GPHIN Daily Report for 2020-08-26

Special section on Coronavirus

Canada

Areas in Canada with cases of COVID-19 as of 25 August 2020 at 07:00 pm EDT
Source: Government of Canada

Province, territory or other	Number of confirmed cases	Number of active cases	Number of deaths
Canada	125,969	4,829	9,090
Newfoundland and Labrador	268	0	3
Prince Edward Island	44	3	0
Nova Scotia	1,080	4	65
New Brunswick	190	10	2
Quebec	61,803	1,207	5,746
Ontario	41,607	1,059	2,800
Manitoba	1,018	399	13
Saskatchewan	1,601	88	23
Alberta	13,083	1,134	235
British Columbia	5,242	925	203
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)

Canada

Hospitalizations continue to rise as B.C. announces 58 new COVID-19 cases but no new deaths |
Source: CBC News
ID: 1007707212

B.C. health officials announced 58 new cases of COVID-19 on Tuesday, the second lowest number in two weeks, after a steady rise in new cases throughout August.
There were no new deaths.
A total of 22 people are now in hospital with the disease, up from 18 on Monday. Seven of them are in intensive care, two more than on Monday.
The number of people with active infections in B.C. now stands at 925. There have been a total of 5,242 cases and 203 deaths since the pandemic began and 4,114 people have recovered from the disease.
B.C.'s total caseload is higher now than it was in March, when the province began shutting down services and businesses.
A new outbreak was declared at Bear Creek Villa in the Fraser Health region, as well as at Langley Memorial Hospital.
There are currently 10 long-term care or assisted-living facilities experiencing outbreaks, and two acute-care facilities.
Vancouver Coastal Health says anyone who visited Privé Kitchen and Bar on August 3, 6, 7, 8, 15, 16 and 17 may have been exposed to the virus that causes COVID-19. Those who did are asked to monitor themselves for symptoms.
In Tuesday's joint statement, Provincial Health Officer Dr. Bonnie Henry and Health Minister Adrian Dix said there continue to be instances of community exposure on flights in and out of the province.
"Our recent daily cases are higher than many of us are comfortable with, so let's continue to do our part every moment of every day and keep COVID-19 where it needs to be," the statement said.
"While we would all like to get to zero, we need to rather focus on prevention, detection and rapid response."
'Many more months of this to come'
Despite recent outbreaks and clusters of cases, Henry said Monday shutting down is not the answer.
Compared to earlier in the pandemic, she said, officials have a better understanding of the virus, including how to track it and prevent transmission.
Henry said B.C. still has a low rate of undetected transmission, meaning health officials are able to find and connect with people who have the disease.
In recent weeks, B.C. has increased its testing capacity to between 4,000 and 5,000 people a day. Henry said the rate of positive tests remains relatively low, but the health-care system needs to be prepared.
"There are many more months of this to come," she said.
https://www.cbc.ca/news/canada/british-columbia/covid19-bc-august-25-1.5699700

Canada
Drive-thru coronavirus testing site planned for Ottawa's RCGT Park
ID: 1007706358
Source: globalnews.ca

A new drive-thru coronavirus testing site is set to open soon in Ottawa's east end.
The Champlain COVID-19 Response Committee (CCRC) said in a statement Tuesday that setup has begun for a new COVID-19 assessment centre in the parking lot of Raymond Chabot Grant Thornton (RCGT) Park, located off Coventry Road near the Queensway.
Tests will be available only via drive thru and by appointment, with bookings opening up in the coming days on Ottawa Public Health's (OPH) website.
There will be no clinical assessment available at the site, with CCRC advising anyone experiencing symptoms to instead attend the Brewer Assessment Centre or one of the two care clinics on Moodie Drive or Heron Road.
The CCRC statement says "more options for mobile testing are being explored and will be implemented shortly."
Rideau-Rockcliffe Coun. Rawlson King had previously pitched the unoccupied baseball stadium as a supplemental testing site for east-end residents who were struggling with travelling to the existing options.
News of an additional testing site comes as OPH added 16 coronavirus cases to Ottawa's total on Tuesday.
The city has now seen 2,855 cases of the virus since the pandemic began.

There were no changes in the number of virus-related deaths, people in hospital with COVID-19 and coronavirus outbreaks in Ottawa on Tuesday.
OPH did report that there are 166 active cases of the virus in the city, 10 more than the day before.
https://globalnews.ca/news/7297437/ottawa-coronavirus-update-aug-25/

Canada
Amateur sports in B.C. move to Phase 3 of COVID-19 guidelines
CBC | British Columbia News
ID: 1007706501

B.C.'s amateur sports leagues are on the path back to the playing field following an announcement that athletes can now engage in more organized sports.
In a statement Monday, B.C.'s Ministry of Tourism, Arts and Culture said the province is moving to Phase 3 of its sports guidelines.
"Athletes and their families have been missing the joy of competition these past few months," said minister Lisa Beare.
The ministry said the B.C. Centre for Disease Control has reviewed the Return to Sport Guidelines laid out by viaSport — the government's agency for sports programs — which contain recommendations for how different types of sports can gradually add activities.
In June, viaSport released its guidelines to support amateur sports restarting in B.C.
Under Phase 3, amateur sport activities can now include additional training, "modified" games and matches, and most importantly, league play and competitions — but within cohorts of between 10 and 100 people, depending on the sport.
"Team play and friendly competition are at the heart of amateur sport," said Charlene Krepiakevich, chief executive officer, viaSport.
The guidelines show each sport will advance at a different pace depending on what Krepaikevich called "community capacity and readiness", with sports involving more physical contact being of greatest concern.
'Contact in a safe way'
The viaSport guidelines say that close physical proximity should still be minimized as much as possible, which mean game rules should be modified to keep participants at a safe distance, and organizers should limit the number and duration of contacts between participants when physical distancing isn't possible.
Organizers should continue to enforce physical distancing during Phase 3 in areas off the playing field, such as dressing rooms, benches and hallways, and, most importantly, any physical contact should only occur within a sport cohort, the guidelines say.
The guidelines rank each sport activity in terms of risk of COVID-19 transmission from lowest to highest based on amount of contact:
Skill-building drills or training at home, alone or with family members.
Group or team-based skill-building or drills that maintain physical distancing.
Group or team-based drills that require close contact.
Non-contact competitive activities between teams.
Group or team-based activities that include physical contact.
Competitive activities that include physical contact between teams.
The ministry and viaSport have provided a Sport Activity Chart that outlines allowable activities in each of the four Return to Sport phases.
https://www.cbc.ca/news/canada/british-columbia/amateur-sports-phase-3-covid-19-restart-plan-1.5697945?cmp=rss

Canada
Ottawa giving $82.5M for Indigenous mental health support during COVID-19
Source: Rimbey Review
ID: 1007706354

Summary Access to many mental health services within Indigenous communities have been disrupted due to the pandemic, while some services have shifted to virtual and telehealth treatment options, creating obstacles for those living in remote communities that have limited connectivity. In the first four

months of this year, the Hope for Wellness Help Line, which provides telephone and online support for First Nations, Inuit and Metis in a number of Indigenous languages, received over 10,000 calls and chats from people seeking crisis intervention services. Indigenous Services Minister Marc Miller acknowledged Tuesday that a disparity exists between mental wellness support available to Indigenous and non-Indigenous people in Canada and called this situation unacceptable.

The federal government is pledging $82.5 million to improve access and address growing demand for mental health services in Indigenous communities during the COVID-19 pandemic.
Access to many mental health services within Indigenous communities have been disrupted due to the pandemic, while some services have shifted to virtual and telehealth treatment options, creating obstacles for those living in remote communities that have limited connectivity.

Meanwhile, demand for services has surged.
In the first four months of this year, the Hope for Wellness Help Line, which provides telephone and online support for First Nations, Inuit and Metis in a number of Indigenous languages, received over 10,000 calls and chats from people seeking crisis intervention services.

This represents a 178 per cent increase in demand compared to the same time period in 2019.
Also, the First Nations Health Authority in B.C. reported last month that First Nations overdose deaths almost doubled between January and May of this year.
Indigenous Services Minister Marc Miller acknowledged Tuesday that a disparity exists between mental wellness support available to Indigenous and non-Indigenous people in Canada and called this situation unacceptable.
“The COVID-19 pandemic has only exacerbated the situation,” Miller said.
“Sustained, targeted investment is needed to ensure that culturally safe mental wellness services remain available and community-driven, culturally appropriate and timely mental health supports are critical to the well-being for anyone struggling to cope with the added stress and anxiety that the COVID-19 pandemic has created.”
ALSO READ: Isolation, drug toxicity lead to spike in First Nations overdose deaths amid pandemic
The new federal funding will support access to additional services, such as transitioning some services to virtual platforms to meet increased demand.
It will also support Indigenous partners in developing new ways to address substance use and to improve access to treatment and it will work to expand access to culturally appropriate services such as on-the-land activities, community-based health supports and mental wellness teams.
The new funds are a response to calls from many First Nations, Inuit and Metis leaders who have been pushing for more mental health supports in their communities, Miller said.
Intergenerational trauma suffered by many Indigenous people due to Canada’s history of colonialism and mistreatment of Canada’s First Peoples is already a deeply difficult issue to address when it comes to mental health treatment, said Dr. Tom Wong, chief medical officer of public health for Indigenous Services Canada
The additional anxiety of the COVID-19 pandemic has only made things worse, he said.
The negative effects of COVID-19 physical distancing restrictions have also led to increased rates of family violence against women and have also caused further isolation of Indigenous youth and those in the LGBTQ+ and two-spirit communities.
“We all need to be standing behind First Nations, Metis and Inuit in responding to the mental wellness, mental health crisis in Canada. It is extremely important that we stand behind them so that no communities are left behind,” Wong said.
Funding will be allocated to First Nations, Inuit and Metis communities based on discussions among national and regional partnership tables or regional governing leaders.
There will also be some funds remaining to enable surge capacity and adaptation among national organizations and services, such as the Thunderbird Partnership Foundation, First Peoples Wellness Circle and Hope for Wellness Line.
Teresa Wright, The Canadian Press

https://www.rimbeyreview.com/news/ottawa-giving-82-5m-for-indigenous-mental-health-support-during-covid-19/

Canada
Feds will help First Nations schools guard against COVID-19: Miller
Source: CTVNews
ID: 1007706395

NEWS -- Indigenous Services Minister Marc Miller says Ottawa will be there to help First Nations schools protect against COVID-19 following calls for more dedicated funding.
The Nishnawbe Aski Nation has accused the federal government of ignoring its urgent requests for supplies and funding needed for a safe back-to-school plan for its nearly 9,000 students in northern Ontario communities.
Deputy Grand Chief Derek Fox said the organization has asked for $33 million to pay for personal protective equipment and sanitization supplies, but was told its plans are too "far-reaching."
And he warned this could mean delaying the start of the school year in its 49 member First Nation communities -- many remote and without the reliable internet infrastructure needed for online learning.
Miller says he understands this is a major concern for all Indigenous educators and parents, including for those whose children attend schools away from reserves.
He says the government has the financial resources to help facilitate a safe return to school for First Nations children and teachers.
This report by The Canadian Press was first published Aug. 25, 2020.
https://www.ctvnews.ca/politics/feds-will-help-first-nations-schools-guard-against-covid-19-miller-1.5078769

Canada
How pooling samples could impact COVID-19 testing in Alberta
ID: 1007706338
Source: globalnews.ca

Alberta Health Services is piloting a new way to test COVID-19 samples: pool testing.
The pilot, which is targeted towards samples taken from asymptomatic Albertans, would see four samples pooled together when tested. It is currently only being tried in Edmonton.

READ MORE: Hinshaw urges Alberta teachers to get tested for COVID-19 ahead of school reopenings
The pilot comes as school staff are being asked to get asymptomatic tests before they return to school and as the province continues to ramp up testing capacity, which had, at one point, been promised to hit 20,000 tests a day. Total daily test numbers currently hover around 7,000 to 10,000 tests a day.
In pool testing, samples from four COVID-19 swabs are combined into a single specimen.
If the test comes back negative, then all four samples are marked negative; if the test comes back positive, the four samples are then individually tested.
“It does allow a lab to increase their capacity without necessarily increasing the number of supplies and people they would need to do that same testing,” said Nathan Zelyas, medical microbiologist and program lead for respiratory virus testing at Alberta Precision Labs.
Zelyas said the pooling process is still being refined in the pilot and at this time, it’s hard to say what impact pool testing may have on timelines for testing and test results.
“I actually wouldn’t expect it at least to improve those turnaround times immediately but the more we streamline the process and the more we work out the kinks, I would expect, hopefully, to see a reduction over time,” he said.
David Evans, a virologist and professor in the Department of Medical Microbiology and Immunology at the University of Alberta, said pool testing can be effective to a certain extent, adding it works best if the positivity rate is low.
“If you start to have a situation where a significant fraction of the specimens are contaminated, you get no advantage from this methods because odds are, you’ll start getting more and more positives, which you then have to go back and re-check anyway,” he said.

Pool testing can, however, be advantageous when it comes to conserving lab supplies, according to Dr. Marc Romney, medical director of medical microbiology and virology at St. Paul's Hospital in Vancouver.
"The labour has very finite resources," he said.
"There are many components – one of them is reagents – beyond the reagents for a particular test. There's also the other consumables related to that testing. For example, test tubes, pipet tips, there may be a shortage of pipet tips."
Nevertheless, Romney said testing itself is complex and pooling increases the level of complexity and with it, human error.
"Whenever you are doing more manual work, it increases the chance the technologists will make a mistake. For example, you could have a positive pool and you resolve the pool and everything is negative. So what do you do? You're stuck," he said.
"It could be contamination… it could be machine error, it could be a pipetting error. The more steps you include in a procedure, the more manual it becomes, the riskier the whole process."
Zelyas agreed there are concerns about human error and said the process in Alberta is being automated as much as possible.
"Instead of having people pipetting and doing the pooling themselves, we have programmed an instrument to do that pooling for us," he said.
"It's not so much people needed to do the pooling and run the testing. We probably need more people, as much as possible, to do a lot of the data entry with thousands of samples coming in."
Some countries, such as Germany, have been using pool testing for some time. Zelyas said the lab wanted to make sure various processes were in place before taking on this testing method.
The pilot began Aug. 14. Zelyas said it may be a few weeks before the pilot can be determined to be a success and whether it can be expanded to other parts of the province.
https://globalnews.ca/news/7297532/alberta-covid-19-pool-testing-pilot/

Canada
Saskatchewan reports no new COVID-19 cases for the first time in more than 2 months
Source: National Post
ID: 1007706184

REGINA — Health officials in Saskatchewan are reporting zero new cases of COVID-19 — for the first time this summer.
Government data show the last time the province saw no new infections was June 7.
Cases numbers began to climb in mid-July and hit a single-day record of 60 cases on July 22, with many of the infections found on Hutterite colonies.
As of Tuesday, the Ministry of Health says 57 of the 88 active cases are in the communal living settings.
Health officials say a person in their 70s has died from COVID-19, bringing Saskatchewan's death toll from the virus to 23.
Four people are in hospital and 1,490 people have recovered.
The province has recorded a total of 1,601 COVID-19 cases.
Premier Scott Moe took to Twitter to say the province's case numbers were improving and that Saskatchewan has the lowest per capita rate of active infections on the Prairies.
This report by The Canadian Press was first published Aug. 25, 2020
https://nationalpost.com/pmn/news-pmn/canada-news-pmn/saskatchewan-reports-no-new-covid-19-cases-for-the-first-time-in-more-than-2-months

Canada
Stats Canada survey suggests some Canadians worried about safety of COVID-19 vaccine
ID: 1007705558
Source: winnipegfreepress.com
Last Modified: 08/25/2020 2:33 PM

OTTAWA - A new Statistics Canada survey suggests that while the vast majority of Canadians would get a COVID-19 vaccine if and when it becomes available, more than one in 10 likely would not.

The survey comes as governments around the world are rushing to develop a vaccine for the illness that has infected more than 23 million people around the world, including 126,000 in Canada.

Among the reasons respondents gave for not wanting the vaccine were concerns about its safety and potential side effects, while some said they did not trust vaccines in general.

Canada's chief public health officer Dr. Theresa Tam says authorities need more information about those who are worried about or opposed to a vaccine to ensure they have the proper information about how vaccines are approved.

She says while efforts are being made to accelerate development of a vaccine, the federal government will not take shortcuts when it comes to ensuring the safety of a COVID-19 vaccine before it is approved and distributed.

Tam says she is concerned about misinformation spread online about vaccines, adding internet and social-media companies should have a responsibility to police their domains to make sure that doesn't happen.

This report by The Canadian Press was first published Aug. 25, 2020.
https://www.winnipegfreepress.com/arts-and-life/life/health/stats-canada-survey-suggests-some-canadians-worried-about-safety-of-covid-19-vaccine-572218052.html

Canada
Summer camp continues to run after child tests positive for COVID-19
ID: 1007705988
Source: kitchenertoday.com

25 August

The Region's top doctor says while an outbreak was declared, exposure can be limited enough to allow the camp to continue

A child has tested positive for COVID-19 at a summer camp in the region.

Acting Medical Officer of Health Dr. Hsiu-Li Wang confirmed that news Tuesday at a weekly press briefing, though declined to give additional information about the child or the camp itself for privacy reasons.

Since the Ministry of Education defines one case in a daycare or daycamp as an outbreak, an outbreak was declared, though the camp has been allowed to continue operation.

"Whether or not a setting like that would have to shut down depends on the assesment of potential exposures that could have occurred, and factors such as whether there are other groups that would be unaffected, and if they would have sufficient staffing to continue," explained Dr. Wang.

She also noted that the camp had and continues to have a facemask policy, though it is possible that the child contracted the virus from a different location.

"The important thing is to make sure that all potentially affected families and staff are informed, and Public Health follows up with the case as well as contacts."

The outbreak is the first of its kind in the region. Public Health continues to investigate how the child contracted the virus.
https://www.kitchenertoday.com/local-news/summer-camp-continues-to-run-after-child-tests-positive-for-covid-19-2663597

Canada

Quebec declines to use federal COVID-19 notification app for now

ID: 1007705938

Source: CBC

Minister says province is prepared to deploy smartphone app if situation worsens
1 hour ago

Quebec will not ask its citizens to download the federal COVID-19 notification app for the time being, the minister responsible for digital transformation, Éric Caire, announced Tuesday afternoon.

The government believes the tracing system it is using now is adequate, given that there has been a slowdown in the number of cases reported in the province.

However, Caire said the province will continue to do the logistical work needed to "immediately" deploy an app if the Health Ministry deems it necessary.

Launched by the federal government on July 31 — and so far operational only in Ontario — the COVID Alert app is designed to warn users if they've spent at least 15 minutes in the past two weeks within two metres of another user who later tested positive for the coronavirus.

Caire said the success of such an app depends on it being widely used by the population.

He said the province has learned from public consultations and legislative hearings that a solid understanding of the technology used in the app — it relies on Bluetooth technology to detect proximity to other users and does not collect geographic or biometeric data — makes Quebecers more open to installing it.

"The more that people are told what it does and does not do, the more they will be reassured," said Caire.

he province heard from 16,456 Quebecers in online public consultations about the use of a COVID-19 notification app. Seventy-seven per cent believed such an app would be useful, and 75 per cent said they would install it.

The federal app, which works on Apple and Android devices made in the last five years, has received positive reviews from privacy advocates, but myths persist about the data it collects — and doesn't collect.

Canada's chief public health officer, Dr. Theresa Tam, said Tuesday that 2.2 million Ontarians have downloaded the app so far.

"From the federal perspective, we want as many Canadians as possible to be participating," she said, adding it is "very, very helpful" to ensure those who travel between provinces are notified of possible exposure to the virus.

Experts in both technology and public health stress that the more people who use it, the better it will be.

But the Commission des institutions, the province's legislative committee responsible for studying the usefulness of the app, said the disadvantages outweigh the advantages.

"Quebec's legal framework is inadequate in terms of data and personal information protection and access to information, informed consent and the fight against discrimination," the committee said in its report.

Committee members acknowledged that almost all of the 18 experts who testified at the hearings expressed serious reservations about the effectiveness and reliability of these technologies.

The populations most vulnerable to the virus are those who would have the least access to applications, the report said.

Caire said the province would continue to watch how widely the app is used in Ontario as Quebec continues to run its own tests.

Ontario Premier Doug Ford said he would ask Quebec Premier François Legault to reconsider his government's position.

"Just do it. It protects everyone," he told reporters Tuesday afternoon. "It's not a big deal."
https://www.cbc.ca/news/canada/montreal/federal-contact-tracing-app-quebec-1.5698725

Canada
Majority of students in Upper Canada board attending class in person this fall
Source: www.ottawamatters.com
Unique ID: 1007704272

The UCDSB received confirmation of enrolment for approximately 22,500 students. The results of the survey regarding how UCDSB families are choosing to proceed with school in September is as follows:
18,054 students are confirmed for in-person attendance at their local school
4,452 students are confirmed for remote learning
3,184 elementary students are choosing remote learning for the start of the new school year
1,268 students Grade 9 to Grade 12 have chosen remote learning
Eighty-five per cent of parents responded to the online registration form for the 2020-2021 school year. Parents who want to change their choice have this week to contact their school.
https://www.ottawamatters.com/local-news/majority-of-students-in-upper-canada-board-attending-class-in-person-this-fall-2662476

Canada
Without new federal funding, some Ontario First Nations may close schools until 2021
Source: CBC News
Unique ID: 1007703286

Two First Nation high schools in northwestern Ontario will not reopen in September because of a lack of funding to mitigate the risk of transmitting COVID-19, according to the Nishnawbe Aski Nation (NAN).
Pelican Falls education centre near Sioux Lookout and Dennis Franklin Cromarty high school in Thunder Bay have pushed back their fall opening until the end of October, said NAN deputy grand chief Derek Fox.
Without additional funding and with no other resources to institute pandemic protocols, some of the 49 First Nations in NAN may cancel the entire first semester at schools in their communities, Fox said.
"It's negligence. It's discrimination," he said, of the lack of response Nishnawbe Aski Nation says it received to a $33 million funding request to address COVID-19 concerns in schools.
Fox said the proposal was submitted about two months ago, and he is disheartened that educators, parents and students are left scrambling this close to the beginning of school, especially as their peers across the province are getting support.
"I think of our little ones and of how they're not being treated the same as other students," he said. "As a leader and as a parent, it's very frustrating."
The Ontario government is spending $50 million for upgrades to ventilation systems and $18 million for online learning amid concerns over student safety during the COVID-19 pandemic. Provincial school boards also have access to $500 million in reserve funds to address physical distancing and other concerns.
Meanwhile First Nations leaders and educators are forced to decide whether to open schools with the means to follow public health advice, Fox said.
During the pandemic so far, adherence to strict protocols in First Nations has helped keep the rate of COVID-19 infection among people living on reserve to about one-quarter the rate of the general Canadian population.

'How do we ensure students are both safe and happy?'
But there is a cost to all that isolation, Fox said.
"Kids are anxious to get out and about after being isolated for so long," Fox said. "We know it's good for their mental health but we have to balance that. How do we ensure students are both safe and happy? That's the big challenge."
Delays in opening schools will hamper efforts to improve student achievement after decades of federal under-funding of First Nations schools, in the shadow of the residential school system, Fox said.
About 44 per cent of First Nations people on-reserve (age 18-24) have completed high school, compared to 88 per cent for other Canadians, according to Indigenous Services Canada.
"That huge gap will just get bigger," Fox said.
Indigenous Services Canada said it is working on a response to questions from CBC News about the funding proposal from Nishnawbe Aski Nation.
Fox said he worries the response will be that individual First Nations must submit their own proposals, which he says will be a burden for school administrators and delay school openings even further.
Nishnawbe Aski Nation's proposal is separate from a plan submitted by Matawa First Nations Management for more than $25 million dollars, even though the Matawa communities are part of NAN.
Fox said Matawa's proposal includes funding for infrastructure, whereas NAN focused mainly on operational and maintenance costs such as: increased cleaning of schools and buses, flying in materials to support physical distancing and hiring additional staff for the necessary smaller class sizes.
NAN supports Matawa's proposal, Fox said.
https://www.cbc.ca/news/canada/thunder-bay/without-new-federal-funding-some-ontario-first-nations-may-close-schools-until-2021-1.5698124?cmp=rss

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

United States

Cruise Ship Crew Member Disembarkations
Source: CDC
Updated Aug. 25, 2020

Since the No Sail Order was extended on April 15, and extended a second time on July 16, CDC has worked with cruise lines to help thousands of crew members return home safely.

Safe disembarkation of crew has included a requirement for cruise lines to submit a signed attestation and use non-commercial transportation for their crew members. The list on this page provides the latest information on cruise lines that have submitted the signed attestations that received CDC approval to safely disembark crew using noncommercial transportation. This list is updated when new noncommercial attestations are approved.

CDC helping cruise ship travelers
Learn what CDC is doing to help cruise ship travelers during the COVID-19 pandemic.

Ships that have complete and accurate No Sail Order response plans to protect crew members against COVID-19 can now disembark crew members for non-commercial travel without a signed attestation. Cruise company officials must sign an acknowledgement of the completeness and accuracy of their response plans.

Ships that want to disembark crew members using commercial travel will need to meet certain additional eligibility requirements. For more information, visit the Interim Guidance.

Emergency Medical Disembarkations
CDC will continue to support urgent medical evacuations of crew in U.S. waters and ports, either by air or land ambulance. Emergency medical evacuations should be coordinated with U.S. Coast Guard and the receiving medical facility and do not require CDC approval. CDC has notified all cruise lines as well as

federal, state, and local partners that the No Sail Order of April 15 will not prevent crew members from receiving emergency medical care.

Frequently Asked Questions
Cruise Ship Crew Member Disembarkations Approved by CDC (April 15, 2020 – Present)
Last updated on August 10, 2020

Cruise Ship Crew Member Disembarkations Approved by CDC (April 15, 2020 – Present)

Vessel Name	Cruise line	Parent Company	Date Submitted	Number of Crew Affected	Country of Repatriation
Vessel Name	Cruise line	Parent Company	Date Submitted	Number of Crew Affected	Country of Repatriation
Norwegian Jewel	Norwegian Cruise Line	Norwegian Cruise Line Holdings	08/07/2020	1	United States
Norwegian Bliss	Norwegian Cruise Line	Norwegian Cruise Line Holdings	07/29/2020	1	United States
Norwegian Spirit	Norwegian Cruise Line	Norwegian Cruise Line Holdings	07/28/2020	1	United States
Norwegian Encore	Norwegian Cruise Line	Norwegian Cruise Line Holdings	07/27/2020	1	Panama
Norwegian Epic	Norwegian Cruise Line	Norwegian Cruise Line Holdings	07/27/2020	1	Guyana
Norwegian Epic	Norwegian Cruise Line	Norwegian Cruise Line Holdings	07/27/2020	2	Panama
Seven Seas Explorer	Regent Seven Seas Cruises	Norwegian Cruise Line Holdings	07/27/2020	1	Panama
Norwegian Epic	Norwegian Cruise Line	Norwegian Cruise Line Holdings	07/23/2020	141	Mauritius
Norwegian Epic	Norwegian Cruise Line	Norwegian Cruise Line Holdings	07/23/2020	2	United Kingdom
Norwegian Sun	Norwegian Cruise Line	Norwegian Cruise Line Holdings	07/23/2020	2	United Kingdom

https://www.cdc.gov/coronavirus/2019-ncov/travelers/cruise-ship/cruise-ship-member-disembarkations.html

United States

F.D.A. 'Grossly Misrepresented' Blood Plasma Data, Scientists Say
Source: NY Times
Unique ID: 1007703588

Many experts — including a scientist who worked on the Mayo Clinic study — were bewildered about where a key statistic came from.
Dr. Stephen M. Hahn, the F.D.A. commissioner, erroneously said on Sunday that convalescent plasma would have saved 35 percent of coronavirus patients this year.Credit...Oliver Contreras for The New York Times
At a news conference on Sunday announcing the emergency approval of blood plasma for hospitalized Covid-19 patients, President Trump and two of his top health officials cited the same statistic: that the treatment had reduced deaths by 35 percent.
Mr. Trump called it a "tremendous" number. His health and human services secretary, Alex M. Azar II, a former pharmaceutical executive, said, "I don't want you to gloss over this number." And Dr. Stephen M. Hahn, the commissioner of the Food and Drug Administration, said 35 out of 100 Covid-19 patients "would have been saved because of the administration of plasma."
But scientists were taken aback by the way the administration framed this data, which appeared to have been calculated based on a small subgroup of hospitalized Covid-19 patients in a Mayo Clinic study: those who were under 80 years old, not on ventilators and received plasma known to contain high levels of virus-fighting antibodies within three days of diagnosis.
What's more, many experts — including a scientist who worked on the Mayo Clinic study — were

bewildered about where the statistic came from. The number was not mentioned in the official authorization letter issued by the agency, nor was it in a 17-page memo written by F.D.A. scientists. It was not in an analysis conducted by the Mayo Clinic that has been frequently cited by the administration.
“For the first time ever, I feel like official people in communications and people at the F.D.A. grossly misrepresented data about a therapy,” said Dr. Walid Gellad, who leads the Center for Pharmaceutical Policy and Prescribing at the University of Pittsburgh.
It is especially worrisome, he said, given concerns over how Mr. Trump has appeared to politicize the process of approving treatments and vaccines for the coronavirus. Over the next couple of months, as data emerges from vaccine clinical trials, the safety of potentially millions of people will rely on the scientific judgment of the F.D.A. “That’s a problem if they’re starting to exaggerate data,” Dr. Gellad said. “That’s the big problem.”
When asked where the 35 percent figure came from, an agency spokeswoman initially directed a reporter to a graph of survival statistics buried in the Trump administration’s application for emergency authorization . The chart, analyzing the same tiny subset of Mayo Clinic study patients, did not include numerical figures, but it appeared to indicate a 30-day survival probability of about 63 percent in patients who received plasma with a low level of antibodies, compared with about 76 percent in those who received a high level of antibodies.
See more updates
More live coverage: Markets
On Monday, Dr. Peter Marks, the director of F.D.A.’s center for biologics, evaluation and research, said that the agency reviewed published studies of plasma and conducted its own analysis of data from the Mayo Clinic’s program of hospitalized patients who received plasma. Although the size of the benefit varied, he said in a statement, “there appears to be roughly a 35 percent relative improvement in the survival rates of patients” who received the plasma with higher versus lower levels of antibodies.
He added: “Given the safety profile observed, the totality of evidence regarding potential efficacy more than adequately met the ‘may be effective’ standard for granting an Emergency Use Authorization.”
Convalescent plasma, the pale yellow liquid left over after blood is stripped of its red and white cells, has been the subject of months of enthusiasm from scientists, celebrities and Mr. Trump, part of the administration’s push for coronavirus treatments as a stopgap while pharmaceutical companies race to complete dozens of clinical trials for coronavirus vaccines.
Image
Convalescent plasma donation at a blood bank in Seattle this year.Credit...Karen Ducey/Getty Images
Although there have been some positive signs that it can reduce deaths in Covid-19 patients, no randomized trials have shown that it works. A popular access program set up this spring by the F.D.A. and run by the Mayo Clinic has provided the treatment to more than 70,000 people, but it has also, some researchers said, hindered enrollment in the more rigorous randomized trials that could definitively prove whether it works. The emergency authorization released on Sunday broadens that access.
Statisticians and scientists said that Dr. Hahn, in saying at the news conference that 35 out of 100 sick Covid-19 patients would have been saved by receiving plasma, appeared to have overstated the benefits. Dr. Robert Califf, who was F.D.A. commissioner under President Barack Obama, said on Twitter on Sunday that Dr. Hahn should correct his statement.
The publicly released data from the Mayo Clinic shows that, among the larger group of more than 35,000 patients, when plasma was given within three day of diagnosis, the death rate was about 22 percent, compared with 27 percent when it was given four or more days after diagnosis.
Dr. Eric Topol, a professor of molecular medicine at Scripps Research in La Jolla, Calif. and a longtime expert in clinical trials, said that convalescent plasma has not yet shown the benefit that Dr. Hahn described — and that he should issue a correction.
“He needs to come out with that, and until he does, he has no credibility as an F.D.A. commissioner,” Dr. Topol said.
Updated August 24, 2020
What are the symptoms of coronavirus?
In the beginning, the coronavirus seemed like it was primarily a respiratory illness — many patients had fever and chills, were weak and tired, and coughed a lot. Those who seemed sickest had pneumonia or acute respiratory distress syndrome — which caused their blood oxygen levels to plummet — and received supplemental oxygen. In severe cases, they were placed on ventilators to help them breathe. By now, doctors have identified many more symptoms and syndromes. (And some people don’t show many

symptoms at all.) In April, the C.D.C. added to the list of early signs sore throat, fever, chills and muscle aches. Gastrointestinal upset, such as diarrhea and nausea, has also been observed. Another telltale sign of infection may be a sudden, profound diminution of one's sense of smell and taste. Teenagers and young adults in some cases have developed painful red and purple lesions on their fingers and toes — nicknamed "Covid toe" — but few other serious symptoms. More serious cases can lead to inflammation and organ damage, even without difficulty breathing. There have been cases of dangerous blood clots, strokes and brain impairments.

Why does standing six feet away from others help?

The coronavirus spreads primarily through droplets from your mouth and nose, especially when you cough or sneeze. The C.D.C., one of the organizations using that measure, bases its recommendation of six feet on the idea that most large droplets that people expel when they cough or sneeze will fall to the ground within six feet. But six feet has never been a magic number that guarantees complete protection. Sneezes, for instance, can launch droplets a lot farther than six feet, according to a recent study . It's a rule of thumb: You should be safest standing six feet apart outside, especially when it's windy. But keep a mask on at all times, even when you think you're far enough apart.

I have antibodies. Am I now immune?

As of right now, that seems likely, for at least several months. There have been frightening accounts of people suffering what seems to be a second bout of Covid-19. But experts say these patients may have a drawn-out course of infection, with the virus taking a slow toll weeks to months after initial exposure. People infected with the coronavirus typically produce immune molecules called antibodies, which are protective proteins made in response to an infection . These antibodies may last in the body only two to three months , which may seem worrisome, but that's perfectly normal after an acute infection subsides, said Dr. Michael Mina, an immunologist at Harvard University. It may be possible to get the coronavirus again, but it's highly unlikely that it would be possible in a short window of time from initial infection or make people sicker the second time.

I'm a small-business owner. Can I get relief?

The stimulus bills enacted in March offer help for the millions of American small businesses. Those eligible for aid are businesses and nonprofit organizations with fewer than 500 workers, including sole proprietorships, independent contractors and freelancers. Some larger companies in some industries are also eligible. The help being offered, which is being managed by the Small Business Administration, includes the Paycheck Protection Program and the Economic Injury Disaster Loan program. But lots of folks have not yet seen payouts. Even those who have received help are confused: The rules are draconian, and some are stuck sitting on money they don't know how to use. Many small-business owners are getting less than they expected or not hearing anything at all.

What are my rights if I am worried about going back to work?

https://www.nytimes.com/2020/08/24/health/fda-blood-plasma.html

United States

U.S. FDA chief apologizes for overstating plasma effect on virus

Source: CTVNews.ca

Unique ID: 1007704281

WASHINGTON -- Responding to an outcry from medical experts, Food and Drug Administration Commissioner Stephen Hahn on Tuesday apologized for overstating the life-saving benefits of treating COVID-19 patients with convalescent plasma.

Scientists and medical experts have been pushing back against the claims about the treatment since President Donald Trump's announcement on Sunday that the FDA had decided to issue emergency authorization for convalescent plasma, taken from patients who have recovered from the coronavirus and rich in antibodies.

Trump hailed the decision as a historic breakthrough even though the treatment's value has not been established. The announcement on the eve of Trump's Republican National Convention raised suspicions that it was politically motivated to offset critics of the president's handling of the pandemic.

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Hahn had echoed Trump in saying that 35 more people out of 100 would survive the coronavirus if they were treated with the plasma. That claim vastly overstated preliminary findings of Mayo Clinic observations.

Hahn's mea culpa comes at a critical point for the FDA which, under intense pressure from the White House, is responsible for deciding whether upcoming vaccines are safe and effective in preventing COVID-19.

The 35% figure drew condemnation from other scientists and some former FDA officials, who called on Hahn to correct the record.

“I have been criticized for remarks I made Sunday night about the benefits of convalescent plasma. The criticism is entirely justified. What I should have said better is that the data show a relative risk reduction not an absolute risk reduction,” Hahn tweeted.

The FDA made the decision based on data the Mayo Clinic collected from hospitals around the country that were using plasma on patients in wildly varying ways -- and there was no comparison group of untreated patients, meaning no conclusions can be drawn about overall survival. People who received plasma with the highest levels of antibodies fared better than those given plasma with fewer antibodies, and those treated sooner after diagnosis fared better than those treated later.

Hahn and other Trump administration officials presented the difference as an absolute survival benefit, rather than a relative difference between two treatment groups. Former FDA officials said the misstatement was inexcusable, particularly for a cancer specialist like Hahn.

“It's extraordinary to me that a person involved in clinical trials could make that mistake,” said Dr. Peter Lurie, a former FDA official under the Obama administration who now leads the non-profit Center for Science in the Public Interest. “It's mind-boggling.”

The 35% benefit was repeated by Health and Human Services Secretary Alex Azar at Sunday's briefing and promoted on Twitter by the FDA's communication staff. The number did not appear in FDA's official letter justifying the emergency authorization.

Hahn has been working to bolster confidence in the agency's scientific process, stating in interviews and articles that the FDA will only approve a vaccine that meets preset standards for safety and efficacy. Lurie said Hahn's performance at the press conference undermined his credibility, particularly among FDA staff.

“I think within the agency his credibility is massively reduced as a result,” Lurie said.

Hahn pushed back Tuesday morning against suggestions that the plasma announcement was timed to boost Trump ahead of the Republican convention.

“The professionals and the scientists at FDA independently made this decision, and I completely support them,” Hahn said, appearing on “CBS This Morning.”

Trump has recently accused some FDA staff, without evidence, of deliberately holding up new treatments “for political reasons.” And Trump's chief of staff, Mark Meadows, said over the weekend that FDA scientists “need to feel the heat.”

The administration has sunk vast resources into the race for a vaccine, and Trump aides have been hoping that swift progress could help the president ahead of November's election.

At Sunday's briefing Hahn did not correct Trump's description of the regulatory move as a “breakthrough.” He also did not contradict Trump's unsupported claim of a “deep state” effort at the agency working to slow down approvals.

Former FDA officials said the political pressure and attacks against the FDA carry enormous risk of undermining trust in the agency just when it's needed most. A vaccine will only be effective against the virus if it is widely taken by the U.S. population.

“I think the constant pressure, the name-calling, the perception that decisions are made under pressure is damaging,” said Dr. Jesse Goodman of Georgetown University, who previously served as FDA's chief scientist. “We need the American people to have full confidence that medicines and vaccines are safe.”

Convalescent plasma is a century-old approach to treating the flu, measles and other viruses. But the evidence so far has not been conclusive about whether it works, when to administer it and what dose is needed.

The FDA emergency authorization is expected to increase its availability to additional hospitals. But more than 70,000 Americans have already received the therapy under FDA's “expanded access” program. That program tracks patients' response, but cannot prove whether the plasma played a role in their recovery.

Some scientists worry the broadened FDA access to the treatment will make it harder to complete studies of whether the treatment actually works. Those studies require randomizing patients to either receive plasma or a dummy infusion.

https://www.ctvnews.ca/health/coronavirus/u-s-fda-chief-apologizes-for-overstating-plasma-effect-on-virus-1.5078192

IHR Announcement

WHO: Invitation to participate in the COVID-19 Member States Information session on Thursday, 27 August 2020 (12:30-14:30) Virtual Room (Zoom)

Announcement Displayed From: Wednesday, August 26, 2020 - 12:20
Topic: ***COVID-19 Information session***
Time: ***Aug 27, 2020 12:30*** *Amsterdam, Berlin, Rome, Stockholm, Vienna*

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PAHO

PAHO asks countries to reinforce contact tracing and data systems as the region starts to reopen
25 Aug 2020
As Covid-19 infections double, smart local measures needed to slow its spread

Washington D.C., August 25, 2020 (PAHO) – As cases of COVID-19 have more than doubled in the region of the Americas in the past weeks, reinforcing contact tracing and data management are key when many countries are reopening their activities.

The number of new COVID-19 infections reported in the Americas has more than doubled, rising from 5.3 million on July 1st to more than 12 million cases today

“Primary health care should be at the center of the response: identifying cases, acting to contain transmission and providing timely care in the community,” the Director of the Pan American Health Organization, Dr. Carissa F. Etienne said during a press conference today. “Local health authorities have a central role to play in generating and analyzing data to adjust public health measures to the reality in each area”.

Noting that in the past 6 weeks deaths in the region have doubled, Dr. Etienne said, “we can’t stop all transmission, but if countries stay vigilant and expand testing and surveillance, they can better identify spikes in cases and act quickly to contain them before they spread out of control.”

Despite the rise in cases, countries have gradually relaxed restrictions, resumed commerce and some are gearing up to head back to school. “In far too many places, there seems to be a disconnect between the policies being implemented and what the epidemiological curves tell us. This is not a good sign. Wishing the virus away will not work, it will only lead to more cases, as we’ve seen over these past 6 weeks,” Etienne said.

“We have good tools today: data that show where the hot spots are, contact tracing protocols to slow onward transmission and public health measures that can reduce the risk of exposure. We’ll have even better tools in the future: improved tests, more effective treatments and even vaccines. National and local

governments need to be strategic about how they use these tools – old and new – to achieve the desired impact," she said.

Incidence of COVID-19 in younger people

Data from all over the Americas show that the majority of cases are reported in people between 20 and 59 years of age, but almost 70% of deaths are reported in people over 60.

"This indicates that younger people are primarily driving the spread of the disease in our region. Many young people who contract the virus may not become ill or require an ICU bed, but they can spread it to others who will. This is a stark reminder that defeating COVID-19 is a shared responsibility – not only among countries and regions, but between people, neighbors and communities," Etienne added.

"If you don't take the right steps to keep yourself safe, you're putting others in danger," she warned.

Concerns and encouraging signs

Dr. Etienne said she was concerned about new infections in the Caribbean as countries open their borders. While Caribbean islands have avoided major outbreaks thanks to strong political resolve and a smart mix of public health measures, "now that non-essential air travel is resuming across the region, several countries are reporting spikes in cases."

Two weeks ago, the Bahamas observed a 60 percent increase compared to the previous week, while Sint Maarten, Trinidad and Tobago and the US Virgin Islands all reported a 25 percent jump.

"This is not just driven by tourism, but also by citizens returning home after the lockdown. We know that countries that depend on tourism can't remain closed indefinitely, but as they reopen, they must use all the resources available to reduce risk for their people," she said.

"One of the most effective strategies we have is contact tracing," as shown in work to stop the chain of transmission by using it to track all new cases and limit the spread of the virus in Dominica, The Bahamas, Argentina, Guatemala and Suriname, she said.

"This bought them time to prepare their systems for this moment, and they've built the necessary capacity to identify cases and trace people who may have been exposed."

Dr. Etienne cited other examples of how the right strategies can bend the curve of the pandemic. "As recently as June, infections in Chile were rising rapidly. So national authorities looked at the data and tailored their approach: drastically expanding testing, isolating cases and deploying stay-at-home orders in the hardest hit areas. It worked. For six weeks now, Chile has seen COVID-19 lose steam, and is reporting fewer cases," she said.

Costa Rica had low transmission when they implemented stay-at-home orders and used the opportunity to prepare, by expanding testing and hospital capacity.

"Even though there are new cases now, their health services are coping well. These examples prove that if we employ evidence-based approaches, we can eventually overcome this crisis, even in places where cases are rising," she said.

"This virus is going to be with us for a while. Without a vaccine, it's going to be with us for years. This will not be a fight we win once – but one that will go several rounds. That's why we need to apply lessons from places that have controlled the virus and let data guide our actions," Etienne added.
https://www.paho.org/en/news/25-8-2020-paho-asks-countries-reinforce-contact-tracing-and-data-systems-region-starts-reopen

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

Brazil

Brazilian scientists investigate 20 suspected cases of coronavirus reinfection in brazil
ID: 1007705551
Source: O Dia

Summary São Paulo - In addition to the first reinfection of covid-19 in a man in Hong Kong, Brazilian institutions are investigating 20 possible cases of second contamination. Last week, the Hospital das Clínicas announced that it has reserved a ward of care only for patients suspected of further contamination of Covid-19. This is the case of the nurse from Ribeirão Preto, who said she had symptoms 38 days after allegedly recovering.

After confirmation of man reinfection in Hong Kong, scientists question virus mutation and risks in vaccine research
São Paulo - In addition to the first reinfection of covid-19 in a man in Hong Kong, Brazilian institutions are investigating 20 possible cases of second contamination. The investigations are conducted by the University of São Paulo (USP) and the Oswaldo Cruz Foundation (Fiocruz).
About 16 of the suspected cases are in São Paulo, while the other four are from Rio de Janeiro. Last week, the Hospital das Clínicas announced that it has reserved a ward of care only for patients suspected of further contamination of Covid-19.
The first case of reinfection of the new coronavirus was reported by USP. This is the case of the nurse from Ribeirão Preto, who said she had symptoms 38 days after allegedly recovering.
Five days after feeling malaise, fever, sore throat, loss of taste and smell and headaches and muscle, she returned to positive testing for Covid-19. The symptoms stayed for 12 days, and she still tested positive again.
The new contamination of patients who had already contracted Covid-19 may impact research for a vaccine, as this may imply little antibody creation in some people.
With this, it is possible that only one dose is not effective against the disease in some organisms. There is also the possibility that, in the face of a mutation, research will be compromised.
https://gphin.canada.ca/cepr/showarticle.jsp?docId=1007705551

Germany

Study Finds 2.6 Times More COVID-19 Cases in S. Germany Than Previously Confirmed
Source: UrduPoint News
ID: 1007706505

study by Germany's Robert Koch Institute has revealed that the Bavarian municipality of Bad Feilnbach has 2.6 times more COVID-19 cases than it has been previously confirmed, the institute said on Tuesday. The study was conducted from June 23-July 4, with a sample of 2,153 people aged over 18 years old. A study by Germany's Robert Koch Institute has revealed that the Bavarian municipality of Bad Feilnbach has 2.6 times more COVID-19 cases than it has been previously confirmed, the institute said on Tuesday

A study by Germany's Robert Koch Institute has revealed that the Bavarian municipality of Bad Feilnbach has 2.6 times more COVID-19 cases than it has been previously confirmed, the institute said on Tuesday MOSCOW (UrduPoint News / Sputnik - 25th August, 2020) A study by Germany's Robert Koch Institute has revealed that the Bavarian municipality of Bad Feilnbach has 2.6 times more COVID-19 cases than it has been previously confirmed, the institute said on Tuesday.
The study was conducted from June 23-July 4, with a sample of 2,153 people aged over 18 years old.
"During the research, we have detected 2.6 times more infection cases than it was known in Bad Feilnbach up until now," the institute said in a statement.
The institute has also confirmed that six percent of the commune's adult population have SARS-CoV-2 antibodies. At the same time, 39.9 percent of respondents, who said they had tested positive for COVID-19, did not have antibodies.
Germany has confirmed a total of 234,853 cases, with a death toll of 9,277.
https://www.urdupoint.com/en/world/study-finds-26-times-more-covid-19-cases-in-1011296.html

United Kingdom

Nottinghamshire woman, 75, may be first known UK Covid victim

ID: 1007705954

Source: theguardian.com

Tue 25 Aug 2020 20.47 BST

Scientific analysis suggests coronavirus was spreading in UK weeks earlier than thought

Scientists believe a 75-year-old woman from Nottinghamshire was the first known person to catch coronavirus in the UK and the earliest to die from it, as research shows the disease was circulating widely in communities in early February.

Samples analysed by the University of Nottingham show the unnamed woman, who had an underlying health condition, tested positive for the virus on 21 February.

She was admitted to Queen's medical centre (QMC), in Nottingham, and died on 3 March, two days earlier than the first recorded Covid-19 death in the UK. Her positive coronavirus test results were not returned until 16 March, almost two weeks after her death.

Previously, the first case caught in the UK was believed to be a man in Surrey who was reported to have tested positive on 28 February.

The University of Nottingham study said: "Patient 1 in this study is, to the best of our knowledge, the earliest described community-acquired case of Sars-CoV-2 in the UK, admitted to hospital care on 21 February 2020, and was also the first UK Covid-19 death, preceding the earliest known death by two days."

Scientists retrospectively analysed samples from the QMC hospital dating back to January, and discovered the virus had been circulating in the area between early February and March.

Their study said this was undetected at the time because the government was restrictive both in its definition of coronavirus symptoms, and over who could be tested.

Prof Jonathan Ball, one of the authors of the study, said: "Had the diagnostic criteria for Covid-19 been widened earlier to include patients with compatible symptoms but no travel history, it is likely that earlier imported infections would have been detected, which could have led to an earlier lockdown and lower deaths.

"However, the capacity for testing available nationally was not sufficient at the time to process the volume of testing required with a broader case definition."

Initial testing for coronavirus in the UK required that a patient had a recent travel history to Hubei province in China or contact with a known case and one or more symptoms out of fever, shortness of breath and a new and persistent dry cough.

The criteria was later revised to include those who had travelled to mainland China and several other Asian countries, then expanded further to include Iran and northern Italy before being removed as essential criteria for diagnostic testing by mid-March.

The University of Nottingham said its researchers were carrying out the analysis of samples from patients with symptoms compatible with Covid-19 to better understand the prevalence and emergence of the virus in the UK.

Around 2,000 respiratory samples taken from patients at the hospital between January and March were tested. Although the study, which is yet to be peer-reviewed, is limited to samples from one hospital, it

suggests the disease was being contracted in Britain without the knowledge of experts weeks earlier than initially thought.

“Their results showed that the virus was already circulating in the community and resulted in several hospital admissions and deaths,” the university said in a report of the findings.

DNA sequencing conducted as part of the analysis by researchers also showed there had been multiple cases of the virus in the east Midlands before wide-scale testing was introduced.

It found that the first official case of coronavirus in the area – a traveller who returned from South Korea on 28 February – had probably caught the virus in Nottingham rather than in South Korea as had been assumed.

https://www.theguardian.com/world/2020/aug/25/nottinghamshire-woman-75-may-be-first-known-uk-covid-victim

Netherlands

Dutch coronavirus deaths double in a week, as new infections fall
Source: NL Times
Unique ID: 1007703269

The official weekly report from Dutch public health agency RIVM showed that the number of Covid-19 deaths reported for the week ending Tuesday was double the previous week's total. The agency confirmed the deaths of another 32 people known to have Covid-19 died in the past seven days. The Netherlands has thus far registered 6,207 deaths, which were known to be caused by Covid-19.
3,588 more positive coronavirus tests were recorded during the seven-day period concluding at 10 a.m. on Tuesday. That was 425 less than the previous week, equivalent to a ten percent drop. It was the first weekly decline registered by the agency since the beginning of July. Some 67,543 people have tested positive for the SARS-CoV-2 novel coronavirus since the end of February.
The GGD tested over 140 thousand people in the past week, which the RIVM said was a 37 percent increase over the previous week. About 2.5 percent of those tests carried out by the GGD came back with a positive result, a figure which had been above three percent in the previous weekly RIVM reports.
"The percentage positive was highest (4-5%) in the GGD regions Rotterdam-Rijnmond, Amsterdam and Haaglanden," according to the RIVM. The basic reproduction (R) number of the virus also dropped to 1.0 nationally, meaning that 100 contagious people will infect 100 others. The R-Number is calculated from a virology model with a margin of error. For the first time in a month, part of that margin of error was below 1.0, which the Cabinet has called a critical benchmark in determining new socially-restrictive measures to slow the spread of the virus.
Testing for the coronavirus strain began to increase dramatically on June 1, when any member of the public could request a mucus swab test for the SARS-CoV-2 by contacting their GGD municipal health service directly. GGD offices do not account for all of the testing in the Netherlands, but they do handle most of the testing in the Netherlands.
The RIVM said that 12,126 people have required hospitalization for the coronavirus disease, including an increase of 84. The weekly hospitalization total was well above the previous week, in which 50 new patient admissions were revealed. While new patient admissions rose, 26 people with Covid-19 were moved into intensive care during the week, down two compared to the previous week.
Since the end of February, 12,126 residents of the Netherlands have been treated in hospitals for respiratory illness Covid-19, caused by the novel coronavirus strain. Over three thousand of those required intensive care treatment.
https://nltimes.nl/2020/08/25/dutch-coronavirus-deaths-double-week-new-infections-fall

European Union

Two European patients re-infected with coronavirus
Source: Financial Post
Unique ID: 1007703150

AMSTERDAM/BRUSSELS — Two European patients are confirmed to have been re-infected with the coronavirus, raising concerns about people's immunity to the virus as the world struggles to tame the pandemic.
The cases, in Belgium and the Netherlands, follow a report this week by researchers in Hong Kong about a man there who had been re-infected with a different strain of the virus four and a half months after being declared recovered – the first such re-infection to be documented.
That has fueled fears about the effectiveness of potential vaccines against the virus, which has killed hundreds of thousands of people, though experts say there would need to be many more cases of re-infection for these to be justified.
Belgian virologist Marc Van Ranst said the Belgian case was a woman who had contracted COVID-19 for the first time in March and then again in June. Further cases of re-infection were likely to surface, he said.
"We don't know if there will be a large number. I think probably not, but we will have to see," he told Reuters, noting that COVID-19 had only been in humans for less than a year.
"Perhaps a vaccine will need to be repeated every year, or within two or three years. It seems clear though that we won't have something that works for, say, 10 years," he said.
https://financialpost.com/pmn/business-pmn/two-european-patients-re-infected-with-coronavirus

Hong Kong

Hong Kong Children Hospital announces a preliminarily positive case of COVID-19 infection
Source: Official
Unique ID: 1007703372

The spokesperson for Hong Kong Children's Hospital (HKCH) made an announcement today (August 25) on a patient tested preliminarily positive to COVID-19:
A 19-month-old boy was admitted to HKCH yesterday (August 24) afternoon for an essential elective surgery. Health declaration was made upon admission and he did not present with fever or respiratory symptoms. Nasopharyngeal swab test was performed as a screening measure. The result released last night was preliminarily positive to COVID-19. The patient and his accompanying mother were immediately put in an isolation room of HKCH, and then transferred to Queen Elizabeth Hospital (QEH) this morning for isolation.
Subsequent blood tests were arranged for the confirmed patient and his mother by HKCH and QEH respectively. The results released today showed the presence of antibodies. They met the discharge criteria and have been discharged directly from QEH.
The hospital's infection control team has immediately conducted contact tracing upon learning the preliminary positive result. It is found that two patients have stayed in the same cubicle as the confirmed patient, and their four parents have visited that cubicle on compassionate ground. With the presence of antibodies in the blood specimens of the mother and the boy, they should have acquired infection from the community earlier and have recovered. Upon discussion with the Centre for Health Protection (CHP), it was agreed that there is no risk of transmission to others. Therefore, the other patients and parents in the cubicle concerned are not classified as close contacts.
Staff in the ward concerned were equipped with appropriate personal protective equipment in accordance with the infection control guidelines. None of them are classified as close contacts.
Thorough cleansing and disinfection have been conducted in the ward areas which the confirmed patient had stayed. The hospital will continue to closely monitor the health condition of the patients and staff concerned, while maintaining close communication with the CHP.
https://www.info.gov.hk/gia/general/202008/25/P2020082500615.htm

Spain

Spain To Purchase Oxford-AstraZeneca Coronavirus Vaccine
Source: Urdupoint
Unique ID: 1007703152

Spain will purchase the UK-made coronavirus vaccine, developed by the University of Oxford and produced by the AstraZeneca pharmaceutical company, the Spanish Ministry of Health said in a press release on Tuesday
MADRID (UrduPoint News / Sputnik - 25th August, 2020) Spain will purchase the UK-made coronavirus

vaccine, developed by the University of Oxford and produced by the AstraZeneca pharmaceutical company, the Spanish Ministry of Health said in a press release on Tuesday.
"This [vaccine] is one of the most advanced options and is already undergoing clinical trials to guarantee its safety and effectiveness. Spain has joined the collective purchase of this vaccine together with other EU member-states. The vaccine will be distributed among states on the basis of equality depending on the size of their population," the press release read.
The ministry pointed out that the European Union was still engaged in talks with other companies developing candidate vaccines against COVID-19.
"All these negotiations are within the European strategy on vaccines which Spain joined in July.
It develops a common European position that will ensure that everyone has an equal access to the vaccine for the protection of humanity," the ministry said.
On Monday, the European Commission wrapped up talks with the US-based Moderna pharmaceutical company, the fifth potential supplier of a vaccine, for an early access to 80 million doses initially. The other four include Sanofi-GSK, Johnson & Johnson, CureVac and AstraZeneca.
June brought a new splash of coronavirus cases in Spain, which used to be among Europe's three worst outbreaks in the beginning of the year. In four past days alone, health authorities confirmed over 19,400 new cases, predominantly among young people without symptoms.
As of Tuesday, Spain has reported more than 405,000 cumulative cases, including nearly 29,000 deaths.
https://www.urdupoint.com/en/health/spain-to-purchase-oxford-astrazeneca-coronavi-1010867.html

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

Canada
University of Toronto research to explore racism in health care during pandemic
ID: 1007706182
Source: nationalpost.com

TORONTO — A new research project will look at the impact of the COVID-19 pandemic on racialized communities as well as existing biases in the health-care system.
The national project was launched by Roberta Timothy, an assistant professor with the University of Toronto's Institute for Pandemics.
Timothy says many members of the Black and Indigenous communities already avoid interacting with the health-care system mostly due to experiences with racism and biases.
During a global pandemic, Timothy says that can have grave consequences for the well-being of those communities.
"People will seek help when it's an emergency and by then it's too late," she says. "Because of the bias, because of anti-black racism, because of violence they experience, their health becomes more at risk."
Timothy says there's a need for more data to effectively understand the impact of COVID-19 on racialized communities.
The Ontario government refused to collect race-based data earlier in the pandemic, but it was forced to change course in June. Now it mandates the collection of data around race, income, household size and language when following up with people who've been infected with COVID-19.

A spokesman for the Ministry of Health said the government is engaging with people from racialized communities and other health equity experts regarding the data collection.

"We plan to share findings of this data collection, informed by this engagement," David Jensen said in an email.

Jensen said the ministry is concerned about the spread of the virus in "certain groups of people and in certain neighbourhoods," and would welcome additional insights and information about how COVID-19 is affecting racialized communities.

Early data compiled by Toronto Public Health showed that 83 per cent of COVID-19 cases occurred in racialized people. Black people represented 21 per cent of cases in Toronto, but only nine per cent of the city's population.

"There is growing evidence in North America and beyond that racialized people and people living in lower-income households are more likely to be affected by COVID-19," said Dr. Christine Navarro, associate medical officer of health for Toronto.

"While the exact reasons for this have yet to be fully understood, we believe it is related to both poverty and racism."

Timothy's project will collect more data about how Black and Indigenous people interact with the health-care system, but also about economic impacts, evictions, support networks and essential work being done by marginalized communities.

"An underlying part of the project is not only to bring better data, but to support the community in strategizing and finding interventions to find how we get through this," said Timothy.

Rudayna Bahubeshi, a Toronto resident and post-graduate student in public policy, says she has first-hand experience with racism in the health-care system. During a stint in a mood disorder ward when she was 18, Bahubeshi said a nurse mistook her for a 30-year-old patient — the only other Black person in the ward at the time — and tried to make her take the other person's medication.

Bahubeshi says she argued but was ignored, and believes her race was a factor in the way she was treated by staff. She says the nurse only realized the mistake when the other patient happened to walk by.

In another hospital visit during the pandemic, Bahubeshi says she was taken to a "COVID ward" because she had fever. She says staff would not answer simple questions about whether there were risks involved with using a shared washroom, or about the fact that some staff weren't wearing PPE.

"The way she (the nurse) was engaging with me was very much that I was the problem," says Bahubeshi. "When I talked to a doctor afterwards they told me I was fully in the right and that was unacceptable."

Bahubeshi says experiences like those erode her trust in the public health system and its ability to provide quality care for her. She says more data about the experience of Black people in health care will be a first step in the right direction.

"The fact that we don't have race-based data is a way we've decided that Black communities are not a priority," said Bahubeshi.

Timothy's national project is set to begin in a few months, and will involve surveys and focus groups among Black and Indigenous Canadians.

This report by The Canadian Press was first published Aug. 25, 2020.

https://nationalpost.com/pmn/news-pmn/canada-news-pmn/university-of-toronto-research-to-explore-racism-in-health-care-during-pandemic

Canada
Alberta's chief medical officer advises against smoking and vaping in battle against COVID-19
Source: Global news
Unique ID: 1007703458

Alberta's chief medical officer of health is recommending Albertans who smoke or vape take measures to quit the habits to decrease the impact of a coronavirus infection.
"What we've seen in other jurisdictions is that there does seem to be a link to things like smoking or vaping and having a more severe outcome after a COVID-19 infection," Dr. Deena Hinshaw said on Monday.
A Stanford University study found those who vaped were five times more likely to be diagnosed with the novel coronavirus than non-users. The study caused some United States lawmakers to try to temporarily ban the sale of e-cigarettes until more research could be done on their effects.
"It's a good reminder for those who are interested in cutting down or quitting those activities to look at the supports that are available like the Alberta Quits help line," Hinshaw said.
A 2016 study found "ample evidence" that cigarette smoke weakens the defensive function of the immune system. One from 2017 found that even social or occasional smoking can cause immense damage to a person's body, leading to problems like high blood pressure, high cholesterol and hypertension.
There is "conclusive evidence that smoking is associated with an increased risk of respiratory viral infection," according to the results of the Surgeon General's 2014 report.
Hinshaw said her message was focused particularly on Alberta's youth.
"Obviously this is more for those who are teens who are vaping or smoke. This is a great opportunity to think about supports that are available for them to quit, to reduce the chances of a more severe outcome should they become infected," Hinshaw said.
In a 2018-19 survey, the federal government said 34 per cent of students in grades 7-12 said they'd tried vaping. Despite it being illegal to sell e-cigarettes to kids in Canada, 54 per cent of youth respondents said it would be "fairly easy" or "very easy" to get an e-cigarette with nicotine if they wanted one.
The study: https://www.sciencedirect.com/science/article/pii/S1054139X20303992
https://globalnews.ca/news/7295994/dr-deena-hinshaw-smoking-vaping-covid-19/

Japan
COVID-19 spread noted in 'healthy' concertgoers 2 days after infection
ID: 1007707069
Source: CIDRAP

Seemingly healthy people with COVID-19 can spread the disease to others as soon as 2 days after infection, an analysis of a coronavirus cluster traced to four live music clubs in Osaka, Japan, shows. The study, published today in the *Journal of Infectious Diseases*, extracted data on club-goers linked to an 108-person cluster from the Japanese Ministry of Health, Labour and Welfare website. The first case in the cluster was identified on Feb 27, and the outbreak was contained by Mar 17.

Of the 51 asymptomatic people infected with SARS-CoV-2, the virus that causes COVID-19, who visited one music club only once, 10 remained asymptomatic at coronavirus diagnosis after, on average, 20 days. The 41 club-goers with symptoms became ill 2 to 17 days after exposure.

Three people who attended concerts who remained asymptomatic at diagnosis spread the coronavirus to as many as three family members or coworkers each.

The authors said that the results underscore the continued need for crowd avoidance and good personal hygiene amid the pandemic. Activities such as talking, singing and shouting have been shown to generate virus-containing aerosols that hang in the air for hours. "Seemingly healthy people could spread SARS-CoV-2 during intense activities in enclosed environments without sufficient ventilation," they wrote.

https://www.cidrap.umn.edu/news-perspective/2020/08/news-scan-aug-25-2020
https://academic.oup.com/jid/advance-article/doi/10.1093/infdis/jiaa542/5896928

Switzerland
Study identifies sex differences in levels of antibodies against COVID-19
ID: 1007707069

Source: CIDRAP

Concentrations of antibodies against SARS-CoV-2 began to decline 4 to 5 weeks after diagnosis in 159 patients who recovered from COVID-19, with men showing a significantly stronger immune response than women—which could account for the poorer outcomes seen in men, according to a Swiss study published yesterday in the *Journal of Infection*.

Researchers analyzed participants' antibody concentrations for 8 weeks, starting 2 weeks after a positive coronavirus test result. After a median of 5 weeks after diagnosis, 4.6% to 6.5% of participants had not developed measurable levels of one of three types of coronavirus antibodies, which the investigators said may be due to a missing or delayed immune response to COVID-19. "We speculate this to be secondary to a suspected virus' ability to modify or suppress innate immune responses," they wrote.

The decline in two different types of immunoglobulin G (IgG) antibodies from weeks 8 to 10 was significant, which the authors said contrasts sharply with the 34-week or longer IgG immune response to SARS-CoV-1, the virus that causes severe acute respiratory syndrome (SARS).

Compared with women, men had substantially higher levels of all antibodies, but especially of immunoglobulin A (IgA). The authors said that the sex-specific differences may be due to ongoing infection in men.

The early drop in antibody concentrations should affect the interpretation of serological results obtained at specific time points, especially for disease surveillance, they said.

"After SARS-CoV-2 infection, the immune system seems to produce different amounts of IgG and IgA in women and men, possibly helping to explain the higher risk of adverse COVID outcome in men through a stronger (inflammatory) response," the researchers wrote. "If confirmed on other cohorts, these observations should be considered when assessing the efficacy and safety of novel vaccine candidates against SARS-CoV-2."
https://www.cidrap.umn.edu/news-perspective/2020/08/news-scan-aug-25-2020
https://www.journalofinfection.com/article/S0163-4453(20)30567-3/fulltext

Germany

Study Finds 2.6 Times More COVID-19 Cases in S. Germany Than Previously Confirmed
ID: 1007706505
Source: urdupoint.com

A study by Germany's Robert Koch Institute has revealed that the Bavarian municipality of Bad Feilnbach has 2.6 times more COVID-19 cases than it has been previously confirmed, the institute said on Tuesday
MOSCOW (UrduPoint News / Sputnik - 25th August, 2020) A study by Germany's Robert Koch Institute has revealed that the Bavarian municipality of Bad Feilnbach has 2.6 times more COVID-19 cases than it has been previously confirmed, the institute said on Tuesday.
The study was conducted from June 23-July 4, with a sample of 2,153 people aged over 18 years old.
"During the research, we have detected 2.
6 times more infection cases than it was known in Bad Feilnbach up until now," the institute said in a statement.
The institute has also confirmed that six percent of the commune's adult population have SARS-CoV-2 antibodies. At the same time, 39.9 percent of respondents, who said they had tested positive for COVID-19, did not have antibodies.
Germany has confirmed a total of 234,853 cases, with a death toll of 9,277.
https://www.urdupoint.com/en/world/study-finds-26-times-more-covid-19-cases-in-1011296.html

United States

Primary Indicators to Systematically Monitor COVID-19 Mitigation and Response — Kentucky, May 19–July 15, 2020

Source: CDC

Early Release / August 25, 2020 / 69

Summary

What is already known about this topic?

State and local health departments use various indicators to identify local and regional changes in the number of COVID-19 cases and severe outcomes, including hospitalizations and deaths.

What is added by this report?

Kentucky's indicator monitoring report (IMR) is a useful tool that combines multiple data elements to generate a daily COVID-19 status score that allows systematic assessment of the state's mitigation, response, and reopening efforts. The Kentucky Department for Public Health analyzes publicly available data sources and compiles the IMR using standardized methods.

What are the implications for public health practice?

State and local health departments in other jurisdictions might benefit from implementation of systematic indicator monitoring to guide decision-making for COVID-19 reopening, mitigation, and response efforts.

State and local health departments in the United States are using various indicators to identify differences in rates of reported coronavirus disease 2019 (COVID-19) and severe COVID-19 outcomes, including hospitalizations and deaths. To inform mitigation efforts, on May 19, 2020, the Kentucky Department for Public Health (KDPH) implemented a reporting system to monitor five indicators of state-level COVID-19 status to assess the ability to safely reopen: 1) composite syndromic surveillance data, 2) the number of new COVID-19 cases,* 3) the number of COVID-19–associated deaths,† 4) health care capacity data, and 5) public health capacity for contact tracing (contact tracing capacity). Using standardized methods, KDPH compiles an indicator monitoring report (IMR) to provide daily analysis of these five indicators, which are combined with publicly available data into a user-friendly composite status that KDPH and local policy makers use to assess state-level COVID-19 hazard status. During May 19–July 15, 2020, Kentucky reported 12,742 COVID-19 cases, and 299 COVID-19–related deaths (1). The mean composite state-level hazard status during May 19–July 15 was 2.5 (fair to moderate). IMR review led to county-level hotspot identification (identification of counties meeting criteria for temporal increases in number of cases and incidence) and facilitated collaboration among KDPH and local authorities on decisions regarding mitigation efforts. Kentucky's IMR might easily be adopted by state and local health departments in other jurisdictions to guide decision-making for COVID-19 mitigation, response, and reopening.

On March 6, Kentucky reported its first COVID-19 case and declared a state of emergency. During subsequent weeks, mitigation efforts included temporarily closing schools for in-person instruction, ceasing elective medical procedures, and limiting visitors to long-term care facilities; an executive order was issued on March 22 that temporarily closed all nonessential businesses. The number of cases during March 6–May 8 peaked during the week of May 4, when 1,446 cases were reported (1). Kentucky commenced reopening on May 9 through the phased "Healthy at Work" plan.§ During reopening, KDPH and other officials sought to monitor changes in rates of reported COVID-19 and health care resource utilization to inform mitigation and reopening policies (2). KDPH epidemiologists developed the IMR after recognizing the need for a plain language assessment that could facilitate reopening and ongoing response decision-making addressing multiple stakeholders. The five primary indicators were selected based on available data and in consultation with KDPH syndromic surveillance and emergency preparedness subject matter experts and academic advice from the University of Kentucky and the Kentucky Injury Prevention and Research Center. Metrics were developed in consultation with CDC COVID-19 Response task force modeling experts. KDPH implemented the IMR process on May 19. The IMR describes five state-level primary indicators (syndromic surveillance data, case counts, deaths, health care capacity data, and contact tracing capacity), which are scored individually. Scores are combined into a composite categorical state-level status indicator to assess COVID-19 disease prevalence and severity (syndromic surveillance data, cases, deaths) and readiness (health care capacity and contact tracing capacity). Daily IMRs are standardized and produced with publicly available data (3) using spreadsheets and R statistical software (version 3.6.3; The R Foundation). Reports are produced and results are disseminated Monday through Saturday. Reports include data through the report date.¶

The slope of the 7-day moving average for seven separate variables constituted the indicator for syndromic surveillance data (4). These state-level variables were inpatient admissions, outpatient visits, and emergency department (ED) visits attributed to COVID-19–like illness (variables 1–3); inpatient admissions, outpatient visits, and ED visits attributed to COVID-19 diagnostic codes (variables 4–6); and ED visits attributed to influenza-like illness (variable 7).

The case count indicator was assessed as a composite of the number of new COVID-19 cases per 100,000 population reported to KDPH during the preceding 2 weeks (incidence) and the slope of the 7-day moving average (incidence trend). State-level incidence was categorized as low (≤10 per 100,000 population), moderate (>10–49.99), moderately high (≥50–100), and high (>100). The slope of the 7-day moving average was categorized as decreasing (≥4 days with slope <0) or increasing (≥4 days with slope ≥0).

Similarly, the COVID-19–associated death indicator was a composite of COVID-19-associated mortality per 100,000 in the preceding 2 weeks and the slope of the 7-day moving average. The state-level mortality rate was categorized as low (≤1.5 per 100,000), moderate (>1.5–2.99), moderately high (≥3–5), and high (>5). As with cases, the slope of the 7-day moving average was categorized as decreasing (≥4 days with slope <0) or increasing (≥4 days with slope ≥0).

The health care capacity indicator was a composite measure that included 1) state-level hospital utilization as the percentage of intensive care unit beds in use and the percentage of ventilators in use as reported daily by Kentucky health care facilities to WebEOC (https://www.juvare.com/webeoc/external icon), an emergency management software application used by the KDPH Public Health Preparedness Branch, and 2) the supply of personal protective equipment as measured by state-level N95 respirator availability, which is based on information collected by KDPH in a state-level supply database. Finally, the contact tracing capacity indicator was measured as the daily percentage of contact tracing teams deployed to each of the 16 public health regions in Kentucky.

Each of the five indicators was scored using a 3-point scale (3 = excellent, 2 = moderate, 1 = poor) (Supplementary Table, https://stacks.cdc.gov/view/cdc/91982). A daily state-level composite COVID-19 status was determined by the number of individual indicators that were excellent. Each indicator was weighted equally and accounted for 20% of the composite status. This daily composite COVID-19 status was described by a user-friendly, descending 5-point rating system developed around reopening recommendations (5 = excellent [reopen/remain open]; 4 = good [monitor, continue reopening/remain open], 3 = moderate [caution, enhance monitoring], 2 = fair [increase mitigation], 1 or 0 = poor [reopening risky, slow reopening or close]). The daily IMR included the five indicators, the composite state-level COVID-19 status, and data to support the score for each indicator. County-level incidence hotspot maps were compiled in the IMR to help focus investigation efforts on hotspots as they were identified.

The mean scores for each indicator during May 19–July 15, 2020, were calculated by summing the products of the scores multiplied by the number of days with that score and dividing by the total number of days assessed. The same method was used to calculate means for the IMR composite COVID-19 status.

KDPH reported 12,742 incident COVID-19 cases and 299 COVID-19–related deaths during May 19–July 15, 2020; 5,705 (44.8%) cases occurred in males, and the median age was 41 years (range = 0–107 years). During this period, the mean COVID-19 status was 2.5 (fair to moderate) (range = 2–4) (Figure). The composite status was 4 (good) for 19 days (38.7%) and 3 (moderate) for 22 days (44.8%). Eight days were rated as 2 (fair); five of these occurred after June 29. No days were rated as 5 (excellent), 1 (poor), or 0 (poor). During May 19–June 16, the mean state-level composite status was 3 (moderate); during June 17–July 15, the mean composite status was 2.5 (fair to moderate).

During May 19–July 15, 2020, the mean score for syndromic surveillance data was 2.0 (moderate) (range = 1–3), with 20 consecutive days of excellent during May 19–June 12, followed by periods of nonconsecutive days where the score was excellent (17 days), moderate (6 days), and poor (6 days),

with scores of poor on three consecutive days during July 13–July 15 (Table). The mean score for the case count indicator was 2.5 (poor to moderate) (range = 1–3), with scores of poor on 22 consecutive days from June 20 to July 15. Mean death indicator was 2.5 (moderate to excellent) (range = 2–3). Death indicator score changes most frequently resulted in a change in the composite COVID-19 status (13 instances). Mean health care capacity was 3.0 (excellent) (range = 3), remaining unchanged throughout the period. Mean contact tracing capacity was 2.0 (moderate) (range = 1–3). As of June 2, contact tracing capacity increased from 0% to 100% when all 16 Regional Epi Contact Tracing Teams were deployed to assigned regions and available to conduct case and contact investigations.

Selected Example of IMR Use

On July 7, 2020, the COVID-19 status score in Kentucky was 3 (moderate), prompting additional review of county-level incidence rate maps included in the IMR by KDPH epidemiologists. A suspected hotspot (defined by KDPH as a county with a 7-day average daily incidence rate of >25 cases per 100,000 population) was identified in Bell County, a county that had had a low incidence until that time. The state epidemiologist contacted the regional epidemiologist to confirm that case investigations were underway. Case investigations revealed four specific clusters but did not indicate increased community transmission. The regional epidemiologist reported that appropriate contact tracing and quarantine measures had occurred within 12 hours of notification, and, because additional state-level public health action was not warranted, resources could be directed elsewhere.

Discussion

Kentucky's IMR and composite state-level COVID-19 status scores were produced to facilitate decisions regarding reopening and ongoing COVID-19 response decision-making among various stakeholders. The IMR is a tool that combines multiple data elements to systematically assess reopening efforts in the state as measured by a daily composite state-level status score. Kentucky's COVID-19 status is reported Monday through Saturday to approximately 90 stakeholders within and outside state government, including the Kentucky Governor's Office and local health department directors. Officials reported monitoring the status daily as a plain language summary of multiple critical indicators to describe the current COVID-19 hazard status in Kentucky. Local health departments also reported COVID-19 status monitoring to track statewide status and maintain vigilance for worsening conditions to inform their local decision-making. Reports such as the IMR, geared toward a broader audience of decision-makers, are important tools for informing and guiding public health policy as the COVID-19 pandemic continues.

During May 19–July 15, the Kentucky composite COVID-19 status worsened. During this period, the COVID-19 status was 3 (good: recommend monitoring) or 2 (moderate: recommend caution) 83% of the time. In certain instances, the composite COVID-19 status was moderate or good despite increasing incidence, which was attributed to all indicators receiving equal weight in the composite status scoring system. However, more recent IMR data indicate declining ratings, with the majority of days having a status of fair (fair: recommend increased mitigation efforts) occurring during June 17–July 15. In Kentucky, incidence has continued to increase, death rates have fluctuated, and syndromic surveillance data have demonstrated increases in ED visits and hospitalizations attributed to COVID-19–like illness and COVID-19. These results are consistent with identified hotspot counties and regions and increasing transmission statewide (1). Timely dissemination of easily understood surveillance data are critical to a rapid and effective public health response (5). The IMR has supported implementation of mitigation efforts to reduce transmission, including the July 9, 2020, executive order mandating face coverings in certain settings.**

The findings in this report are subject to at least five limitations. First, changes in data reporting or health care utilization might influence interpretation of the five indicators (e.g., increased use of telehealth) (6). Second, health care capacity might be affected by unaccounted factors such as the number of patients per nurse in intensive care units. Third, after implementation of the IMR, modifications were made to improve the scoring methods for cases, deaths, and syndromic surveillance data, which might affect comparability over time. Fourth, additional updates might be needed, including a more detailed assessment of levels for contact tracing capacity†† that includes turnaround time for test results or additional indicators, as response needs change. Finally, because the composite score was derived in

consultation with multiple subject matter experts across disciplines, a field assessment is needed to validate the scoring system.

Jurisdictions such as state and local health departments might benefit from use of IMRs to guide decision-making for continued COVID-19 mitigation and response. Data sources included in Kentucky's IMR are publicly available, data are analyzed with familiar software, and a standardized method is used to compile the report, suggesting IMR might easily be adopted by other jurisdictions.
https://www.cdc.gov/mmwr/volumes/69/wr/mm6934e3.htm?s_cid=mm6934e3_e&deliveryName=USCDC_921-DM36100

Study

First review of SARS-CoV-2 and COVID-19 infection models aims to fast track research
Source: Medical Xpress
Unique ID: 1007696686

An international collaboration between leading respiratory scientists, immunologists and clinicians, led by Centenary UTS Center for Inflammation, has completed the first comprehensive review of all relevant animal and cellular models of SARS-CoV-2 infection and COVID-19.
The review, published in Mucosal Immunology, aims to provide a head-to-head comparison of existing disease models, including in the background of predisposing chronic diseases, and discusses the pre-clinical pipeline for the testing of new and targeted preventions and treatments for COVID-19 patients.
The researchers say that clinical trials have been hampered by the lack of this type of information derived from fundamental research.
Lead author, Dr. Matt Johansen from Centenary UTS Center for Inflammation, said that everyone understands COVID-19 is causing a major "once-in-a-century global pandemic" and that there is a race to develop vaccines and identify the most effective treatments.
"Using representative animal models of SARS-CoV-2 infection, including in the background of chronic diseases such as obesity and diabetes, with validation of findings in primary human cells and tissues is the most efficient strategy," Dr. Johansen said
"By discussing all the available models and their pro's and con's, this will enable other readers to make informed decisions about the advantages of each model and the suitability to their applications," he said.
Among the key points of the review are that the clearest predictor of mortality is age, with the case fatality rate rising dramatically over 60 years of age. Other predisposing factors for heightened mortality are being male, social deprivation, and chronic disease particularly chronic obstructive pulmonary disease (COPD), cardiovascular disease (CVD), obesity and diabetes.
Director of the Centenary UTS Center for Inflammation and senior author, Professor Phil Hansbro said
"Understanding the complex interactions between people with underlying diseases is critical to finding the most effective treatments for those susceptible individuals. A key issue is why some individuals progress to more severe lower respiratory disease but others do not, and currently scientists aren't really sure why. Within the Center for Inflammation, one of the things we are trying to do is use cellular and animal models to comprehensively decipher why some people get more severe disease than others."
More information: Johansen et al., Mucosal Immunology DOI: 10.1038/s41385-020-00340
The study: https://www.nature.com/articles/s41385-020-00340-z
https://medicalxpress.com/news/2020-08-sars-cov-covid-infection-aims-fast.html

United Kingdom (Study)

Treating COVID-19 may lead to increased antibiotic resistance, UK study finds: The Tribune India
Source: Tribune India
Unique ID: 1007703439

The use of antibiotics in people with COVID-19 could lead to raised levels of the drugs within rivers or coastal waters which may in turn result in an increase in antimicrobial resistance, according to a UK study.
Patients hospitalised due to the novel coronavirus infection are being given a combination of medications to prevent possible secondary bacterial infections, noted the researchers at the University of Plymouth in the UK.

The study, published in the Journal of Antimicrobial Chemotherapy, suggests their increased use during the pandemic could be placing an additional burden on waste water treatment works.
Scientists noted that this could lead to raised levels of antibiotics within rivers or coastal waters which may in turn result in an increase in antimicrobial resistance (AMR), where bacteria become resistant to the action of antibiotics.
This would be particularly acute in receiving waters from waste water treatment works serving large hospitals, or emergency hospitals, where there is a concentration of COVID-19 patients, they said.
The findings are based on reports that up to 95 per cent of COVID-19 inpatients are being prescribed antibiotics as part of their treatment, and concerns that such a large-scale drug administration could have wider environmental implications, according to the researchers.
"COVID-19 has had an impact on almost every aspect of our lives. But this study shows its legacy could be felt long after the current pandemic has been brought under control," said Sean Comber, Professor of Environmental Chemistry in Plymouth.
"From our previous research, we know that significant quantities of commonly prescribed drugs do pass through treatment works and into our water courses.
"By developing a greater understanding of their effects, we can potentially inform future decisions on prescribing during pandemics, but also on the location of emergency hospitals and wider drug and waste management," said Comber.
The COVID-19 guidance issued by the National Institute for Health and Care Excellence (NICE) suggests patients with COVID-19 should be treated with doxycycline and either amoxicillin or a combination of other medications if a bacterial infection is suspected, but to withhold or stop antibiotics if a bacterial infection is unlikely, the researchers said.
"Common with other hospitalised patients in the UK, and other countries, the majority of our patients with COVID symptoms were prescribed antibiotics because it is very difficult to know whether a patient presenting with symptoms of COVID has an overlying bacterial infection or not," Neil Powell, Consultant Pharmacist at the Royal Cornwall Hospital said.
"We did a lot of work to try and identify those patients who were unlikely to have a bacterial infection complicating their viral COVID infections in an attempt to reduce the amount of antibiotic exposure to our patients and consequently the environment," said Powell.
This research combined patient numbers for UK emergency hospitals set up temporarily around the country with waste water treatment work capacity and available river water dilution serving the emergency hospital and associated town. PTI
The study: https://academic.oup.com/jac/advance-article/doi/10.1093/jac/dkaa350/5896238?searchresult=1
https://www.tribuneindia.com/news/world/treating-covid-19-may-lead-to-increased-antibiotic-resistance-uk-study-finds-131228

Study
SARS-CoV-2 (COVID-19) serology: implications for clinical practice, laboratory medicine and public health
Source: CMAJ
Unique ID: 1007703495

Multiple commercial assays for severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) antibodies have been approved for use as serological tests by Health Canada, with some manufacturers claiming about 95% sensitivity and about 99.5% specificity.
The detectable presence of SARS-CoV-2 antibodies has not yet been proven to confer meaningful or durable immunity to reinfection. Thus, serological testing should not be used to guide individual decisions about personal or occupational exposures, use of personal protective equipment and physical distancing.
At present, clinical indications for serologic testing in health care settings are limited, and SARS-CoV-2 serological testing has no role in routine clinical care.
Serological testing at this time should be focused on research concerning immunity to SARS-CoV-2 and population-level studies to inform public health responses to the Canadian coronavirus disease 2019 (COVID-19) epidemic.
Clinical presentation in persons infected with severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) ranges from asymptomatic to the life-threatening respiratory distress that can occur with

coronavirus disease 2019 (COVID-19).1 Diagnosis of acute or new cases of SARS-CoV-2 infection at present relies upon molecular-based detection of viral RNA in upper or lower respiratory tract specimens, typically within 2–7 days after exposure. 2,3 In this period, active viral shedding occurs, and individuals who are infected can transmit the virus to others. Although viral RNA may still be detected in respiratory and stool specimens of some people for many weeks after they have recovered, this does not appear to pose a transmission risk.4,5 Serological testing involves detection of antibodies specific to SARS-CoV-2 infection in blood, serum or plasma. The role of serology is limited in the diagnosis of acute COVID-19 because it usually takes a minimum of 7–14 days or more after symptom onset to develop a reliable and measurable SARS-CoV-2 antibody response.6,7 However, interest has arisen in the potential application of serological testing for purposes as wide-ranging as authorization of international travel, stratification of reinfection risk in workplaces and the reduction of public anxiety to facilitate resumption of economic activity.8,9 We review what is currently known regarding SARS-CoV-2 serological testing — a body of basic and clinical science that is still evolving (Box 1); consider its implications for clinical care, the development of appropriate services and test interpretation; and advise on appropriate use of serological testing for clinical and public health purposes.

Box 1:

Evidence used in this review

We searched PubMed for articles published from Jan. 1, 2020, to June 30, 2020, in English on severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), immune response, diagnostics and serology with the following medical subject headings terms: coronavirus disease 2019 (COVID-19), antibodies, serology, serologic test, diagnosis, point-of-care testing, immunoglobulin, immunoassay, enzyme-linked immunosorbent assay, immunity, humoral, cross-reaction, neutralization assay and multisystem inflammatory syndrome in children.

We identified additional articles through weekly searches of the LitCOVID database under the categories of “mechanism” and “diagnosis” from Mar. 15, 2020, to June 30, 2020.

We also identified relevant studies by consulting with Canadian experts and searching COVID-19 and SARS-CoV-2 preprints in medRxiv and bioRxiv. In addition, we regularly consulted the relevant guidelines and resources from international organizations including the World Health Organization, Health Canada, Public Health Agency of Canada, US Food and Drug Administration, US Centers for Disease Control and Prevention and Infectious Diseases Society of America, along with guidance generated by the participating Canadian organizations.

What are the antibody responses to SARS-CoV-2?

The SARS-CoV-2 genome encodes 4 major structural proteins: surface or spike glycoprotein (S), envelope, membrane and nucleocapsid (N).10 Currently available serological tests detect antibodies to various epitopes on the S or N structural proteins.

The surface spikes are the “corona” observed on electron micrographs of coronaviruses; they play a critical role in viral pathogenesis, and thus studies have focused on antibodies to specific parts of the S glycoprotein. Each spike protein consists of 2 subunits: the S1 subunit binds to angiotensin-converting-enzyme-2 receptors on cells in multiple organs via its receptor-binding domain; and the S2 subunit mediates fusion between the virus and the cell membrane of the host. The S protein receptor-binding domain is an important vaccine and therapeutic target because a subset of antibodies targeting the receptor-binding domain appear to block viral binding and neutralize viral infectivity in vitro.11,12

Figure 1 shows a schematic of the pattern of antibody response to SARS-CoV-2 infection. Although immunoglobulin M (IgM) and immunoglobulin A (IgA) antibodies are widely regarded to appear early during most acute viral infections, it is uncertain whether this occurs with SARS-CoV-2 infection.13 With COVID-19, similar to SARS and Middle East respiratory syndrome (MERS), both IgM and IgG antibodies appear at detectable levels concomitantly around 2–3 weeks after symptom onset or exposure.6,7,14,15 However, in some mild and asymptomatic cases, antibodies may not be detected at all, at least within the time scale as reported in some recent studies (< 46 d).15–17

Figure 1:

Description and projection for the kinetics of antibody response to infection caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). With only a few months of experience to date, projections into years, although based on experience with other coronaviruses, must be regarded as speculative. Data on immunoglobulin A (IgA) responses are still emerging. Note: IgM = immunoglobulin M, IgG = immunoglobulin G.

Commercially available assays target 1 or more of the 3 antibody isotypes (i.e., IgA, IgM or IgG) or total

immunoglobulin. The 2 main types of commercial assays are described in Box 2. An updated list of approved clinical diagnostic tests for SARS-CoV-2 antibodies is available through the Health Canada website.20 Although several laboratory-based immunoassays have been approved, there is insufficient evidence to support use of point-of-care testing devices for SARS-CoV-2 serology (see Box 2 for a description of these kits) and, at the time of writing, no SARS-CoV-2 serological point-of-care tests have received Health Canada approval for use.19 Effective use and interpretation of point-of-care tests will require consistent correlation of their results with approved laboratory-based tests, as well as secure supplies of kits that have consistent quality-assured performance.

Box 2:

Approaches to detecting antibodies for severe acute respiratory syndrome coronavirus 2

Testing matrices

The tests listed here are typically used to detect antibody in blood sources.

Laboratory-based immunoassays and specialized neutralization tests rely on blood matrices (serum or plasma). Point-of-care tests use blood from finger pricks (or heel pricks as applicable).

Finger pricks can also be used to create dried blood spots that can be conveniently transported for laboratory-based immunoassays. Early results for dried blood spot testing results are promising, but insufficient evidence currently exists to support dried blood spot testing for severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). Comprehensive validation against results of tests based on venipuncture blood draws is ongoing worldwide.

The consistency and interpretation of antibody detection from sources other than blood, such as saliva, is still uncertain.

Types of tests

Laboratory-based immunoassays involve plate-based tests (enzyme-linked immunosorbent assays [ELISAs]) or chemiluminescent immunoassays (CLIAs) on automated high-throughput instruments. With most immunoassays, the signal produced by the assay correlates with the level of antibody detected in the patient's sample. Cross-reactions with other coronaviruses are uncommon but do occur. For laboratory-based tests, venipuncture and transport to the testing laboratory is typically required. Commercially available immunoassays are semiquantitative (i.e., use a cut-off to determine reactive [positive] versus nonreactive [negative] results).

Rapid test cassettes or lateral flow tests are often referred to as point-of-care tests. These tests are typically easy to use, require only a small amount of blood matrix (e.g., from a finger prick), do not require specialized equipment or expertise and have rapid turnaround times (10–15 min).18 Most can detect immunoglobulin M and immunoglobulin G separately or in combination. However, such assays are qualitative, performance varies substantially and none have been approved by Health Canada to date. There is no current indicated use for point-of-care tests.19

Neutralization tests are considered the gold standard for antibody detection because of their high sensitivity and specificity but are not widely available. Laboratory-based and point-of-care immunoassays are "binding antibody assays" (i.e., they detect binding of antibody from patient blood to SARS-CoV-2 antigens). In contrast, neutralization assays measure antibody-mediated inhibition of viral entry into cells in vitro. These tests require specialized expertise and laboratory containment facilities (containment level 3 for SARS-CoV-2), and have limited throughput. However, pseudovirus-based neutralization assays can detect neutralizing antibody to SARS-CoV-2 using engineered noninfectious virus strains and can be performed in containment level 2 laboratories.

What considerations affect the interpretation of SARS-CoV-2 serological tests?

Sensitivity, specificity and disease prevalence

The discriminative potential of a test is assessed by its clinical sensitivity and specificity. The sensitivity is a measure of the test's ability to detect antibodies in matrices such as blood, serum or plasma of patients with SARS-CoV-2 infection (i.e., a true positive result). Specificity, on the other hand, is a measure of the test's ability to correctly identify the absence of antibodies in an individual who has not been infected (i.e., a true negative result). At present, Health Canada recommends a target specificity of 98% or higher, and the minimum required for consideration of approval is 95%.21 Sensitivity and specificity are inherent elements of test performance, but the predictive value of any test depends on the prevalence of the infection within a given population. For example, if the disease prevalence in the population is only 1%, even a highly specific diagnostic test (99% specificity or only 1 false-positive result out of 100 patient results) would be predicted to lead to roughly 1 false-positive result for every true positive result.9,22

In Canada, the baseline prevalence of SARS-CoV-2 infection as of July 9, 2020, was estimated at 0.3%,

based on 106 805 confirmed cases of COVID-19.23 However, the number of Canadians infected is likely many times higher than indicated by the number of confirmed cases for several reasons. Current nucleic acid testing has moderate sensitivity, and tests performed in patients with infection may have returned a negative result in some cases. Furthermore, testing indications and coverage have varied over time and by region, and some people with SARS-CoV-2 infection do not show symptoms; therefore, many people who were infected may not have requested or qualified for testing. The prevalence of asymptomatic infection measured in other jurisdictions ranges widely depending on the target population tested, geographic location and age of the patients.14,24–27

We posit that the prevalence in most Canadian locations is likely low enough that very small reductions in test specificity will drive up the proportion of false positives that are reported. This can be corrected post hoc in population-level estimates of the prevalence of SARS-CoV-2 infections but creates problems in applying serology results at the individual level — a challenge compounded by biological uncertainties.

Correlation of SARS-CoV-2 antibodies with virus neutralization

Commercially available serological assays detect and semiquantitatively determine the amount of antibody binding to various SARS-CoV-2 antigens. (Quantitation may be valuable when a rising level suggests recent infection and associated positive seroconversion.) Depending on the antigen target used, the bound antibodies detected may correlate with detection of neutralizing antibodies that, as noted above, are antibodies that block viral binding and neutralize viral infection in vitro (hence the term, neutralizing antibodies). Neutralizing antibodies may provide a better indication of immunity, but there is ongoing debate as to whether neutralizing antibodies are the primary mechanism of immune protection against SARS-CoV-2 infection.22,28–30 Instead, a cell-mediated immune response, known to be a key element in viral control for SARS-CoV-1 and MERS-CoV,31–33 may be more relevant. Therefore, further studies are required to evaluate the correlation of commercial assays for SARS-CoV-2 antibodies with neutralization capacity, the potential for antibody-dependent cell-mediated immune responses and seroprotection.34,35

Duration of antibody response

In mild and asymptomatic cases, antibody responses may not consistently develop or reach levels sufficient to be detectable by antibody tests.36 Research continues on the extent and duration of antibody responses in the context of infections ranging from asymptomatic to severe, and across different populations, ages, genetic backgrounds and comorbidities. Antibody levels to coronaviruses diminish over time.37,38 Persistence of measurable neutralizing antibodies for at least a year has been reported in patients who have recovered from MERS-CoV and SARS-CoV-1 illness, despite declines in titres.39,40 However, studies evaluating the immunological response to SARS-CoV-2 have suggested that a substantial proportion of asymptomatic patients are IgG negative during the convalescent phase of infection,36 and evidence is emerging that neutralizing antibodies to SARS-CoV-2 decrease in convalescent patients within 2–3 months after infection.36,41 In contrast, multiyear persistence of memory T-cell responses has been reported for both MERS-CoV and SARS-CoV-1,32,33 which suggests that waning antibody titres may not portend loss of immunity. The relation between measured antibodies and durability of protection therefore remains unclear.

Serological test positivity and infectiousness

A positive antibody result cannot be equated to a noninfectious state. Particularly for non-neutralizing antibodies, the presence of antibodies does not preclude active viral shedding through respiratory secretions.42,43 Thus, factors such as symptom onset, symptom resolution and days since onset or resolution should guide advice on infectivity.

What are the implications for practitioners and policy-makers?

Consider test performance

Laboratories should strive to implement SARS-CoV-2 serologic tests that have manufacturer-claimed sensitivity of 95% or more and specificity of 99.5% or more based on specimens obtained 14 days or more after onset of symptoms or a positive result for an RNA test. Serological testing in a real-world setting is necessary to confirm that the tests perform as claimed. To maximize specificity in populations with low pretest probability of disease (i.e., low community prevalence), it may be necessary to use orthogonal testing so that those patients with a positive result for 1 test are routinely retested with a second test to confirm the result.

When interpreting serological results, laboratories may need to consider time since onset of symptoms or time since exposure to SARS-CoV-2, if they are known. Clinical laboratories and ordering physicians also need to consider the pretest probability of a positive or negative result given the testing location and

patient population (e.g., higher likelihood of a positive result in a hospital setting versus an outpatient seroprevalence screen).

Additional research studies of the performance of serology tests will be required with individuals in different age groups, at different times after exposure and to determine duration of detectable antibody after infection.

When and who to test

At present, use of SARS-CoV-2 serological testing should focus on informing the public health response to the Canadian epidemic rather than on estimating any individual's current or future susceptibility to infection. Serological testing should be reserved primarily for clinical research and population-level assessments of the prevalence of past infection with SARS-CoV-2.

As outlined previously, serological testing is neither adequate nor appropriate for use as the primary tool for diagnosis of infection or confirmation of noninfectivity. In other words, the current state of knowledge would not support having broadly available SARS-CoV-2 antibody tests. In the absence of a positive RNA test or evidence of seroconversion (as measured by a rising antibody level over time), serology should not be used to diagnose acute SARS-CoV-2 infection. On rare occasions, serological testing may be useful as an adjunct diagnostic test when molecular testing is repeatedly negative but clinical suspicion is high and symptoms persist.7,13,44–46 In such cases, the time since exposure (if known) or since symptom onset should be considered as seropositivity occurs only 7–14 or more days after symptom onset.

Serological testing may assist in the assessment of patients who present with atypical clinical manifestations such as inflammatory syndromes (e.g., multisystem inflammatory disorder in children and adolescents, COVID toes or unexplained thrombosis). 47,48 Box 3 discusses antibody testing in the context of multi-system inflammatory syndrome in children and adolescents, based on limited current evidence.13,49–54

Box 3:

Use of serology in suspected multisystem inflammatory syndrome in children and adolescents temporally related to coronavirus disease 2019

Case definitions for multisystem inflammatory syndrome in children (MIS-C) have been outlined by several organizations including the World Health Organization, Centers for Disease Control and Prevention, Royal College of Paediatrics and Child Health in the United Kingdom and the Canadian Paediatric Society,48–51 and include the use of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) serology.

Case series have reported high percentages of patients with positive results for SARS-CoV-2 serology testing, with lower rates of positivity for throat swabs and stool samples on polymerase chain reaction testing.52–54

Several Canadian provinces are in the process of adopting these case criteria and have identified MIS-C as a notifiable disease, which requires case reporting to local public health authorities.55–57

Despite the inclusion of serological testing in the MIS-C case definitions, the performance of serological tests in children and in patients with MIS-C remains poorly characterized.

More studies are needed, including validation studies of SARS-CoV-2 antibody assays in children and in suspected MIS-C.

How to report the results of serological tests

A recent United Kingdom report58 showed variability in the clinical interpretation of SARS-CoV-2 serology results especially with respect to inferring immunity and the infectious status of individuals. Consistent messaging and avoiding misinterpretation of serology test results depends on harmonized reporting across laboratories combined with proactive communication by laboratory staff, medical microbiologists and infectious disease practitioners. Box 4 provides suggestions for some interpretive wording for interim use by clinical and public health laboratories for reporting SARS-CoV-2 serology.

Box 4:

Suggestions for the reporting of test results by clinical laboratories (include as appended comments)

Reporting positive/reactive results

Presence of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) antibody indicates current or previous infection. False-positive results may occur because of cross-reacting antibody or other causes. Currently, it is unknown whether antibodies indicate protective immunity and for how long. Presence of SARS-CoV-2 antibody should not be used to infer the infectious status of an individual or immunity.

Reporting negative/nonreactive results

Absence of SARS-CoV-2 antibody should not be used to infer the infectious status of an individual or immunity.

Reporting inconclusive/indeterminate results

An inconclusive result neither rules in nor rules out previous SARS-CoV-2 infection.

Potential uses of SARS-CoV-2 serology from a public health and research perspective

At present, based on the evidence we have considered, serological test results should not be used to guide patient-level decision-making on measures for infection control, including the use of personal protective equipment, timing of return to work or local physical-distancing policies.

However, seroprevalence studies of SARS-CoV-2 may be used to estimate rates of exposure and the geographic transmission of the virus within communities and populations, as well as within facilities, workplaces and households over time. This information may be used by epidemic modellers to help guide public health policies, by vaccine program planners to help set priorities and by front-line public health practitioners to determine which communities or congregate settings show minimal past exposure to SARS-CoV-2 and, therefore, may be at higher risk of rapid spread. At the interface of clinical and public health applications, while the diagnostic role of antibody testing is strictly adjunctive, seroprevalence studies may be useful in contact tracing when RNA tests are indeterminate.

Longitudinal seroprevalence studies may provide information on the nature and durability of antibody responses in patients with confirmed infection. The aim of such studies may be to determine if previous COVID-19 infection and seropositivity is associated with protection from subsequent reinfection; specialized serology tests, such as neutralization assays, will be particularly useful in this context. Likewise, serological screening of donated blood may reveal which blood samples contain adequate levels of neutralizing antibody to allow for their use in randomized controlled trials that investigate the effectiveness of pooled convalescent plasma treatment for patients with severe COVID-19.

Studies of vaccine effectiveness for SARS-CoV-2 may use serological testing results as a marker of immunity in cohort studies that explore correlates of protection and reinfection risk.

Conclusion

Given measurement and interpretive uncertainties of the tests, the clinical indications for SARS-CoV-2 serological testing are limited, with only a few exceptions. The tests will be useful in diverse research contexts and for policy-making in public health but should not be rolled out for general clinical use based on current evidence. Careful interpretation and reporting of test results is important. The current state of knowledge does not permit definitive inferences about immunity and likelihood of reinfection based on the results of serological testing, and testing cannot, therefore, be used to inform individual-level decisions on changing occupational exposure, the use of personal protective equipment, recommendations on physical distancing by members of the public or advice on international travel.

Footnotes

Competing interests: Paul Van Caeseele is the director of the Cadham Provincial Public Health Laboratory (Manitoba Health). Mel Krajden has received grants paid to his institution from Roche, Hologica and Siemens. No other competing interests were declared. For competing interests of members of the 5 authorship groups, see Appendix 1, available at https://www.cmaj.ca/lookup/doi/10.1503/cmaj.201588/tab-related-content.

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https://www.cmaj.ca/content/192/34/E973

Domestic Events of Interest

Canada
Torontonian contracts West Nile virus; first resident infected in 2020
Source: www.cp24.com
Unique ID: 1007704537

A Torontonian has contracted the West Nile virus becoming the first person to test positive for the infection this year in the city.
In a press release, Toronto Public Health (TPH) said an adult resident contracted the virus.
West Nile virus is an infection transmitted to people through the bite of an infected mosquito.
“While the likelihood of becoming infected with West Nile virus is low in our city, now is a good time to remind residents of simple actions they can take when enjoying the outdoors to further minimize the potential risk,” Toronto’s Medical Officer of Health Dr. Eileen de Villa said in the press release.
“These actions include wearing insect repellent and light-coloured clothing, long pants and long-sleeved shirts to prevent getting bitten by an infected mosquito.”
West Nile virus symptoms usually develop between two and 14 days after a person is bitten by an infected mosquito.
Symptoms may include fever, headache, nausea, vomiting, body aches, skin rash and swollen lymph glands.
In 2019, TPH reported nine laboratory-confirmed human cases of West Nile virus and 10 positive mosquito tests.
https://www.cp24.com/news/torontonian-contracts-west-nile-virus-first-resident-infected-in-2020-1.5078266

Canada
B.C. marks 3rd straight month with more than 170 overdose deaths
ID: 1007706507
Source: CBC
4 hours ago

'Sustained increase' of illicit drug toxicity deaths detected since pandemic's 1st peak: BC Coroners Service

British Columbia has nearly matched its monthly record for deadly illicit drug overdoses, with 175 deaths during the month of July.

The BC Coroners Service saw 177 fatalities in June, which surpassed the previous high of 174 deaths in May. The service initially reported 175 deaths for June but updated the number on Tuesday.

A statement said the service has detected "a sustained increase" of illicit drug toxicity deaths since the first peak of the pandemic in March, and it's now confirming five straight months with more than 100 such deaths.

Provincial Health Officer Dr. Bonnie Henry, who has led the response to the province's concurrent health crises of overdoses and the novel coronavirus, said the pandemic has led to more people using and dying alone.

"It's dismaying to know that all of the work that we have done around responding to COVID-19 has been a contributing factor to the numbers of deaths that we're seeing from the toxic drug supply here in British Columbia and across Canada," she said at a news conference Tuesday.

e using illicit substances, whether it be fentanyl, cocaine or methamphetamine, [use] only in the presence of someone else," she said.

Just under 80 per cent of people who have died of an overdose in B.C. this year were men. Eighty-five per cent of the deaths happened indoors. No deaths have been reported at supervised injection sites or drug overdose prevention sites.

Fight against overdose crisis must do more than target prescription opioids, study says

There was a 93 per cent increase in the number of Indigenous people dying of an illicit overdose from January to May. Indigenous people make up 3.4 per cent of the population in B.C., but accounted for 16 per cent of overdoses in that time period — a rate five times higher than other B.C. residents.

Fentanyl remains the most significant driver in the high number of deaths across all demographics. Opioids were found among all those who died, along with cocaine and the stimulants methamphetamine and amphetamine.

Safe supply, decriminalization crucial: officials

Medical leaders, physicians and advocates speaking Tuesday all called for the same measures to save lives. They pushed for decriminalization, a safe supply for users and erasure of the stigma surrounding substance use.

"Given the toxicity of the drug supply, now is the time for all of us to demonstrate compassion and empathy," said Lapointe.

Lapointe and Henry described the current toxicity of the supply as "extreme," made more toxic than ever before due to the COVID-19 pandemic.

Officials have said border closures during the pandemic have disrupted the usual flow of fentanyl into B.C., leading the supply to be replaced by an unstable and unpredictable substances produced locally by those who might be inexperienced.

"The quality control has never obviously been there with fentanyl, but it's that much worse now, when drug traffickers and dealers are throwing the kitchen sink and whatever they have to make the product," said Dr. Dan Kalla, head of emergency medicine at St. Paul's Hospital in downtown Vancouver.

Kalla also urged officials to act on decriminalization and safe supply.

"I promise you, you're not stopping anybody by keeping it criminal and prosecuting the people who use as criminals rather than people with medical conditions and addictions issues," Kalla said.

Last month, B.C. Premier John Horgan called for a national plan to help stem the overdose crisis as he backed the Canadian Association of Chiefs of Police in calling for the possession of small amounts of illegal drugs to be decriminalized.

B.C. adds services to help people threatened by tainted illicit drug supply

More people are dying of illicit drug overdoses in B.C. than due to homicides, motor vehicle incidents, suicides and COVID-19 combined.

About 5,000 people in B.C. have died of illicit-drug overdoses since the public health emergency was declared in 2016.

Judy Darcy, B.C.'s Minister of Mental Health and Addictions, said the province has escalated its response to the overdose crisis in an effort "to counter the effects of the pandemic."

"British Columbians showed the world what we could do when it came to COVID-19 ... We must do the same for the overdose public health emergency in this province and we must do it now," she said in a statement.

https://www.cbc.ca/news/canada/british-columbia/bc-overdose-numbers-july-2020-1.5698795

International Events of Interest

WHO

Global polio eradication initiative applauds WHO African region for wild polio-free certification
Support from national governments and global donors critical to the region's success against wild polio and must continue to achieve a polio-free world
Source: WHO

25 August 2020 News release
GENEVA
Today, the Africa Regional Certification Commission certified the WHO African Region as wild polio-free after four years without a case. With this historic milestone, five of the six WHO regions – representing over 90% of the world's population – are now free of the wild poliovirus, moving the world closer to achieving global polio eradication.
Only two countries worldwide continue to see wild poliovirus transmission: Pakistan and Afghanistan. The Global Polio Eradication Initiative (GPEI) congratulates the national governments of the 47 countries in the WHO African Region for today's achievement.
"Ending wild polio virus in Africa is one of the greatest public health achievements of our time and provides powerful inspiration for all of us to finish the job of eradicating polio globally," said WHO Director-General Dr Tedros Adhanom Ghebreyesus. "I thank and congratulate the governments, health workers, community volunteers, traditional and religious leaders and parents across the region who have worked together to kick wild polio out of Africa."
Strong leadership and innovation were instrumental in stopping the wild poliovirus in the region. Countries successfully coordinated their efforts to overcome major challenges to immunizing children, such as high levels of population movement, conflict and insecurity restricting access to health services, and the virus's ability to spread quickly and travel across borders.
In addition, the continued generosity and shared commitment of donors – including governments, the private sector, multilateral institutions and philanthropic organizations – to achieving a polio-free world helped build the infrastructure that enabled the African region to reach more children than ever before with polio vaccines and defeat wild polio.
"During a challenging year for global health, the certification of the African region as wild poliovirus-free is a sign of hope and progress that shows what can be accomplished through collaboration and perseverance," said Rotary International President Holger Knaack. "Since 1996, when Nelson Mandela

joined with Rotary, the Global Polio Eradication Initiative, and governments of the African region we've achieved something remarkable. Today's milestone tells us that polio eradication is possible, as long as the world remains committed to finishing the job. Let us work together to harness our collective energies to overcome the remaining challenges and fulfil our promise of a polio-free world."
The resources and expertise used to eliminate wild polio have significantly contributed to Africa's public health and outbreak response systems. The polio programme provides far-reaching health benefits to local communities, from supporting the African region's response to COVID-19 to bolstering routine immunization against other vaccine-preventable diseases.
While this is a remarkable milestone, we must not become complacent. Continued commitment to strengthening immunization and health systems in the African region is essential to protect progress against wild polio and to tackle the spread of type 2 circulating vaccine-derived poliovirus (cVDPV2), which is present in 16 countries in the region. Pockets of low immunity mean such strains continue to pose a threat and the risk is magnified by interruptions in vaccination due to COVID-19, which have left communities more vulnerable to cVDPV2 outbreaks.
The GPEI calls on countries and donors to remain vigilant against all forms of polio. Until every strain is eradicated worldwide, the incredible progress made against polio globally will be at risk.
The WHO African Region's success against wild polio has shown the world that progress against some of the biggest global health challenges is possible. The GPEI is grateful for every person, partner, donor and country who helped bring about this incredible achievement.

The Global Polio Eradication Initiative is a public-private partnership led by national governments with six core partners – the World Health Organization (WHO), Rotary International, the US Centers for Disease Control and Prevention (CDC), UNICEF, the Bill & Melinda Gates Foundation and Gavi, the Vaccine Alliance.
For information and multimedia content on the WHO African Region's efforts to eradicate wild polio, please visit africakicksoutwildpolio.com. For more information on the global effort to end polio, visit polioeradication.org.
https://www.who.int/news-room/detail/25-08-2020-global-polio-eradication-initiative-applauds-who-african-region-for-wild-polio-free-certification

Senegal
Yellow fever infects Senegal child
Source: WHO

Senegal has reported its first yellow fever case since early 2018, which involves a 5-year-old girl from an area with low vaccine coverage, the WHO's African regional office said in its weekly outbreaks and health emergencies report today.

The girl's symptoms began on Jun 24, and she was initially seen and treated by a traditional healer. She is from the Darou Marnane Ndia area of Touba, Senegal's second-largest city, which is located in the central part of the country.

When her illness persisted, she was treated at a health center, where a blood sample was obtained and tested as part of arbovirus syndromic surveillance at the Pasteur Institute in Dakar. Testing was delayed owing to the demands of the COVID-19 response.

The investigation found that the girl wasn't up to date on her immunizations. Active case searching didn't identify any other cases, and 10 children from the patient's home were vaccinated.

A larval survey of water sources near the patient home found mosquito infestation rates above 22%, and a high proportion were *Aedes aegypti*, a known carrier of the yellow fever virus. The WHO noted that the detection is Senegal's first since February 2018. WHO officials praised the action of Touba authorities, noting that continued follow-up is needed.
https://www.cidrap.umn.edu/news-perspective/2020/08/news-scan-aug-25-2020

https://apps.who.int/iris/bitstream/handle/10665/333969/OEW34-1723082020.pdf

DR Congo
Monkeypox in DRC rises by another 1,000 cases
ID: 1007706778
Source: outbreaknewstoday.com

The Democratic Republic of the Congo (DRC) saw another 1,000 total monkeypox cases in the past month, rising from 2,591 cases on July 5 to 3,567 on August 9, according to the World Health Organization.

The monkeypox death toll in DRC has also risen to 132 through Aug. 9.

WHO notes that one major challenge in the DRC to the current emergency include acquiring the required funding to respond to all the multiple ongoing outbreaks in the country, which include Ebola, COVID-19, cholera and others.

Monkeypox is a rare disease that occurs throughout remote parts of Central and West Africa, often near tropical rainforests. It is spread through contact with the monkeypox virus from an animal or human (alive or dead) or with materials contaminated with the virus.

Symptoms begin with fever, headache, muscle aches, swollen lymph nodes and exhaustion, and is followed by a rash. Patients are usually ill for 2-4 weeks. Monkeypox is fatal in as many as 10% of people who get it.

http://outbreaknewstoday.com/monkeypox-in-drc-rises-by-another-1000-cases-81864/

Researches, Policies and Guidelines

Study
12% of adults hospitalized for flu have acute heart problems, study finds
Source: CIDRAP

A study today in the *Annals of Internal Medicine* shows that acute cardiovascular events, including heart failure and ischemic heart disease, occur in almost 12% of adult patients hospitalized for influenza.
The study was based on more than 80,000 US patients whose outcomes were tracked via the US Influenza Hospitalization Surveillance Network during the 2010-11 through 2017-18 flu seasons.
Older age, tobacco use, underlying cardiovascular disease, diabetes, and renal disease were significantly associated with higher risk of cardiovascular events, the authors said. Among the 11.7% of patients with cardiovascular events, acute heart failure (6.2%) and acute ischemic heart disease (5.7%) were the most common. Adults vaccinated against flu were significantly less likely to suffer a cardiac event.
According to the authors, "Acute cardiovascular events are important contributors to influenza-related morbidity and mortality. Almost one third of patients with an acute cardiovascular event were admitted to the intensive care unit, and 7% (6% excluding those with cardiogenic shock) ultimately died during hospitalization."
In an accompanying commentary, Chandini Raina MacIntyre, PhD, said the study offers strong evidence for assessing all adult flu patients for cardiovascular health and vaccination status.
"Influenza may unmask undiagnosed cardiovascular disease and may exacerbate known disease," MacIntyre writes. "Cardiovascular disease is the leading cause of morbidity and mortality globally, so by preventing a proportion of acute cardiovascular events, influenza vaccination will have a substantial public health benefit and will likely be cost-beneficial."
The study is the latest in a string of research detailing the risk of heart attacks with flu, including a 2018 study that showed the risk of a heart attack increasing sixfold in the first 7 days of flu.
https://www.cidrap.umn.edu/news-perspective/2020/08/news-scan-aug-25-2020
Aug 25 *Ann Intern Med* study
Aug 25 *Ann Intern Med* commentary
Jan 25, 2018, CIDRAP News story "Study bolsters link between flu and heart attack"