performed intensive epidemiological investigations, through which they were able to identify transmission links between cases. Genome sequencing helped confirm the accuracy of these links, but also uncovered many links between cases that would have otherwise been missed.

A telling example: The East Boston outbreak was initially thought to be a distinct event until genome sequencing revealed that the virus detected there was highly similar to those found in a cluster of cases at Harvard. Additional investigation then identified three individuals affiliated with both Harvard and the local community who could have acted as transmission links.

The rapid and often asymptomatic spread of Covid-19 has clearly challenged the capacities of traditional epidemiology. Just as genome sequencing helped increase our understanding of the mumps outbreak, capturing the trajectory of Covid-19 will require the use of newer, complementary technologies. Our recent study of the genomic epidemiology of Covid-19 in Boston uncovered links between a biotech conference in February 2020 and subsequent outbreaks in local homeless shelters and the wider community.

Mobile health applications can enhance epidemiological investigations. Our realization of the limitations of traditional epidemiology during the mumps outbreak led us to build and test mobile apps to allow individuals to report symptoms, confirm diagnoses, and share contacts and other epidemiological data in real-time. We believed this type of approach could gain momentum in a circumscribed, close-knit community where mass adoption can be achieved, much like the launch of Facebook.

We leveraged residential colleges as a relevant demographic that could provide deeper understanding around the value and use of such mobile apps in other densely populated communities. In 2017, when we began surveying students on their use of the apps we were developing, we learned that most students were not well-versed in health monitoring and had widely varying views on privacy. Today, a range of different apps for symptom tracking and contact tracing are available, but data on their widespread use remains scarce.

College campuses provide an opportunity to understand the potential value of mobile health apps in a relatively well-defined and receptive community. Based on our preliminary data, however, we understand

that the appropriate and safe use of contact-tracing apps for Covid-19 will require education and engagement of students, as well as further analysis to determine the best and most relevant options for them.

To this end, public health officials and institution leaders must continuously highlight the personal incentives all students have to use these apps and provide feedback so they can help keep themselves and their communities safe.

UPCOMING EVENT

The future of clinical trials

Dr. Robert Califf, Head of clinical policy and strategy for Verily, joins us for a conversation on October 8 to discuss how new technologies could change medical research without sacrificing rigor. Register now to join.

Decentralize diagnosis of symptomatic patients. The emergence of mumps among nurses at Harvard University Health Services (UHS) showed that hospital and clinic waiting rooms are high-risk settings for infection during an outbreak. As long as students are not in need of urgent care, diagnosis and treatment can be done by sample collection and testing outside of university health service facilities, as well as by bringing back the traditional house call. For a college campus with accessible dorms, this is not only feasible but also convenient, given the availability and willingness of health care staff to bring health services to the students. Other options include telehealth, which can provide safe and reliable opportunities for remote assessment and care of patients, thereby limiting the risks of in-person transmission of Covid-19 or other infectious diseases.

These changes are becoming increasingly possible amid the Covid-19 pandemic, given that it can now be detected in noninvasive samples, such as anterior nasal swabs and saliva, which individuals can collect without professional help or supervision. Efforts towards decentralized sample collection and testing need to take into account different challenges for those who are ill and those without means to access care.

Testing programs need to include other co-circulating viruses. Many infectious diseases exhibit overlapping symptoms, like mumps, the flu, and Covid-19, confounding the accuracy of diagnosis. During the current pandemic, most people who have symptoms that could be Covid-19 don't actually have it, and a negative test for SARS-CoV-2 doesn't reveal what is actually making someone sick.

This fall and winter, a potential second wave of Covid-19 may appear alongside new cases of the seasonal flu and colds. It is important to employ a broad differential-diagnosis approach, one that allows for the possibility of multiple causes of an individual's illness instead of just one. With concerns high and lives on the line, sick people need accurate explanations of their symptoms and effective plans for treatment. University programs should provide testing for a range of diseases and incorporate metagenomic sequencing to diagnose patients whose diagnoses are not readily evident.

Thanks to existing vaccines that blunted the spread and impact of mumps, the Harvard outbreak was far more manageable and less dangerous than the current pandemic. The decisions and challenges facing colleges and universities today are more complicated. But one thing is certain: Any institution that has reopened or intends to reopen must do so with a solid plan built on preparedness, transparency, responsible reporting, and collaboration. The safety of students, faculty, and staff — and the communities that surround them — depends on it.

Pardis Sabeti is a professor of organismic and evolutionary biology and immunology and infectious diseases at Harvard University and a researcher at the Broad Institute of MIT and Harvard. Yolanda Botti-Lodovico is the policy lead in the Sabeti Lab at the Broad Institute of MIT and Harvard.

<https://www.statnews.com/2020/10/08/a-mumps-epidemic-has-a-lot-to-teach-colleges-about-reopening-safely-in-the-time-of-coronavirus/>

<https://journals.plos.org/plosbiology/article?id=10.1371/journal.pbio.3000611>

Study

E-cigarette related to sleep deprivation in young adults, reveals study

Source: Medical Dialogues

Unique ID: [1008000517](#)

A systematic review in 2019 on adolescent substance use and sleep found few and inconsistent studies addressing the association between e-cigarette use and sleep deprivation and concluded that this association is a concern that requires more research. The findings from a recent study published in Addictive Behaviors suggest that e-cigarette use might be related to sleep deprivation in young adults.

Nicotine, as a stimulant, can suppress rapid eye movement (REM) sleep, which may contribute to a variety of sleep problems such as sleep deprivation.

The findings from a recent study published in *Addictive Behaviors* suggest that e-cigarette use might be related to sleep deprivation in young adults.

Sleep deprivation is a strong predictive factor for many adverse health outcomes. It disrupts the functionality of different human body systems, such as immune, reproductive, and cardiovascular systems.

One potential predictor of sleep deprivation might be e-cigarette use. E-cigarette use (vaping) has dramatically increased among young adults in the U.S., even among those who had never used cigarettes. . Nicotine and other particulates of e-cigarettes have been linked to adverse health outcomes, such as increased heart rate, cough and wheeze, endothelial dysfunction, oxidative stress, addiction, and attention deficiency.

The potential substance that links e-cigarette and sleep health is nicotine (Brett et al., 2020). Nicotine, as a stimulant, can suppress rapid eye movement (REM) sleep, which may contribute to a variety of sleep problems such as sleep deprivation. The nicotine in the inhaled e-cigarette aerosols may have negative effects on sleep architecture and disturb the neurotransmitters that regulate the sleep cycle.

Many studies have found an association between combustible cigarette smoking and poor sleep. A systematic review in 2019 on adolescent substance use and sleep found few and inconsistent studies addressing the association between e-cigarette use and sleep deprivation and concluded that this association is a concern that requires more research.

This is an important question given the rapid increase in e-cigarette use among young adults in recent years.

To bridge this gap, a study was undertaken to determine whether e-cigarette use is associated with sleep deprivation in a sample of young (18–24 years-old) American adults.

Researchers used pooled cross-sectional data from the 2017 and 2018 Behavioral Risk Factor Surveillance System (BRFSS), selecting respondents aged 18 to 24 from forty-one states and U.S. territories that included the e-cigarette and sleep modules in the interview (N = 19,701).

Poisson regression models tested the relationship between e-cigarette use and sleep deprivation.

The team adjusted for sociodemographic variables, physical activity, mental health, BMI, smokeless tobacco products use, alcohol drinking, and smoking. The main outcome of interest was sleep deprivation.

On analysis, the following facts were revealed.

In the pooled dataset, the weighted prevalence of current or former e-cigarette use was 47%, and 35% of participants self-reported sleep deprivation.

After adjusting for confounders, former e-cigarette users were 1.17 times more likely to report sleep deprivation, compared to never users (95%CI: 1.06, 1.29).

The prevalence ratio for self-reported sleep deprivation increased to 1.42 (95%CI: 1.23, 1.65) for everyday users, compared to never e-cigarette user

The research team highlighted some facts.

Electronic cigarette use might be related to sleep deprivation in young adults.

Former users were more likely to report sleep deprivation compared to non-users.

The association became stronger when comparing current users with nonusers.

The association remained even after adjusting for confounders, e.g. alcohol use

Primary source: *Addictive Behaviors*

Source : *Addictive Behaviors*

Dr Satabdi Saha (BDS, MDS) is a practicing pediatric dentist with a keen interest in new medical researches and updates. She has completed her BDS from North Bengal Dental College ,Darjeeling. Then she went on to secure an ALL INDIA NEET PG rank and completed her MDS from the first dental college in the country – Dr R. Ahmed Dental College and Hospital. She is currently attached to The Marwari Relief Society Hospital as a consultant along with private practice of 2 years. She has published scientific papers in national and international journals. Her strong passion of sharing knowledge with the medical fraternity has motivated her to be a part of Medical Dialogues.

<https://www.sciencedirect.com/science/article/pii/S0306460320307760?via%3Dihub>

<https://medcialdialogues.in/psychiatry/news/e-cigarette-related-to-sleep-deprivation-in-young-adults-reveals-study-70285>

WHO

WHO advisors propose new vaccine virus strains for pandemic readiness

Source: WHO, CIDRAP

ID: 1008003342

During recent meetings to recommend the flu strains to include in the Southern Hemisphere's 2021 flu season, the World Health Organization (WHO) advisory group also reviewed the latest developments with zoonotic strains and recommended two new candidate vaccine viruses for pandemic preparedness.

Based on results from genetic characterization and antigenic testing, the group proposed developing a new candidate vaccine virus against a new clade of H5N6 recently detected in poultry in Vietnam, an influenza A/chicken/Vietnam/RAHO4-CD-20-421/2020-like virus.

It also recommended a new candidate vaccine virus against variant H1 (H1v) that was detected in Germany, an influenza A/Hessen/47/2020-like virus.

https://www.who.int/influenza/vaccines/virus/202009_zoonotic_vaccinevirusupdate.pdf

Canada

Planning underway to tackle rising overdose deaths in New West

Source: New West Record

Unique ID: [1007999522](#)

A staff report considered by city council on Monday states that Fraser Health is actively exploring a location for an overdose prevention site in New West. And that was similar in New West – it was actually better,” said Dr. Aamir Bharmal, Fraser Health’s medical health officer and medical director, communicable disease and harm reduction. A rezoning or temporary-use permit may be required to allow for the proposed use, but, because of the number of overdose deaths, staff is proposing to use an expedited development approval process.

Fraser Health now has the resources needed to open an overdose prevention site in New Westminster. A staff report considered by city council on Monday states that Fraser Health is actively exploring a location for an overdose prevention site in New West. In July, council directed staff to work with Fraser Health on the establishment of an overdose prevention site and the implementation of a safe supply program.

“I am really pleased to see this coming to us, but I do have to say that I am somewhat distressed that it has taken this long, to be honest,” said Coun. Nadine Nakagawa. “I mean, people have died and are dying.”

According to staff, once Fraser Health selects a non-profit operator for the overdose prevention site, it will inform the city of a potential location for the facility. A rezoning or temporary-use permit may be required to allow for the proposed use, but, because of the number of overdose deaths, staff is proposing to use an expedited development approval process.

Coun. Mary Trentadue said council is committed to doing what it takes to help resolve this crisis.

“All of us feel very deeply for community members and families, and that there needs to be a stop. We have to fix this, whatever that takes,” she said. “I don’t feel I am speaking out of turn in saying our city really believes in doing whatever it takes to make this happen.”

The provincial government declared a state of emergency related to the overdose crisis in April 2016.

“In 2019 we were seeing a decrease overall in terms of the number of overdose deaths. There was a decrease of about 30% across the province. And that was similar in New West – it was actually better,” said Dr. Aamir Bharmal, Fraser Health’s medical health officer and medical director, communicable disease and harm reduction. “In 2018, there were 35 people who died of an opioid overdose, and in 2019 there were 19 people. So far this year we have seen that 23 people, up to Aug. 31, have died of an overdose.”

Along with deaths, there’s been a big jump in the number of overdose calls.

“The number of 911 calls has, on average, been about 20 to 30 per month in New West, and that’s up

about 50% this year. It's up to about 30 to 45 per month that are being seen," Bharmal said. "For New West specifically, what we find is about 70% of overdose deaths are occurring in private residences and 80% are among men."

Bharmal said many of the people who were dying of overdoses, especially last year, were a little bit older than provincial averages or regional averages – usually people 40 to 60 years of age – but there's been a shift toward a younger demographic, with the peak age where people are dying now being 30 to 34 years of age.

Chris Buchner, Fraser Health's director of clinical operations, said the model it's now recommending for overdose prevention sites is a "health contact centre" for people who use drugs.

"Apart from places where there is a very high concentration of folks, where it may make sense to solely invite people in to observe their consumption of drugs and to reverse overdoses when they may occur, we now believe that it is best practice to co-locate a number of low-barrier health services, to really try to increase our connections to a population of people who may be living with significant isolation," he said. "The intention of that is to maximize the opportunity to connect with individuals who are using substances and really provide them with a range of options."

Buchner said a health contact centre would allow people to use drugs they've purchased in a space where, if they should overdose, the overdose could be reversed and they would live another day. He said it could also include: testing of drugs to determine whether they are contaminated, the degree of contamination and the type of contaminant; providing harm-reduction supplies such as naloxone for people to take home; and accessing a safe supply or referrals to other services.

"I think people understand that the people who are losing their lives to overdoses are doing so, to a large degree, because the drug supply is not regulated and it's extremely contaminated," he said. "Nobody knows from day to day with what and to what degree the drug supply is poisoned. And, as such, people who are dependent on those drugs have a very difficult time to continue to live a life with any sense of stability, let alone count on being around for a long period of time."

Buchner said Fraser Health wants to work with the city to implement a service that's acceptable to the city and its citizens and hopefully has an impact on reducing fatalities and increasing uptake in services such as safe supply for the citizens who are dependent upon those prescriptions.

"We are trying to look at this a lot more holistically than just a place where people may be using drugs safely," Bharmal explained. "It is also a place where they are able to access other health services. That might include opioid agonist treatment or some of these other alternatives."

<https://www.newwestrecord.ca/news/planning-underway-to-tackle-rising-overdose-deaths-in-new-west-1.24216585>

Canada

New health projects empower Indigenous communities to address chronic diseases

Source: Nation Talk

Unique ID: [1008000449](#)

With guidance from a national steering committee, the team aspires to close the gap in health care disparities for Canada's Indigenous Peoples who are significantly disadvantaged by a high incidence of chronic illnesses and depleted mental health. 7, 2020 – Indigenous communities burdened with up to three times the national rates of chronic diseases now have access to an innovative health project fund established by Bimaadzwin and Boehringer Ingelheim (Canada) Ltd. These community-driven pilot projects – specifically aimed at reducing type 2 diabetes and chronic obstructive pulmonary disease – are intended to empower Nations in improving health and wellness.

BURLINGTON, ON, Oct. 7, 2020 – Indigenous communities burdened with up to three times the national rates of chronic diseases now have access to an innovative health project fund established by Bimaadzwin and Boehringer Ingelheim (Canada) Ltd. These community-driven pilot projects – specifically aimed at reducing type 2 diabetes and chronic obstructive pulmonary disease – are intended to empower Nations in improving health and wellness.

The Indigenous Health Pilot Project is a collaboration between Boehringer Ingelheim Canada, Bimaadzwin and Indigenous health policy leaders. Funding is available to advance national health and wellness projects that go "beyond the pill" in addressing type 2 diabetes and/or chronic obstructive pulmonary disease among Canada's Indigenous Peoples. Further investments in other chronic illnesses are planned following the successful launch of four initial pilot projects.

“Our vision is empowerment – building relationships between Indigenous communities, the private sector and other interested partners through involvement in pilot projects with equal participation at all steps,” explains Isadore Day, CEO, Bimaadzwin. “We need more partnerships like this to tackle the monumental endeavour of improving health outcomes and quality of life for our Indigenous communities.”

With guidance from a national steering committee, the team aspires to close the gap in health care disparities for Canada’s Indigenous Peoples who are significantly disadvantaged by a high incidence of chronic illnesses and depleted mental health.

“As a family-owned company, Boehringer Ingelheim is committed to advancing humankind and we strive to make the world healthier for current and future generations,” said Andrea Sambati, President and CEO of Boehringer Ingelheim (Canada) Ltd. “The Indigenous Health Pilot Project will allow us to collaborate with Indigenous communities and explore opportunities to help improve health and wellness for Indigenous Peoples in Canada.”

Expressions of interest can be submitted online at www.indigenoushealthprojects.com

ABOUT BIMAADZWIN

An Indigenous-led consulting and policy group founded by former Ontario Regional Chief Isadore Day, our focus is enabling First Nations communities to successfully reconstitute Nationhood by advancing health governance and economic development.

ABOUT BOEHRINGER INGELHEIM (CANADA) LTD.

Making new and better medicines for humans and animals is at the heart of what we do. Our mission is to create breakthrough therapies that change lives. Since its founding in 1885, Boehringer Ingelheim is independent and family-owned. We have the freedom to pursue our long-term vision, looking ahead to identify the health challenges of the future and targeting those areas of need where we can do the most good.

As a world-leading, research-driven pharmaceutical company, more than 51,000 employees create value through innovation daily for our three business areas: Human Pharma, Animal Health, and Biopharmaceutical Contract Manufacturing. In 2019, Boehringer Ingelheim achieved net sales of 19 billion euros. Our significant investment of almost 3.5 billion euros in R&D drives innovation, enabling the next generation of medicines that save lives and improve quality of life.

We realize more scientific opportunities by embracing the power of partnership and diversity of experts across the life-science community. By working together, we accelerate the delivery of the next medical breakthrough that will transform the lives of patients now, and in generations to come.

The Canadian headquarters of Boehringer Ingelheim was established in 1972 in Montreal, Quebec and is now located in Burlington, Ontario. Boehringer Ingelheim employs approximately 600 people across Canada.

More information about Boehringer Ingelheim can be found at www.boehringer-ingelheim.ca or in our annual report: <http://annualreport.boehringer-ingelheim.com>.

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NT4

<https://nationtalk.ca/story/new-health-projects-empower-indigenous-communities-to-address-chronic-diseases>

International

Strict COVID-19 lockdowns may speed up economic recovery: IMF

Source: Reuters

Unique ID: [1008000259](#)

The COVID-19 pandemic showed that government lockdowns succeeded in lowering infections, the IMF wrote in a chapter of its forthcoming World Economic Outlook, but they also contributed to the recession and hit vulnerable groups such as women and young people particularly hard.

WASHINGTON (Reuters) - Early lockdowns in an epidemic can substantially reduce infections, and policymakers should be wary of lifting them to jumpstart their economies when infections remain high, the International Monetary Fund said on Thursday. The IMF research did not single out specific countries, but comes as infections are rising sharply in parts of the United States that moved to end lockdowns early amid pressure from U.

WASHINGTON (Reuters) - Early lockdowns in an epidemic can substantially reduce infections, and policymakers should be wary of lifting them to jumpstart their economies when infections remain high, the International Monetary Fund said on Thursday.

The COVID-19 pandemic showed that government lockdowns succeeded in lowering infections, the IMF wrote in a chapter of its forthcoming World Economic Outlook, but they also contributed to the recession and hit vulnerable groups such as women and young people particularly hard.

Voluntary social distancing driven by fears of contracting the disease also contributed heavily to the recession and was unlikely to recede if lockdowns were lifted while cases remained elevated, the researchers warned.

"Addressing the health risks appears to be a pre-condition to allow for a strong and sustained economic recovery," wrote IMF economists Francesco Grigoli and Damiano Sandri in a blog post on the research. "Lockdowns impose short-term costs but may lead to a faster economic recovery as they lower infections and thus the extent of voluntary social distancing," they wrote, adding that alternatives such as wearing face masks, expanded testing and contact tracing could have even lower economic costs.

The IMF research did not single out specific countries, but comes as infections are rising sharply in parts of the United States that moved to end lockdowns early amid pressure from U.S. President Donald Trump, who was determined to boost the economy ahead of the Nov. 3 presidential election.

India, second only to the United States in coronavirus infections, is also lifting most restrictions even as the pandemic rages.

The IMF said lockdowns needed to be sufficiently strict to curb infections, suggesting that "stringent and short-lived lockdowns could be preferable to mild and prolonged measures," they wrote.

The crisis was hitting more vulnerable groups harder, they noted, with stay-at-home orders and school closures curbing mobility more sharply among women, who shouldered more of the burden in caring for children.

Lockdowns also reduced the mobility of younger people aged 18 to 44 more sharply, since they had younger children affected by school closures and often had temporary job contracts that were more likely to be terminated during a crisis.

To prevent long-lasting wider inequality, decision-makers should look to strengthen unemployment benefits and offer paid leave to parents.

<https://www.reuters.com/article/idUSKBN26T2KY>

Study

Study shows lower mortality in MERS patients treated with drug combo

ID: 1008003365

Source: CIDRAP

In a study today in the New England Journal of Medicine, a combination of recombinant interferon beta-1b plus lopinavir-ritonavir lowered mortality in Middle Eastern respiratory syndrome coronavirus (MERS-CoV) patients.

The randomized, double-blind experiment involved 43 hospitalized MERS patients receiving the treatment and 52 patients getting a placebo for 14 days (or hospital discharge, if earlier) to determine all-cause mortality after 90 days. Participants were enrolled from nine sites in Saudi Arabia from November 2016 to April 2020.

Researchers found that the mortality rate was 28% in patients in the intervention group and 44% in the placebo group, marking a difference of 19 percentage points when adaptive design was taken into account. The researchers write, "In a prespecified subgroup analysis, treatment within 7 days after symptom onset led to lower 90-day mortality than use of placebo (relative risk, 0.19; 95% CI, 0.05 to 0.75), whereas later treatment did not."

Secondary outcomes included the median number of days patients did not need mechanical ventilation (16 days for the treatment group, 5.5 days for the placebo group) and the median number of days that patients were alive outside the intensive care unit (9 days vs 0 days). On day 90, the median Karnofsky performance-status score was 70 points for those who received the treatment and 50 for those who received the placebo. Serious adverse events were reported in 9% of the intervention group and 19% in

the placebo group, with most being related to elevated liver enzyme levels. The researchers, though, believe these events were caused by the disease, not any treatment.

Interferons have been investigated for years because of their potential to inhibit viral reproduction and stimulate certain immune reactions, and while this study is promising, the researchers point out that future studies should particularly look at quantifying the viral RNA amounts.

<https://www.nejm.org/doi/full/10.1056/NEJMoa2015294>
<https://www.cidrap.umn.edu/news-perspective/2020/10/news-scan-oct-08-2020>

Study

Genome data spotlight re-emergence, resistance in yaws

ID: 1008003313

Source: CIDRAP

A new study by an international team of scientists is shedding light on the re-emergence and development of antibiotic resistance in a neglected tropical infection.

In the study, published yesterday in *The Lancet Microbe*, researchers performed whole-genome sequencing (WGS) on DNA from patients in Papua New Guinea who had yaws, an infection of the skin, bone, and cartilage caused by the bacterium *Treponema pallidum* subspecies *pertenue* (*T p pertenu*). The infection, which is transmitted through person-to-person contact, affects children in at least 15 countries, mainly in Africa, Asia, Latin America, and the South Pacific. If untreated, it can cause chronic, disfiguring skin ulcers.

The infections had been previously detected in a longitudinal study, conducted from 2013 to 2016 on Lihir, an island of Papua New Guinea where yaws is endemic, that was evaluating the impact of a World Health Organization (WHO) strategy for yaws eradication. The strategy, introduced by the WHO in 2012, involves mass administration of a single dose of the antibiotic azithromycin for all community members, regardless of infection status, followed by active case detection surveys every 3 to 6 months.

That study showed mass azithromycin treatment had largely been successful, reducing the prevalence of active yaws on Lihir from 1.8% to 0.1% at 18 months. But it also found that the infection began to re-emerge at 24 months and the prevalence climbed to 0.4% at 42 months. Most of the cases were latent infections in individuals who were absent at the time of mass treatment, but some were imported. The study also found five cases of yaws involving resistance to azithromycin.

In the new study, WGS revealed that re-emergence of the infection likely stemmed from multiple sources and that the resistance appears to have emerged in one patient before spreading to others, findings the authors say could shape the elimination strategy going forward.

Multiple sources of re-emergence

In their analysis of 20 near-whole *T p pertenu*e genomes obtained from swab samples of patients who had PCR-confirmed yaws, researchers from the United Kingdom, Spain, the United States, and Papua New Guinea found that 16 were part of a clonal sequence type (JG8) split into at least three distinct phylogenetic sub-lineages found in patients from different villages on Lihir. All three of these sub-lineages were found in the later rounds of post-mass azithromycin distribution follow-up, indicating they were all involved in yaws re-emergence.

The analysis also showed that these sub-lineages had distinct evolutionary histories, an indication that the re-emergence of the infection after mass azithromycin distribution did not stem from a single source, but multiple sources. The researchers suspect the re-emergence stems from people who had a latent infection and didn't receive azithromycin treatment, which resulted in the infection becoming active.

The researchers then performed further genomic analysis on the five cases of azithromycin-resistant yaws. All of the *Tp pertenuis* samples from these cases belonged to the JG8 sequence type, three of the genomes from the samples were nearly identical, and all contained a single mutation linked to azithromycin resistance. In the index patient, the mutation was not detected before treatment.

Subsequent epidemiologic tracing identified potential transmission links between all five cases. These findings suggest the resistance mutation occurred in the index patient after azithromycin distribution and was then transmitted to the other four.

The authors of the study say these results provide information that could help improve the WHO's mass azithromycin distribution program, which has also been implemented in Benin, Ivory Coast, Ghana, Togo, and Vanuatu.

"Our results have big implications for how yaws elimination campaigns are run—we can recommend high treatment coverage initially, and there needs to be careful surveillance and follow up to detect and swiftly treat any re-emergence, to prevent the bacteria spreading," first author Mathew Beale, PhD, of the Wellcome Trust Sanger Institute, said in a press release.

Beale and his colleagues also recommend careful monitoring of affected communities following mass azithromycin distribution to detect any individuals with treatment failure and retreat them with alternative regimens.

A total of 80,472 suspected yaws cases were reported to the WHO in 2018, of which 888 were confirmed. <https://www.cidrap.umn.edu/news-perspective/2020/10/genome-data-spotlight-re-emergence-resistance-yaws>