GPHIN Daily Report for 2020-08-24

Special section on Coronavirus

Canada

Areas in Canada with cases of COVID-19 as of 23 August 2020 at 7:00 pm EDT

Source: Government of Canada

Province, territory or other	Number of confirmed cases	Number of active cases	Number of deaths
Canada	124,896	4,711	9,073
Newfoundland and Labrador	268	0	3
Prince Edward Island	44	4	0
Nova Scotia	1,080	7	65
New Brunswick	189	9	2
Quebec	61,673	1,251	5,740
Ontario	41,402	1,010	2,797
Manitoba	944	356	12
Saskatchewan	1,600	106	22
Alberta	12,748	1,144	230
British Columbia	4,915	824	202
Yukon	15	0	0
Northwest Territories	5	0	0
Nunavut	0	0	0
Repatriated travellers	13	0	0

A detailed <u>epidemiologic summary</u> 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

Statement from the Chief Public Health Officer of Canada on August 22, 2020

From: Public Health Agency of Canada

Statement

August 22, 2020 - Ottawa, ON - Public Health Agency of Canada

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

"There have been 124,372 cases of COVID-19 in Canada, including 9,064 deaths. 89% of people have now recovered. Labs across Canada have tested 5,034,059 people for COVID-19 to date, with about 2.5% of people testing positive overall. Over the last several weeks, national daily case counts have ranged from 350 to 500 cases, with an average of 380 cases being reported daily during the most recent seven days.

As public health authorities and Canadians continue with our collective effort to limit the spread of COVID-19, we are closely monitoring disease activity indicators, including daily case counts, number of cases hospitalised and the percentage of people testing positive in order to inform, adjust and adapt our actions as needed.

Average daily case counts range from 350 to 500 new cases reported daily and the number of hospitalisations and deaths remain low, indicating that we are currently keeping the infection rate to a manageable level and minimising severe illness and death due to COVID-19.

Another indicator we are keeping a close watch on is the average number of people tested daily and the percent positive for COVID-19. This gives us an indication of how widely we are casting the net of surveillance to capture cases and accurately trace where transmission is occurring.

Currently, laboratory testing is continuing at a high rate, with an average of 48,714 people tested per day, while we are maintaining a low percentage positive. The latter indicates that our surveillance remains very sensitive, testing many people detect the positive cases. Over the most recent seven days, the percentage of people who tested positive for COVID-19 was 0.8%, meaning that on average 125 people are being tested for every case we detect, as we continue to cast the surveillance net wide in an effort to find cases and stamp out transmission where it is occurring.

We all have a role to play in keeping the spread of COVID-19 under manageable control by keeping our number of contacts low and taking precautions to reduce the risk of infection and spreading to others. You can find additional information and guidance to increase your COVID-19 know how and help you make informed decisions to keep you, your family and our communities safer here." https://www.canada.ca/en/public-health/news/2020/08/statement-from-the-chief-public-health-officer-of-canada-on-august-22-2020.html

Canada

Statement from the Chief Public Health Officer of Canada on August 23, 2020 From: Public Health Agency of Canada

Statement

August 23, 2020 - Ottawa, ON - Public Health Agency of Canada

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

"There have been 124,629 cases of COVID-19 in Canada, including 9,071 deaths. 89% of people have now recovered. Labs across Canada have tested 5,076,734 people for COVID-19 to date. Over the past week, an average of over 48,700 people were tested daily, with 0.8% testing positive. Over the last

several weeks, national daily case counts have ranged from 350 to 500 cases, with an average 380 cases being reported daily during the most recent 7 days.

Together, we have worked hard to drive COVID-19 transmission rates down in Canada and our epidemiological data indicate that we are keeping spread under manageable control. As we continue to reopen our economic and social spaces, we can expect increases in cases and clusters as we've seen in recent weeks in jurisdictions across the country but we are continually improving our capacity to manage COVID-19 based on our own experience and the experience of other countries. Together, we can limit the size and impact of these resurgences.

At the same time, limiting the impact of COVID-19 means taking care of our broader health and wellbeing. This includes keeping up with routine medical appointments for essential preventative health services like vaccinations, cancer screening tests, and dental care, as well as the ongoing management of chronic diseases. Delaying essential medical visits can lead to bigger health problems down the road. Take care of yourself and encourage your loved ones to do the same – now is the perfect time to catch up on any appointments you may have missed during the initial epidemic wave.

Health care providers and the colleges and professional bodies that regulate and inform their practices have worked hard to increase the availability and quality of virtual care in Canada over the last several months and they have put measures and guidance in place to protect you and your loved ones during inperson medical visits. Contact your health care provider to find out how they have adapted their practices so that you can access care safely.

Whenever you go out, there are precautions you can take to reduce the risk of getting infected and spreading the virus to others. Understanding the risks and following local public health guidance will help you make informed decisions to keep yourself, your loved ones and communities safer. You can find additional information and guidance to increase your COVID-19 know how here."

https://www.canada.ca/en/public-health/news/2020/08/statement-from-the-chief-public-health-officer-of-canada-on-august-23-2020.html

Canada

HEALTH AHS declares COVID-19 outbreak at Calgary's Peter Lougheed Centre

ID: 1007692827 Source: globalnews.ca

August 23, 2020 7:50 pm

Alberta Health Services confirmed Sunday that there is a COVID-19 outbreak at the Peter Lougheed Centre in Calgary.

AHS declared the outbreak on Aug. 20 due to six positive cases in patients and staff on a mental health and addictions unit.

"The unit is undergoing a deep clean and remains a safe and appropriate place for patients to continue to be treated," AHS said in a statement.

Contact tracing is underway, the health authority said, and all patients and staff have been offered COVID-19 testing.

"The situation is being closely monitored and reviewed by many health professionals, and patients and unit staff are being regularly screened for symptoms and signs related to COVID-19," AHS said.

"We have also increased our symptom screening and infection prevention and control measures on the unit to further ensure the continued safety of all patients and staff."

The centre remains open.

"It is a safe and appropriate facility to receive emergency and scheduled care procedures," AHS said.

According to the province, outbreaks are declared when there are two or more COVID-19 cases in continuing care facilities or when cases in other facilities hit five. https://globalnews.ca/news/7294045/ahs-covid-19-outbreak-calgary-peter-lougheed-centre/

Canada

Opponents of Quebec's back-to-school plan urge province to reconsider

ID: 1007692844 Source: citynews.ca

AUG 23, 2020 AT 6:36 PM EDT

MONTREAL – A group of Quebec educators rallied against the provincial government's back-to-school plan Sunday, saying more needs to be done to ensure the safety of students and staff ahead of an unprecedented school year.

Alex Pelchat, an elementary school teacher in Montreal and spokesman for Progressive Education Workers, the group organizing the protest, said teachers understand that school is necessary for students.

"But we also believe it needs to be done safely," he said, noting Quebec is one of the few jurisdictions in North America that is reopening schools full-time.

He said maintaining normal student-to-staff ratios during a pandemic could lead to major problems in the coming weeks.

"Currently the plan is to return at full capacity and that's going to create a lot of new COVID cases with up to 30 kids in elementary school (classes) and 40 kids in high school," Pelchat said.

He said Quebec should consider what other regions are doing – introducing a hybrid model, dividing a class into two or three groups and combining home learning with a physical return to the classroom.

"That is the most realistic thing. Sadly, we can't just double the number of classrooms, because we're even currently missing 500 teachers in Montreal," Pelchat said, noting an annual shortage of teachers.

The teachers also called for increased investment in custodial staff so schools can be sanitized properly.

Quebec's updated back-to-school plan requires students in Grade 5 and up to wear masks in all common areas of school buildings, but not in the classroom.

Each classroom will be its own "bubble," and students will not be required to maintain a two-metre distance with their classmates.

There will be limited mixing between classes and in the event of an outbreak, parents will be advised and the affected classroom bubble will be sent home to continue studies remotely.

Quebec's school service centres have until mid-September to come up with contingency plans should schools close down.

In May, Quebec became the first province to reopen elementary schools – but only outside the Montreal area, which is the worst hit region in the country.

Pelchat noted that even then, classes were capped at 15 students and high schools remained closed.

"We believe the reality of Montreal is different, as it is for larger cities," he said. "There should definitely be measures for cities that are larger and more affected by COVID."

While students will stay confined to a classroom bubble, some teachers will be required to move around.

Marion Miller, an art teacher, said she has more questions than answers about how that will work when it comes to disinfecting materials and a host of other new procedures.

"As a specialist teacher, I'll be seeing 380 students a week, none of whom are distancing, all in groups of 25 or 27 students," Miller said.

She suggested staggering the return to class to give everyone more time to figure things out.

On Friday, lawyers representing some parents filed a motion in Quebec Superior Court to oblige the province to offer remote learning to families who don't want their kids back in school during the pandemic.

The motion argues that requiring children to attend classes in person violates their parents' charter rights to make decisions that affect their health and safety.

The province has limited online learning for children who have a medical condition that puts them at risk if they contract COVID-19, or for those who live with someone who has such a condition.

Barring that exemption, students can either attend class or be home-schooled.

On Sunday, Quebec reported 74 new COVID-19 cases, bringing the total number of infections in the province to 61,673.

The provincial Health Department added one more death for which the date was unknown to bring that total to 5,740. The province says 54,682 people have recovered from the virus.

Hospitalizations were down seven to 117, of which 14 remain in intensive care – a decrease of two from the previous day.

https://montreal.citynews.ca/2020/08/23/opponents-quebecs-back-to-school-plan-urge-province-reconsider/

Canada

Second day of record daily increases as Manitoba announces 72 new COVID-19 cases

Source: CBC News Unique ID: 1007692167

Most cases in Prairie Mountain Health region reflect more tests in Hutterite colonies

Seventy-two new cases of COVID-19 were announced in Manitoba on Sunday, shooting past the province's previous record of 42 new cases set Saturday, the province's top doctor said.

Forty-five of the new cases are in the Prairie Mountain Health region, which will see amped-up restrictions starting Monday, including mandatory masks in public and group sizes restricted to 10, Chief Provincial Public Health Officer Dr. Brent Roussin said at a news conference on Sunday.

Investigations suggest most of the cases in that region are linked to intentional testing done among known clusters in multiple Hutterite communities, Health Minister Cameron Friesen said.

There are now seven cases linked to an outbreak of COVID-19 at the Bethesda Place personal care home in Steinbach, Man. — three residents and four staff members, Roussin said.

Another sixteen cases were announced in the Southern Health region, along with nine in the Winnipeg health region, one in the Interlake-Eastern Health region and one in the Northern Health region.

Seven people are now in hospital in Manitoba with the illness caused by the novel coronavirus, including one person in intensive care.

The update brings the province's active caseload to 356. To date, 576 people with COVID-19 in Manitoba have recovered and 12 have died, including four fatalities linked to the illness in recent days.

On Saturday, Manitoba broke its record for the highest single-day increase in new COVID-19 cases, with 42 announced.

Two Manitoba First Nations political advocacy groups called on public health officials to bring back a travel restriction to the north that ended on June 26.

That demand came after Fox Lake Cree Nation's Bird reserve went into lockdown after the community said it learned a traveller in the nearby town of Gillam later tested positive for COVID-19.

On Saturday, 1,839 more COVID-19 tests were done in Manitoba, bringing the total number done in the province to 125,300.

https://www.cbc.ca/news/canada/manitoba/manitoba-covid-19-update-1.5696892

Canada

Made-in-Canada COVID-19 vaccine effort slowed by manufacturing delay

Source: CBC News ID: 1007692166

5 hours ago

VIDO-InterVac director says key ingredient needed for study is blocking progress on a path to approval

In early February, a tiny tube of yellow-tinged liquid was packed into a sealed container designed to withstand an airplane crash.

The sample was from the first Canadian case of COVID-19, and destined for the University of Saskatchewan campus in Saskatoon, where research scientists were mobilizing their efforts to develop a vaccine.

At the time, the Vaccine and Infectious Disease Organization-International Vaccine Centre (VIDO-InterVac) was one of only a handful of labs around the world working on a potential COVID-19 vaccine.

The team, which is now one of more than 160 research groups around the world working on a vaccine, set an incredibly tight timeline considering vaccines usually take around a decade to get approval.

VIDO-InterVac's plan, if trials were successful, was to have a vaccine ready to manufacture for targeted groups — such as front-line workers — by March 2021.

But now, despite long workdays and promising early results, the team says a lack of manufacturing capacity is slowing down their efforts at a made-in-Canada vaccine — something that matters given concerns over "vaccine nationalism," which could prevent access to a product that's not made at home.

A typical day for director Volker Gerdts could begin with a meeting with the World Health Organization as early as 6:30 a.m. CST and end as late as 10 p.m. with a call to China.

"We all sense the urgency and the importance of our work and so it's hard to explain to yourself taking time off when people are literally dying in the hospital," said Gerdts in June.

"We have a really good team ... however burnout is a real thing."

Early test results were good. Ferrets given the vaccine candidate showed a strong immune response to COVID-19, generating antibodies and having a decreased viral infection.

Regardless of the encouraging signs, the researchers were always at the mercy of external factors like global politics and manufacturing capacity. Now, Gerdts says the timeline of a VIDO-InterVac vaccine being ready to manufacture, if it's successful, has been delayed by both.

Potential COVID-19 vaccine clears 'major milestone': Sask. researchers
Before it can proceed to human clinical trials, the facility needs to complete more studies using highergrade materials than what they needed for their early animal studies. But waiting for busy manufacturers
to provide them is holding up the process.

Had the federal government invested more in a proposed manufacturing facility at VIDO- InterVac before the pandemic, Gerdts said, a Canadian vaccine would be at the front of the race.

"We've been telling the government, and I don't want to use this as a blaming, but we have raised the issue of Canada's unpreparedness for pandemic diseases for quite a while," Gerdts said. "You need to have manufacturing capacity. You need to have the ability to quickly respond."

INTERACTIVE: CBC's Vaccine Tracker

CBC News asked the federal government why it didn't invest more in manufacturing at VIDO-InterVac before 2020, and whether it feels it did enough to prepare for a potential pandemic before COVID-19.

"The health and safety of Canadians is the Government of Canada's top priority," said part of a statement from Innovation, Science and Economic Development Canada in response.

"That's why the government is mobilizing Canada's world-class researchers to deliver rapid responses to fight COVID-19."

Inside the lab

Darryl Falzarano's work day begins with a series of biosecurity protocols including changing his clothes twice, showering and going through a secure corridor.

He works in the Level 3 high containment lab with SARS-CoV-2 — the virus that causes COVID-19 — and other viruses. His uniform includes a face shield and a head covering that pumps clean air around his face. He puts duct-tape around his wrists where his gloves meet the sleeves of his suit.

Research scientist Darryl Falzarano sits in front a biosafety cabinet at the Level 3 containment lab in Saskatoon. The cabinet blows a protective wall of air between him and the virus, which is inside the cabinet. (Matthew Garand/CBC)

Falzarano said people ask him if he is scared about working in containment labs.

"For myself, that's not the case," he said.

"Of course you're working with a pathogen that can infect you and in some cases cause a ... high fatality rate, but being fearful, that's not the right attitude to have."

How a lab in Sask. that focuses on animals became Canada's \$23M hope for a COVID-19 vaccine Falzarano, who is also working on a vaccine for the MERS coronavirus in camels, needs to prepare samples of SARS-CoV-2 for what the researchers called "challenge" studies.

The study involves giving ferrets or hamsters two doses of the vaccine over a period of two months. After that, the animals are infected with the virus. The scientists then monitor the infected animals to see how well they are protected by the vaccine.

The VIDO-InterVac vaccine is made with the spike protein on the outside of SARS-CoV-2. If successful, it would work by using that protein to trick the immune system into thinking it has COVID-19 so it will generate the antibodies and T-cells that fight the virus.

To make it, the researchers grow the spike protein in human cells then combine it with an ingredient called an "adjuvant," which kicks the immune system into even higher gear.

Inside the lab: Scientists tackle vaccine for novel coronavirus in high security lab 7 months ago 2:34

Scientists at a Saskatoon lab are part of a global effort to find a vaccine for the novel coronavirus. 2:34 To test the vaccine, VIDO-InterVac identified ferrets and hamsters as the animals who experience the effects of the virus most like humans.

The researchers said ferrets tend to be infected most strongly in the upper respiratory tract. The vaccinated ferrets had a strong immune response to the virus.

But the researchers wanted their tests to show the vaccine also reduces the amount of virus in the lower respiratory tract: the lungs. Hamsters were better suited to show that effect.

In late July, the researchers learned the experiment involving the hamsters, which takes two months, would have to be repeated to try a higher dose of the virus.

The researchers said the vaccine also generated an immune response in the hamsters, but not as consistently as it did in ferrets.

Falzarano said that, despite the tight timeline, he has to filter out the pressure that comes with working on a vaccine the world is waiting for.

"I don't feel that so much. I actually think that's a bad thing that leads you to want to cut corners or, you know, look at potentially your data differently," he said.

"I think it's very important that doesn't happen."

Manufacturing creates delays

In June, Gerdts laid out his ideal timeline for progressing to human clinical trials and then manufacturing, if all went well: begin manufacturing in the new year to have 10-20 million doses by March or April 2021

But now, he expects manufacturing to begin in June 2021 at the earliest.

The researchers need higher-grade ingredients to prepare the virus for an essential phase of the animal testing process and to proceed to human clinical trials, but have been unable to get those ingredients manufactured by suppliers without delays.

How scientists aim to make a safe COVID-19 vaccine in record time A vaccine must go through three phases of human clinical testing to be approved.

The first involves one to 100 volunteers and the second phase involves 20 to 500. The third and final phase traditionally takes years, as up to 30,000 volunteers are vaccinated and the researchers wait to see how the vaccine works in volunteers who happen to get infected.

Concerns are already being raised by some scientists about demand for the vaccine outweighing the capacity to manufacture it around the world.

The VIDO-InterVac facility is home to one of Canada's only research facilities with a Level 3 containment lab. (Matthew Garand/CBC)

VIDO-InterVac is in the process of building a pilot manufacturing facility, but it is not scheduled to be ready until the end of 2021.

The facility received an initial \$3.6 million from the federal government in 2018. Even before the pandemic, VIDO-InterVac leaders were trying to get more funding, but an additional \$12 million that allowed the facility to start construction didn't come until March. The facility also received \$23 million to develop the vaccine.

Gerdts said his team could now be as far along the approval process as front-runners like Oxford University/AstraZeneca and Moderna vaccines, neither of which are Canadian, if the funding had come earlier.

Earlier this month the federal government made a deal to purchase millions of doses of the Pfizer and Moderna vaccines, saying it is still considering similar deals with other developers.

Gerdts said not having the manufacturing facility has created delays for his team.

The VIDO-InverVac team has more than 50 scientists, including PhD student Swarali Kulkarni, seen in January working on vaccine development to thwart the transmission of Middle East respiratory syndrome (MERS), another strain of coronavirus, from camels to humans. (Bonnie Allen/CBC) "It is the unfortunate reality and it is disappointing because we have kind of predicted this to happen," said Gerdts.

"We need to have a manufacturing facility and when this thing hits you need to be able to quickly respond, and all in-house so that you don't have to go outside and hire others."

He said that manufacturers elsewhere are understandably busy now.

Feds sign agreements with Pfizer, Moderna for millions of doses of COVID-19 vaccines "So you can't just simply expect that a manufacturing facility stops all what they are doing now to produce vour vaccine."

Andrew Casey from BIOTECanada, an association that supports the vaccine industry, said Canada's capacity to manufacture an eventual vaccine will depend on what type of vaccine it is, and how closely it resembles ones that have been gone before.

The ease of manufacturing, and the time and cost of doing so, could also play a role in which Canadian vaccine, if any, is finally made available to the public, he said.

Emergency fast-tracking seems less likely: Gerdts

A June start-date for manufacturing would only be possible if Health Canada granted an emergency authorization to allow some manufacturing for at-risk groups — like seniors and healthcare workers — before Phase 3 of human clinical testing was complete.

Gerdts said he originally thought that was a strong possibility, but that it seems less likely now. Russia's decision to start using a vaccine without completing Phase 3 was not well received by many scientists.

"We haven't really seen any of the governments saying under an emergency authorization we want this to be used earlier," Gerdts said.

"I think there is a concern in the public that some of these vaccines are maybe not safe enough, because they were developed too quickly."

Russia approves coronavirus vaccine before final clinical trials are completed

Gerdts said he is not concerned about others getting to make a vaccine first, because the world needs multiple vaccines with different abilities. But losing momentum, he fears, could lead the government to invest in other vaccines that are progressing faster, potentially from international companies outside Canada.

Gerdts said the team plans to continue pushing forward with its vaccine with as much urgency as it had at the start of the pandemic.

"I think the scientist in me says I have a better vaccine than many of these vaccines that are out there right now and that's really — our results show that," said Gerdts, who has tested some other vaccines.

He said he expects some vaccines to start coming out early next year, but they may not be as effective as people want.

"Then there will be a second round of vaccines coming forward which will be better than the first round," he said.

"Ours will be one of those."

https://www.cbc.ca/news/canada/saskatoon/vido-intervac-university-of-saskatchewan-manufacturing-delays-canada-vaccine-1.5694008

Canada

Concerns over Canada's reliance on China-made COVID-19 vaccine - Yahoo News Canada

Source: Global News ID: 1007691764

August 22, 2020

Canada is facing criticism for funding a COVID-19 vaccine candidate developed by the Chinese company CanSino. Although it was approved for human trials in Canada, it still hasn't arrived more than three-months after it was given the green light. As Redmond Shannon explains, there are concerns that rocky relations between the two countries may be to blame.

https://ca.news.yahoo.com/concerns-over-canadas-reliance-china-233619536.html

Canada

Government of Canada COVID-19 Update for Indigenous Peoples and communities

From: Indigenous Services Canada

As of August 20, ISC is aware of these confirmed cases of COVID-19 for First Nations on reserve in provinces:

- 428 confirmed positive cases of COVID-19
- 35 hospitalizations
- 408 recovered cases

There is a total of 17 confirmed positive cases in Nunavik, Quebec, and all have recovered.

First Nations communities have been successful in responding to the COVID-19 pandemic. When compared to the general Canadian population, the COVID infection rate, hospitalization rate, and death rate were lower in these communities. For example, the rate of COVID-19 reported among First Nations individuals living on reserve is currently one-quarter the rate of the general Canadian population.

The epidemic curve continues to show signs of flattening, with the numbers of new and active cases dropping significantly in the most recent week. In order to keep flattening the curve and the infection rate low, we must all remain vigilant in employing measures to protect ourselves, our families and our communities from the spread of COVID-19.

Individuals can help by:

- avoiding all non-essential trips in the community;
- limiting the size of group gatherings;
- maintaining physical distancing of at least 2 arm-lengths (approximately 2 meters or 6 feet);
- limiting contact with people at higher risk, such as seniors, those in poor health, or with underlying health conditions;
- wearing a non-medical mask when physical distancing is not possible; and
- Following the recommended public health guidelines outlined by your province or territory of residence.

On August 12, the Government of Canada announced an additional \$305 million for the Indigenous Community Support Fund. This most recent announcement brings the Indigenous Community Support Fund to \$685 million in total funding directly to First Nation, Inuit and Métis leadership as well as the organizations that support them. This fund is integral to equipping communities with what they need to prevent, prepare and respond to COVID-19 and to make the choices they need to make to keep their communities safe. It will be distributed through a combination of allocations directly to First Nations, Inuit and Métis leadership, and needs-based funding, which will be application driven and extend to First Nations living off reserve as well as Inuit and Métis living in urban centres. This fund is flexible and can be used to support the priorities of Indigenous leaders and Indigenous communities. More details will follow soon.

With September right around the corner, ISC continues to work with partners to address additional challenges related to the re-opening of schools and to determine how to best respond to the pressures they are facing. We are supporting educational and other supports for children, for example, the procurement of public health measures such as non-medical face masks, acrylic sheets (plexiglass) retrofits and hand sanitizing stations for schools in First Nations communities. As the situation evolves, ISC will support First Nations and their partners in their decision-making process regarding school reopening for on-reserve establishments.

https://www.canada.ca/en/indigenous-services-canada/news/2020/08/government-of-canada-covid-19-update-for-indigenous-peoples-and-communities0.html

Canada

ONTARIO: Province could do proactive COVID-19 testing in some schools, top doctor says

Source: Ottawa Matters Unique ID: <u>1007677825</u>

TORONTO — Proactive COVID-19 testing could be conducted in some Ontario schools if local health officials are concerned that community spread of the virus presents a risk, the province's chief medical officer of health said Thursday.

Dr. David Williams said while students are to be kept in strict cohorts that limit contact with other children, there may be scenarios where public health officials opt for broader, more proactive testing in schools. "If there was a hot spot in an area that was deemed to be high community spread ... we might choose to do some testing there," Williams said. "So we want to define that carefully with the local public health leadership."

Williams' comments came as a former Ontario education minister urged the province to conduct "surveillance" testing for COVID-19 at schools in virus hot spots around the province.

Mitzie Hunter said in a letter the Health Minister Christine Elliott on Thursday that the province must provide greater reassurance to parents who are already anxious about the government's school reopening plan.

The Liberal legislator, who was education minister in the previous government, said optional testing should be conducted before the start of classes and continue into the beginning of the school year.

"I want to see a proactive rather than reactive approach for a safe return for those schools," Hunter said in an interview.

The province announced its plan to reopen schools last month and has been under pressure to mandate and pay for a reduction in elementary class sizes to increase physical distancing among students. Last week, it announced that school boards can access \$500 million of their own reserves to hire additional teachers and lease space to encourage physical distancing.

The boards have expressed frustration with that plan, saying reserves are committed to priority projects. Premier Doug Ford said Thursday that the province has a plan for testing proactive testing, but offered no specific details of that strategy.

He also announced the hiring of 200 new provincial police officers at a cost of \$25 million — a move Ford defended as critics said the province should be pumping more money into teacher hiring instead.

"I don't like the idea of comparing apples and oranges," said Ford, adding that school boards have been given direction to hire more teachers to encourage physical distancing in classrooms.

"The reserves are there for a rainy day," he said. "I haven't seen a storm like this in quite some time ... so let's use the reserves and hire more teachers."

Canada's largest school board voted unanimously Thursday to adopt a school reopening strategy that focuses on reducing class sizes for schools in areas most at risk to the virus.

Under the plan, the Toronto District School Board will lease additional space and hire more teachers to limit the number of students in the classroom. The money will come from the board's reserve funds. Chairman Alexander Brown said earlier this week that the TDSB's strategy will focus on schools in neighbourhoods with the highest case counts.

The board had initially proposed to cut class sizes in all of its elementary schools, but that plan was rejected by the provincial government last week because it also would have shortened the school day by 48 minutes.

The government has insisted the length of a school day be maintained at 300 minutes.

Meanwhile, a spokesman for Ontario's labour minister said Monte McNaughton will speak with the leaders of the province's teachers' unions about their concerns that the government's back to school plan violates health and safety laws.

The unions said last week they wanted a meeting with McNaughton by this Friday.

Also on Thursday, the Ontario government extended its emergency orders, saying it continues to need the tools to address the COVID-19 pandemic.

Solicitor General Sylvia Jones said that while virus cases continue to go down, the province will extend most orders until Sept. 22.

Orders restricting activities under Stage 3, governing health care worker redeployment and management of long-term care homes remain in place.

Ontario reported 76 new cases of COVID-19 on Thursday, along with one new death related to the virus and 76 newly resolved cases.

The total number of cases now stands at 41,048, which includes 2,793 deaths and 37,291 cases marked as resolved.

http://www.health.gov.on.ca/en/common/ministry/cmoh.aspx

https://www.ottawamatters.com/coronavirus-covid-19-national-news/ontario-province-could-do-proactive-covid-19-testing-in-some-schools-top-doctor-says-2654112

Canada

Goodlife Fitness employee in Gloucester tests positive for COVID-19

Source: Ottawa Matters Unique ID: 1007677894

A staff member of a Goodlife Fitness centre in Gloucester has tested positive for COVID-19.

The employee was most recently at work last Thursday, Friday, and this past Monday at the Ogilvie Road location.

The affected individual was last in the gym at the following times:

August 13: 7:30 am to 2:30 pm August 14: 7:30 am to 2:30 pm

August 14. 7.30 am to 2.30 pm

August 17: 7:30 am to 2:30 pm

The fitness centre said in a release that the employee informed the club right away and members of the gym have been told.

The women's gym says they have thoroughly cleaned the location in addition to their usual 30-minute 'club reset' clean after each hour of member activity.

https://www.ottawamatters.com/local-news/goodlife-fitness-employee-in-gloucester-tests-positive-for-covid-19-2654122

Canada

Two new COVID-19 cases reported in Windsor-Essex

Source: CTV News Unique ID: 1007678375

WINDSOR, ONT. -- The Windsor-Essex County Health Unit reports two new COVID-19 cases on Friday. The region has had a total of 2,454 confirmed cases of the virus, including 2,292 people who have recovered.

Health unit officials say one new case is a resident in a retirement home and the other is still under investigation.

Even though the trend in new cases is continuing to decline, Windsor-Essex still has the highest rate in the province.

There are two retirement homes in outbreak status. New Beginnings in Learnington has four residents and one staff member who have tested positive. Shoreview at Riverside in Windsor has four staff members with COVID-19.

Two agricultural workplaces in Leamington are also experiencing outbreaks.

There have been 71 deaths related to the virus in Windsor-Essex. Forty-nine are related to residents in long-term care homes and two are related to migrant workers.

More coming.

https://windsor.ctvnews.ca/two-new-covid-19-cases-reported-in-windsor-essex-1.5073649

Canada

B.C. to bring in tougher enforcement of COVID-19 rules

Source: NEWS 1130 Unique ID: 1007678374

VICTORIA (NEWS 1130) – As B.C. continues to see inflated COVID-19 infection numbers, the public safety minister is expected to announce tougher enforcement for those not following public health orders. The substance of that update is yet to be known, though the ministry describes the Friday event with Mike Farnworth as an "update on compliance and enforcement measures."

Farnworth said on Tuesday he would bring in new measures to address the behaviour of people whose actions "demonstrate their indifference to the health and safety of others."

Provincial health officials have been focusing their public messages on people throwing indoor private parties, which they say have been responsible for a majority of new cases.

"We are continuing to review what can be done about those, we are continuing to engage with people and discourage people from hosting such gatherings," Health Minister Adrian Dix said on Aug. 17.

Enforcement responsibility will be shared by police, municipal bylaw officers, WorkSafe BC, and public health officials, Dix said.

Farnworth is expected to speak at 10 a.m. Friday, and NEWS 1130 will have the latest coverage on that announcement on all our platforms.

https://www.citynews1130.com/2020/08/21/b-c-to-bring-in-tougher-enforcement-of-covid-19-rules/

Canada

Montreal groups collect race-based COVID-19 data after Quebec flip-flops - National Post

Source: National Post Unique ID: <u>1007678550</u>

MONTREAL — Community groups in Montreal say they had no choice but to go at it alone after the Quebec government went back on a pledge to collect race-based data to help trace the impact of COVID-19 on marginalized communities.

Thierry Lindor, a Montreal entrepreneur, launched an online platform this week to collect information from

Black, Indigenous and other people of colour across Canada about how the novel coronavirus has affected them and their families.

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tap here to see other videos from our team.

Montreal groups collect race-based COVID-19 data after Quebec flip-flops Back to video Eighty-nine people completed the anonymous online survey in the first 24 hours since The Colours of COVID was launched, Lindor said in an interview Thursday, adding that 80 to 90 per cent of respondents were in Quebec.

"How do you fight something you can't measure? It comes down to that," said Lindor, who has teamed up with a handful of advocacy groups, including the Federation of Black Canadians, on the project.

"The objective of The Colors of COVID is to make sure we're painting a clear picture of people that have been invisible for far too long."

For months, community organizations across Canada have called for race-based data related to COVID-19 amid concerns Black, Indigenous and other communities of colour were being disproportionately affected by the virus.

Article Sidebar

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Article content continued

The data, advocates argue, would help highlight underlying socioeconomic issues that they say often contribute to high infection rates and would pressure governments to take concrete action.

Yet, while Ontario has promised to collect race-based data linked to the pandemic, Quebec's public health director, Dr. Horacio Arruda, recently went back on a pledge he made in early May to do the same. Arruda told reporters Aug. 3 that collecting data on race was "sensitive" and that Quebec instead would look at other ways to map specific communities' risk factors for infection, such as geography.

A spokeswoman for the provincial Health Department, Marie-Claude Lacasse, said Thursday the province understands the importance of race-based COVID-19 data, but "for the moment, we are not compiling the information."

She said in an email the public health agency is reviewing existing literature on how race may affect COVID-19 infection rates. It is also working with Montreal public health authorities, Lacasse said, on a study to evaluate whether ethnocultural background is a risk factor for COVID-19.

But that does not go far enough for many organizers, who say people of colour were abandoned when COVID-19 hit their communities — and that Quebec needs to go beyond merely studying the issue. "To think that they would have the audacity, the gall, to try to do a study — to find out what? In six months from now, saying, 'Yeah, turns out that we should have collected race-based data," said Lindor.

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"That's just alarming to me. It's alarming, it's appalling, and it is not the Quebec I hope my kids grow up in."

Tiffany Callender is the executive director of the Cote-des-Neiges Black Community Association, which advocates on behalf of Black families.

The Cote-des-Neiges neighbourhood was one of the areas most heavily affected by COVID-19 in Montreal, the epicenter of the pandemic in Quebec. Overall, the province has reported over 61,400 cases and 5,730 deaths linked to the virus to date.

Callender said many Cote-des-Neiges residents lost their jobs during the pandemic, while others were front-line workers who risked their health and the health of their family members, but had to continue working.

"At one point Cote-des-Neiges had the highest number of cases in Montreal and the response from the Quebec government was so delayed ⦠It was really like being abandoned," she said in an interview. Getting data to illustrate the problem will outline the community's needs and help groups pressure the government to allocate more resources, Callender said.

The survey asks participants to provide their ethnicity, age, gender, and what neighbourhood they live in, among other personal details.

It then asks participants if they have been tested for COVID-19, if they have family members or loved ones who tested positive or died from the virus, and asks how the pandemic has impacted their lives.

Callender added that the link between race and poverty, and the risks of contracting COVID-19, is clear. https://thecolorsofcovid.com/

https://nationalpost.com/pmn/news-pmn/canada-news-pmn/montreal-groups-collect-race-based-covid-19-data-after-quebec-flip-flops

Canada

SHA expands COVID-19 warning at Turtleford SARCAN

Source: CTV News - Saskatoon

ID: 1007681255

SASKATOON -- The Saskatchewan Health Authority has expanded a COVID-19 exposure alert at the Turtleford SARCAN facility.

People may have been exposed from Aug. 4 to Aug. 14, the SHA says.

Previously, the health authority warned of possible COVID-19 exposure between Aug. 4 and 6.

"Although the risk of transmission to the general public is presently considered low, we are advising members of the public who visited the following location to self-monitor for symptoms of COVID-19 for 14 days from the last date they visited the store," according to a news release.

SARCAN has temporarily closed its Turtleford location until at least Aug. 20, according to a previous release.

https://saskatoon.ctvnews.ca/sha-expands-covid-19-warning-at-turtleford-sarcan-1.5074056

Canada

Peel school board makes masks mandatory for Grades 1-12, may see delayed return to class

Source: CBC | Toronto News

ID: 1007681183

The Peel District School Board (PDSB) is making masks mandatory for students in Grades 1 to 12, reducing class sizes by hiring extra teachers and may see a delayed start to the school year as classes resume amid the COVID-19 pandemic.

In an update on its website Friday, the board announced students will be required to wear masks while indoors at schools, including in classrooms and hallways. Masks are also strongly recommended for kindergarten students, per the advice of Peel Public Health.

The board says it will also be accessing up to \$36 million in reserve funding unlocked recently by Ontario's education ministry in part to hire additional elementary and secondary school teachers to bring down class sizes.

The board will also use the reserve funds to bring on more custodial staff, enhance ventilation, purchase cleaning supplies, implement health and safety training, provide special education and mental health supports as well as for distance learning.

The update goes on to say the board is looking into staggering students' return to the classroom, but that further details will be shared after a decision is made.

Of the approximately 81 per cent of families who have indicated their back-to-school plans to the board, just 26 per cent say they will attend class through distance learning only. That totals about 40,000 students, 30 per cent of elementary students and 17 per cent of secondary students.

Supply teachers say bouncing between schools amid COVID-19 pandemic could put staff, students at risk

Premier, education minister defend Ontario's back-to-school plan amid class size concerns "As you can imagine, this presents us with a monumental task, as a structure to support PDSB Online School does not currently exist," the board said.

"Building a meaningful, culturally responsive and relevant distance learning experience for this many students with diverse learning needs and identities who have already been impacted in disproportionate ways is a key priority for the PDSB."

As a result, there may be a delay to the start of the school year for students attending school online. Students attending in person may also be delayed "given the time and consideration required to carefully build cohorts, organize classes and prepare for a safe reopening."

The board says it expects to share more details with parents by early next week.

The update comes just one day after the Toronto District School Board approved a plan to make masks mandatory in its schools as well as to lower class sizes, particularly in communities at heightened risk of COVID-19.

https://www.cbc.ca/news/canada/toronto/peel-school-board-covid-masks-1.5695793?cmp=rss

Canada

Ford government says it could extend takeover of some care homes as contracts set to expire Source: CBC | Toronto News

ID: 1007681177

Ontario's government said Friday it could extend its takeover of some long-term care homes where COVID-19 killed dozens of residents, as the official Opposition urged the province not to cede control of the facilities back to for-profit companies.

The government statement comes as the 90-day temporary management contracts and orders giving local hospitals control of nearly a dozen facilities that struggled to contain deadly COVID-19 outbreaks are set to expire in the coming weeks.

A spokeswoman for Long-term Care Minister Merrilee Fullerton said under the arrangements, companies will be permitted to take back control of the homes once the government is satisfied the outbreak risk to residents and staff have been "mitigated."

But if that hasn't occurred, the government can continue the orders, Gillian Sloggett said.

"Mandatory management orders and voluntary management contracts may be extended beyond the 90 days, if necessary," she said, adding an update on the homes' status is coming in the next few weeks. "We continue to monitor the homes closely."

The statement comes as NDP Leader Andrea Horwath called on the government to extend the management contracts that are set to expire, adding that the province should maintain oversight of those facilities until all investigations are complete.

Horwath stressed that ahead of a potential second wave of the virus this fall, now is not the time to hand control of the homes back to the companies.

'None of the for-profit providers should regain control'

"None of the for-profit providers should regain control of these homes or care for seniors that are in them," she said.

"[Premier] Doug Ford must be prepared to permanently take over homes where evidence shows clear neglect."

The province has appointed temporary management at 11 homes since the start of the pandemic as the facilities struggled to contain COVID-19 outbreaks.

Four homes in Toronto — Extendicare Guildwood, Altamont Care Community, Hawthorne Place Care Centre, and Eatonville Care Centre — have also been under voluntary contracts.

The province issued mandatory management orders for River Glen Haven in Sutton, Ont., Downsview Long Term Care in Toronto, and Forest Heights Long Term Care in Kitchener, Ont.

In April, Ford said the province was taking control of a number of long-term care homes after after a "disturbing" report from the military was released on the conditions in some of the facilities.

The Canadian Armed Forces members said they observed cockroach infestations, aggressive feeding that caused choking, bleeding infections, and residents crying out for help for hours.

"We are fully prepared to take over more homes if necessary. We are fully prepared to pull licences and shut down facilities if necessary," Ford said at the time.

Final armed forces report finds lingering problems

A final report last week from the Canadian Armed Forces as they left the homes said some of them have lingering problems that the government must address.

The government has launched an independent commission into the province's long-term care system. Meanwhile on Friday, Ford and Prime Minister Justin Trudeau announced a joint agreement with 3M that will see the company produce N95 masks at a facility in Brockville, Ont.

Ottawa and the province will each contribute \$23.3 million to help increase capacity at the plant, allowing it to produce up to 50 million N95 masks a year.

Ford called the announcement his "proudest day" since becoming premier of Ontario, and stressed that it will ensure the province has a continued supply of the key personal protective equipment in years to come.

He also said that during the early months of the pandemic there was a point when Ontario had only about a week's supply of N95 masks.

Ontario reported 131 new cases of COVID-19 on Friday and three new deaths related to the novel coronavirus, as well as 106 newly resolved cases.

The total number of cases now stands at 41,179, which includes 2,796 deaths and 37,397 cases marked as resolved.

Health Minister Christine Elliott said that due to an issue with province's reporting system, data that was not available Thursday from 11 of Ontario's 34 public health units was added Friday.

Because of that reporting lag, the new numbers are an "overestimation" of the daily case count, Elliott said

https://www.cbc.ca/news/canada/toronto/ontario-long-term-care-homes-covid-1.5695861?cmp=rss

Canada

\$2,000 fines to be issued to enforce B.C. COVID-19 public health rules

Source: Global News Health

ID: 1007680360

Anyone caught violating B.C.'s public health rules, especially the order on large gatherings, will now face fines of up to \$2,000.

Public Safety Minister Mike Farnworth announced the move, effective immediately, to help stop the spread of COVID-19 in the province amid a recent surge in cases.

Police and bylaw officers will now be able to issue \$2,000 tickets to property owners and operators who host large house parties and unsanctioned events on streets or beaches if there are more than 50 people present.

This also includes failing to provide appropriate hand sanitation and washroom facilities, failing to provide sufficient space in the venue for physical distancing, failing to obtain a list of names and contacts at a large event, and having more than five guests gathered in vacation accommodation.

"Enough is enough," Farnworth said.

In addition, anyone promoting a large event or gathering could be issued a \$200 violation ticket. Anyone refusing to follow the guidelines or being abusive to staff at a business who are trying to enforce those guidelines could also get a \$200 ticket.

"Now more than ever, this is a time to be selfless. This is time to tell friends and family that breaking the rules will hurt us all," Farnworth said.

Now is the time to re-double our efforts to re-flatten the curve, he added, referring to a "small minority of selfish individuals across the province who are putting everyone at risk."

In rare cases of the violation tickets not acting as a deterrent, or if there are repeat offenders, then police can recommend charges, Farnworth said. If someone is convicted, fines of up to \$10,000 may be issued. On Thursday, B.C. recorded two new deaths due to COVID-19, bringing the province's total to 200. Both were in long-term care in the Fraser Health region.

The province also recorded 80 new cases of the virus, with 2,574 people in self-isolation, as new public exposures continue to be announced on a near-daily basis.

https://globalnews.ca/news/7290723/coronavirus-enforcement-bc-public-health-rules/

Canada

Jewish General to build 25-bed unit for second COVID-19 wave

Source: Montreal Gazette

ID: 1007681830

The Jewish General Hospital, a designated COVID-19 treatment centre, will be tearing down one of its older buildings to make way for a 25-bed wing to be built in the next six months to treat patients during a potential second wave in the pandemic, the Montreal Gazette has learned.

The rationale behind the project is not only to limit the spread of the coronavirus at the Jewish General during a second wave, but to free up the hospital to carry out most of its clinical activities. During the first wave last spring, the Côte-des-Neiges hospital purposely ramped down many elective surgeries and medical procedures, creating a huge backlog that is still being cleared.

The prefabricated unit would be separated from the hospital. What's unique about the initiative is Quebec is proceeding with the temporary structure even though the Jewish General opened its state-of-the-art Pavilion K in 2016, equipped with only single-patient rooms to reduce the risk of hospital-acquired infections.

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"The problem is that during the first wave when we opened four COVID units in Pavilion K, we stopped all normal activity," said Dr. Lawrence Rosenberg, chief executive officer of the centre-west health authority. "So there were a lot of people who couldn't get treated for non-COVID reasons. Our surgical program was reduced from what it was to about 15 per cent of activity, not because the operating rooms were closed but because we didn't have beds to put patients in, because they were all being used for COVID patients."

On Friday, two COVID-19 patients were being treated at the Jewish General. During the peak of the first wave, medical teams were tending to more than 160 patients.

A 24-bed prefabricated unit has already been built in 16 weeks at a cost of \$12 million outside the Lakeshore General Hospital in Pointe-Claire. Health Minister Christian Dubé, who toured the new wing at the Lakeshore in June, has said that such prefabricated units are the best way to deal with a second wave.

With little fanfare, similar temporary structures have already been erected outside St. Mary's Hospital in Côte-des-Neiges and Hôpital Sacré-Coeur in the north end of the city. The government is aiming to build up to 20 such units.

But the government is already facing another setback: about 800 nurses have quit working at Montreal hospitals since the start of the pandemic in March, according to Le Devoir. The departure of so many nurses in so short a period of time would normally put the health-care system under enormous pressure, but is now occurring during the pandemic.

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Should a second wave strike in the fall and possibly the winter, Montreal will have fewer nurses to treat COVID-19 patients in the new prefabricated units.

At the Jewish General, the new wing will be built behind Pavilion A on Côte-des-Neiges Rd. What especially worries Rosenberg is the coming flu season, which usually starts in November, coinciding with a COVID-19 second wave.

"As bad as things may have been in March and April — having to test people when the flu season was over — imagine what it's going to be like in flu season and maybe having a second wave of the COVID virus. We're going to be testing virtually everybody who walks through the front door, which means they really have to come up with a much more user-friendly and faster test."

At present, the current processing times for a COVID-19 test is around 24 hours. The test involves sticking a long swab up a person's nose, and some employees in long-term care facilities have grown uncomfortable having to undergo the procedure every week.

In May, an Ottawa biotech company voluntarily recalled a rapid COVID-19 test after Health Canada raised concerns about its accuracy. In the United States, the National Institutes of Health are investing nearly \$248 million in new testing technologies, with the hope of being able to quickly deliver millions of new tests as early as next month.

But Health Canada would have to approve those technologies before they could be used in Montreal. https://montrealgazette.com/news/local-news/jewish-general-to-build-25-bed-unit-for-second-covid-19-wave

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

United States

FDA authorizes COVID-19 plasma treatment amid Trump pressure

ID: 1007692626 Source: thehill.com

08/23/20 05:29 PM EDT

<u>President Trump</u> announced Sunday that the Food and Drug Administration (FDA) has authorized convalescent plasma for emergency use to treat patients sickened by the novel coronavirus.

Trump, who has been looking to announce progress in fighting the virus, touted the news as a "historic breakthrough" at a White House news conference on Sunday, saying it would "dramatically expand access to this treatment."

Experts have expressed optimism about the treatment, but former FDA Commissioner Scott Gottlieb called the move "incremental" earlier on Sunday, noting that convalescent plasma is already available to thousands of patients, though the new announcement might make it somewhat more widely available. The move also comes amid concerns about political pressure from Trump on the FDA and whether the agency is authorizing the treatment prematurely, without adequate data about how well it works.

FDA Commissioner Stephen Hahn said the decision was made in the "independent judgment" of experts and scientists at FDA and that convalescent plasma showed "promising efficacy" as a treatment for coronavirus patients.

"Those scientists have concluded that COVID-19 convalescent plasma is safe and shows promising efficacy, thereby meeting the criteria for an emergency use authorization," Hahn said at the briefing.

Some experts have raised concerns that the plasma is already so widely available that it is hindering the ability to study exactly how well it actually works, through randomized clinical trials, which have been struggling to recruit volunteers, given that many patients can get the treatment even outside a trial.

"I've been optimistic about convalescent plasma as therapy. But optimism isn't science," tweeted Ashish Jha, director of the Harvard Global Health Institute. "We need results of adequately powered randomized trials. Issuing an EUA [emergency use authorization] without it would make such trials harder. And erode the credibility of the FDA."

The announcement comes as Trump has attacked the FDA in an extraordinary way, accusing the "deep state" in the agency of slowing down the development of treatments and vaccines before the November election, raising concerns about the politicization of the agency's approvals.

Trump seemed to reiterate that belief on Sunday, telling reporters during questioning that he thought some health officials were allowing decisions to be "held up" for "political reasons."

"I think there are people in the FDA and actually in your larger department that can see things being held up and wouldn't mind so much. That's my opinion, very strong opinion," Trump said, gesturing to Hahn and Health and Human Services Secretary Alex Azar, both of whom attended the briefing.

"And that's for political reasons. This has nothing to do with politics. This has to do with life and death," he continued.

Hahn said that data so far has shown a 35 percent improval in survival for those treated with convalescent plasma. He did not answer a shouted question at the conclusion of the briefing as to whether he was pressured on the decision.

Azar described the development as a "major advance in the treatment of patients."

Convalescent plasma is created from blood of individuals who have recovered from the coronavirus and has been used to treat other viruses like MERS, SARS and Ebola.

Convalescent plasma has already been used to treat roughly 70,000 Americans who have contracted the coronavirus.

Gottlieb, a former FDA commissioner under Trump, said on CBS's "Face the Nation" earlier Sunday that granting emergency use authorization for the treatment would allow for "easier access in certain settings," but he noted that it is already widely available.

"What the emergency use authorization will allow is probably more commercial distribution and it will allow manufacturers or plasma products to more easily recoup the costs," Gottlieb said.

"The bottom line is, it's widely available right now. Patients are getting it," he continued. "It's incremental, and incremental gains are important here but we need to view it for what it is."

Trump has been a vocal proponent for convalescent plasma as a treatment for COVID-19, and has publicly urged individuals who have recovered from the virus to donate their plasma.

Trump suggested to reporters at a news briefing last week that the FDA was playing politics in its decisions regarding emergency use authorization for convalescent plasma. Trump said he didn't want any "delays" in the decision process.

Sunday's announcement came on the eve of the start of the Republican National Convention, where Trump is seeking a political boost in his battle for reelection against Democratic nominee <u>Joe Biden</u>. At the Democratic National Convention last week, many prominent Democrats focused their criticism on Trump's handling of the coronavirus, which has infected roughly 5.7 million Americans in total and killed over 176,000 in the United States.

Trump, who will be formally nominated on Monday, will be featured each day of the convention in some capacity, and the events will culminate in his acceptance speech from the White House on Thursday.

https://thehill.com/homenews/administration/513312-fda-authorizes-covid-19-plasma-treatment

United States

Travel during the COVID-19 Pandemic

Source: CDC

Updated Aug. 21, 2020

Travel increases your chance of getting and spreading COVID-19. Staying home is the best way to protect yourself and others from COVID-19.

You can get COVID-19 during your travels. You may feel well and not have any symptoms, but you can still spread COVID-19 to others. You and your travel companions (including children) may spread COVID-19 to other people including your family, friends, and community for 14 days after you were exposed to the virus.

Don't travel if you are sick or if you have been around someone with COVID-19 in the past 14 days. Don't travel with someone who is sick.

Before You Travel

Before you travel, consider the following:

Is COVID-19 spreading at your destination?

The more cases at your destination, the more likely you are to get infected during travel and spread the virus to others when you return.

Do you live with someone who might be at increased risk for severe illness from COVID-19?

If you get infected while traveling, you can spread the virus to loved ones when you return, even if you don't have symptoms.

Are you at increased risk for severe illness from COVID-19?

Anyone can get very ill from the virus that causes COVID-19, but older adults and people of any age with certain underlying medical conditions are at increased risk for severe illness from COVID-19.

Does your destination have requirements or restrictions for travelers?

Some state, local, and territorial governments have requirements, such as requiring people to wear masks and requiring those who recently traveled to stay home for up to 14 days. Check state, territorial, tribal and local public health websites for information before you travel. If you are traveling internationally, check the destination's Office of Foreign Affairs or Ministry of Health or the US Department of State, Bureau of Consular Affairs, Country Information pageexternal icon for details about entry requirements and restrictions for arriving travelers, such as mandatory testing or quarantine.

If You Travel

During your trip, take steps to protect yourself and others from COVID-19:

Wear a mask to keep your nose and mouth covered when in public settings.

Avoid close contact by staying at least 6 feet apart (about 2 arms' length) from anyone who is not from your household.

Wash your hands often or use hand sanitizer (with at least 60% alcohol).

Avoid contact with anyone who is sick.

Avoid touching your eyes, nose, and mouth.

Traveling Abroad? Check CDC's COVID-19 Travel Recommendations by Destination before planning your trip.

Considerations for Types of Travel

Travel increases your chances of getting and spreading COVID-19. Your chances of getting COVID-19 while traveling also depend on whether you and those around you take steps to protect yourself and others, such as wearing masks and staying 6 feet away from people outside your household (social distancing). Airports, bus stations, train stations, and rest stops are all places travelers can be exposed to the virus in the air and on surfaces. These are also places where it can be hard to social distance. In general, the longer you are around a person with COVID-19, the more likely you are to get infected.

Air travel

Air travel requires spending time in security lines and airport terminals, which can bring you in close contact with other people and frequently touched surfaces. Most viruses and other germs do not spread easily on flights because of how air circulates and is filtered on airplanes. However, social distancing is difficult on crowded flights, and sitting within 6 feet of others, sometimes for hours, may increase your risk of getting COVID-19.

Also consider how you get to and from the airport, as public transportation and ridesharing can increase your chances of being exposed to the virus.

Bus or train travel

Traveling on buses and trains for any length of time can involve sitting or standing within 6 feet of others, which may increase your risk of getting COVID-19. If you choose to travel by bus or train, learn what you can do to protect yourself on public transportation.

Car travel

Making stops along the way for gas, food, or bathroom breaks can put you and your traveling companions in close contact with other people and frequently-touched surfaces.

RV travel

You may have to stop less often for food or bathroom breaks, but RV travel usually means staying at RV parks overnight and getting gas and supplies at other public places. These stops may put you and those with you in the RV in close contact with others.

Learn more about how to protect yourself from COVID-19 on different types of transportation

Know When to Delay your Travel to Avoid Spreading COVID-19

People who are sick, have recently tested positive for the virus that causes COVID-19, or have been exposed to a person with COVID-19 should delay travel. Learn when and for how long to delay travel to avoid spreading COVID-19.

How Are Companies Protecting Customers from COVID-19?

When planning travel, you may want to check companies' websites to see what they are doing to protect customers from COVID-19. Things to look for include:

Requiring people to wear a mask

Promoting social distancing

Using online or contactless reservations and check-in

Using contactless payment

Enhanced cleaning procedures

Tips to avoid getting and spreading COVID-19 in common travel situations:

In public:

Wear a mask in public settings.

Stay at least 6 feet (about 2 arms' length) from anyone who is not from your household.

Bathrooms and rest stops:

Wash your hands with soap and water for at least 20 seconds after using the bathroom and after you have been in a public place.

If soap and water are not available, use a hand sanitizer that contains at least 60% alcohol. Cover all surfaces of your hands and rub them together until they feel dry.

Getting gas:

Use disinfecting wipes on handles and buttons at the gas pumps before you touch them (if available). After fueling, use a hand sanitizer with at least 60% alcohol. When you get to your destination, wash your hands with soap and water for at least 20 seconds.

Hotels and accommodations:

See advice for traveling overnight.

Food stops:

The safest option is to bring your own food. If you don't bring your own food, use drive-through, delivery, take-out, and curb-side pick-up options.

Anticipate Your Travel Needs

Bring a mask to wear in public places.

Pack hand sanitizer with at least 60% alcohol. Keep this within reach.

Bring enough of your medicine to last you for the entire trip.

Pack food and water in case restaurants and stores are closed, or if drive-through, take-out, and outdoordining options aren't available.

If you are considering cleaning your travel lodgings, see CDC's guidance on how to clean and disinfect. Check Travel Restrictions

State, local, and territorial governments may have travel restrictions in place, including testing requirements, stay-at-home orders, and quarantine requirements upon arrival. Follow state, local, and territorial travel restrictions. For up-to-date information and travel guidance, check the state, territorial, tribal and local health department where you are, along your route, and where you are going. Prepare to be flexible during your trip as restrictions and policies may change during your travel.

If traveling internationally or across international borders, check with the destination's Office of Foreign Affairs or Ministry of Health or the US Department of State, Bureau of Consular Affairs, Country Information pageexternal icon for details about entry requirements and restrictions for arriving travelers, such as mandatory testing or quarantine. Local policies at your destination may require you to be tested for COVID-19 before you are allowed to enter the country. If you test positive on arrival, you may be required to isolate for a period of time. You may even be prevented from returning to the United States, as scheduled.

After You Travel

You may have been exposed to COVID-19 on your travels. You may feel well and not have any symptoms, but you can be contagious without symptoms and spread the virus to others. You and your travel companions (including children) pose a risk to your family, friends, and community for 14 days after you were exposed to the virus. Regardless of where you traveled or what you did during your trip, take these actions to protect others from getting sick after you return:

When around others, stay at least 6 feet (about 2 arms' length) from other people who are not from your household. It is important to do this everywhere, both indoors and outdoors.

Wear a mask to keep your nose and mouth covered when you are outside of your home.

Wash your hands often or use hand sanitizer (with at least 60% alcohol).

Watch your health and look for symptoms of COVID-19. Take your temperature if you feel sick.

Follow state, territorial, tribal and local recommendations or requirements after travel.

Higher Risk Activities

Some types of travel and activities can put you at higher risk for exposure to COVID-19 (see list below). If you participated in higher risk activities or think that you may have been exposed before or during your trip, take extra precautions (in addition the ones listed above) to protect others for 14 days after you arrive:

Stay home as much as possible.

Avoid being around people at increased risk for severe illness from COVID-19.

Consider getting tested for COVID-19.

What activities are considered higher risk?

Here are examples of activities and situations that can increase your risk of exposure to COVID-19:

Being in an area that is experiencing high levels of COVID-19 spread. You can check the levels for places you traveled, including countries as well as U.S. states, territories, counties, and cities.

Going to a large social gathering like a wedding, funeral, or party.

Attending a mass gathering like a sporting event, concert, or parade.

Being in crowds — for example, in restaurants, bars, airports, bus and train stations, or movie theaters. Traveling on a cruise ship or river boat.

If you know that you were exposed to someone with COVID-19, postpone further travel. If you get any symptoms of COVID-19, see What to Do If You Are Sick.

https://www.cdc.gov/coronavirus/2019-ncov/travelers/travel-during-

covid19.html? ga=2.26825460.875466486.1598231163-1101916949.1598231163

United States

Operating schools during COVID-19: CDC's Considerations

Source: CDC

Operating Schools During COVID-19

Updated Aug. 21, 2020

Excerpt

Summary of Changes to the Considerations

Updates have been made to align with the new <u>school resources and tools</u> that were released on July 23rd and 24th and the latest COVID-19 information. The Considerations are intended to help school administrators: (1) promote behaviors that reduce the spread of COVID-19, (2) maintain healthy environments, (3) maintain healthy operations, and (4) prepare for when someone gets sick. Below are changes to the considerations as of August 21, 2020:

- Expanded considerations on planning and preparing schools before opening
- Updated considerations on ventilation
- Updated considerations on food service
- Updated considerations for students who may be unable to wear cloth face coverings
- Updated considerations for students with special healthcare needs and disabilities
- Updated considerations on cohorting, staggering, and alternating strategies
- Updated considerations on recognizing signs and symptoms of COVID-19 and screening
- Updated considerations on coping and support
- Updated considerations on making plans for accommodations
- Updated considerations for Direct Service Providers (DSPs)

https://www.cdc.gov/coronavirus/2019-ncov/community/schools-childcare/schools.html

United States

Michigan health officials report 14 coronavirus outbreaks at schools

Source: Click on Detroit Unique ID: <u>1007677875</u>

Michigan health officials reported 14 coronavirus (COVID-19) outbreaks at K-12 schools and universities as of Thursday, Aug. 20.

The Michigan Department of Health and Human Services (MDHHS) said the outbreaks are reported to them by local health departments. Here's where the outbreaks are:

1 in Region 1

8 in Region 2S

2 in Region 2N

3 in Region 3

You can find the regions on the Michigan Emergency Preparedness Regions map here.

"Health departments will work closely with schools to make sure anyone who is at risk of exposure is notified and the proper procedures are in place. Parents whose children are at risk would always be notified," reads a statement from the MDHHS. "Note that infectious disease outbreaks are not commonly announced to the media, unless there is broad risk to the general public and all people exposed cannot be notified."

The health department said it has plans to publish outbreak data, including school outbreaks, at a regional level in the near future.

The MI Safe Schools: Return to Learn Roadmap provides actions to be taken if there is a case of COVID-19 in the school, including contact tracing and enhanced cleaning.

Many school districts have decided to start the fall semester entirely virtually amid the coronavirus pandemic to avoid such outbreaks.

Return to School section

View more: School Confessionals

Michigan case count

Meanwhile, the number of confirmed cases of the coronavirus (COVID-19) in Michigan has risen to 94,697 as of Thursday, including 6,368 deaths, state officials report.

Thursday's update represents 419 new cases and 19 additional deaths, including 11 from a Vital Records review. On Wednesday, the state totals were 94,278 cases and 6,349 deaths.

New cases have plateaued in the last two weeks, while deaths remain flat in Michigan. Testing has remained steady, with an average of more than 25,000 per day, with the positive rate between 3 and 4 percent. The state reported its highest one-day testing total with more than 41,000 diagnostic tests on Aug. 12.

Hospitalizations have increased slightly over the last month but remain lower than in April.

Michigan has reported 67,778 recoveries. The state also reports "active cases," which were listed at 20,000 as of Wednesday. Michigan's 7-day moving average for daily cases was 715 on Wednesday. https://www.clickondetroit.com/news/michigan/2020/08/21/michigan-health-officials-report-14-coronavirus-outbreaks-at-schools/

United States

FBI investigating COVID-19 data breach in South Dakota

Source: NEWS 1130 ID: 1007681179

RAPID CITY, S.D. — The FBI is investigating a data breach that may have compromised the identity of people with the COVID-19 virus in South Dakota.

South Dakota Department of Public Safety Director Paul Niedringhaus sent a letter to people who may have been affected by the June 19 breach, the Rapid City Journal reported Friday.

The letter, dated Monday, says the state's fusion centre used Netsential.com's services to build a secure online portal this spring to help first responders identify people who had tested positive for the coronavirus so they could take precautions while responding to emergency calls.

The South Dakota letter said police in the state weren't given names but could call a dispatcher to verify positive cases. Houston-based Netsentials added labels to the files that might allow a third-party to identify patients, the letter said, and the breach could have compromised people's names, addresses and virus status.

"This information may continue to be available on various internet sites that link to files from the Netsential breach," the letter said.

Netsential hosted the websites of more than 200 U.S., law enforcement agencies, most of them fusion centres like the South Dakota one affected. The company confirmed in June that its server had been breached.

The server was the source for a trove of files, dubbed BlueLeaks, that were shared online by a transparency collective called DDoSecrets. The collective said it had obtained them from a hacker who said they were sympathetic to anti-racism protesters.

Department of Public Safety spokesman Tony Mangan confirmed to The Associated Press in a short telephone interview that the FBI was investigating but had no further comment. A message left Friday at the FBI's Minneapolis office wasn't immediately returned.

The letter from the state agency said the files didn't include any financial information, Social Security numbers or passwords.

Public officials in at least two-thirds of states share addresses of people who have tested positive with first responders, including police, firefighters and EMTs. An Associated Press review in May found at least 10 states also share patients' names.

Some states erase the information after a certain period. Still, civil liberties groups have warned that sharing such information could lead to racial profiling of Blacks and Hispanics or help immigration officials track people down.

https://www.citynews1130.com/2020/08/21/fbi-investigating-covid-19-data-breach-in-south-dakota/

United States

Coronavirus (COVID-19) Update: Daily Roundup August 20, 2020

The U.S. Food and Drug Administration today announced the following actions taken in its ongoing response effort to the COVID-19 pandemic:

- The FDA has released a temporary industry guidance entitled, "Manufacturing, Supply Chain, and Drug and Biological Product Inspections During COVID-19 Public Health Emergency Questions and Answers." The FDA recognizes the COVID-19 pandemic is not only impacting public health, but also drug development programs, ongoing manufacturing operations and the FDA's ability to conduct inspections. The questions and answers in the guidance provide information regarding inspections for facilities that manufacture pharmaceutical products and sites involved in the conduct of clinical, analytical and nonclinical studies.
- As part of the FDA's effort to protect consumers, the agency issued a joint warning letter with the Federal Trade Commission to Living Senior, LLC for selling fraudulent COVID-19 related products. Living Senior, LLC, sells cannabidiol (CBD) products with misleading claims that the products can mitigate, prevent, treat, diagnose, or cure COVID-19 in people. Currently, there are no FDA-approved products to prevent or treat COVID-19. FDA has requested that Living Senior, LLC, immediately stop selling these unapproved and unauthorized products. Consumers concerned about COVID-19 should consult with their health care provider.
- The FDA has issued a warning letter to Predictive Biotech, Inc., for marketing CoreCyte, an
 unapproved umbilical cord-derived product claiming to mitigate, prevent, treat diagnose and/or
 cure COVID-19. Additionally, the FDA, in conjunction with the Federal Trade Commission, issued
 a separate letter to PA Green Wellness, LLC, for offering CoreCyte for sale to patients in the U.S.
 to prevent COVID-19.
- FDA, in partnership with OSHA, developed the Employee Health and Food Safety Checklist for Human and Animal Food Operations During the COVID-19 Pandemic. The checklist will assist the food industry with operational changes it may have as a result of COVID-19. The checklist pulls guidance from the FDA, CDC, and OSHA; and serves as a quick reference in the areas of employee health, social distancing, and food safety for food operations that have been impacted during the pandemic.
- Testing updates:
 - To date, the FDA has currently authorized 218 tests under EUAs; these include 176 molecular tests, 39 antibody tests, and 3 antigen tests.

https://www.fda.gov/news-events/press-announcements/coronavirus-covid-19-update-daily-roundup-august-20-2020

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

South Korea

South Korea reports biggest rise in coronavirus cases since March

ID: <u>1007692167</u> Source: reuters.com

AUGUST 22, 2020

SEOUL (Reuters) - South Korean authorities reported the highest daily rise in novel coronavirus cases since early March on Sunday, saying tougher social distancing rules may be needed as outbreaks continued to spread from a Seoul church and other gatherings.

The Korea Centers for Disease Control and Prevention (KCDC) reported 397 new infections as of midnight Saturday, up from the previous day's 332 and marking more than a week of daily three-digit rises.

That brings South Korea's total infections of the new coronavirus to 17,399 with 309 COVID-19 deaths, it said.

From Sunday, the government extended second-tier social-distancing rules which had been in place in Seoul to other areas of the country, banning in-person church meetings and closing nightclubs, buffets and cyber cafes.

Health authorities say they may eventually deploy the toughest stage 3 social-distancing rules, where schools and business are urged to close, if the rate of increase in new infections does not slow soon.

"We're on the brink of a nationwide pandemic as the number of new cases are increasing in all 17 regions across the country," said Jung Eun-Kyeong, Director General at the KCDC at a briefing on Sunday.

"Please stay home as much as possible, unless you absolutely need to (be out) for necessities, or for work and visits to doctors."

Families posted notes on social media saying they had cancelled vacation plans to nearby hotels and the southern resort island of Jeju to comply with government guidelines.

On Friday, health authorities said South Korea's coronavirus infections were back "in full swing" as hundreds of infections have started to come out from the Sarang Jeil Presbyterian Church run by a farright preacher.

Jung said a total of 841 confirmed cases were related to the church so far.

Members of the church attending an anti-government protest in Seoul on Aug. 15 have also led to new cases across the country, while another recent cluster has been linked to a Starbucks store.

https://www.reuters.com/article/us-health-coronavirus-southkorea/south-korea-reports-biggest-rise-in-coronavirus-cases-since-march-idUSKBN25J019

Germany

Virus cases reported at 41 schools in Germany's capital - The Mainichi

Source: The Mainichi Unique ID: <u>1007677802</u>

BERLIN (AP) -- At least 41 schools in Berlin have reported that students or teachers have become infected with the coronavirus not even two weeks after schools reopened in the German capital. Daily Berliner Zeitung published the numbers Friday and city education authorities confirmed the figures to The Associated Press.

Hundreds of students and teacher are in quarantine, the newspaper reported. Elementary schools, high schools and trade schools are all affected, the paper wrote. There are 825 schools in Berlin.

The reopening of schools and the possible risks of virus clusters building up in educational institutions and then spreading beyond to families and further into society have been a matter of great concern and it's an issue that's hotly debated in Germany.

Education in Germany is not in the hands of the federal government, but under the auspices of the country's 16 states and thus there are many differing COVID-19 rules in place depending on each state, especially when it comes to wearing masks. While some states are still on summer vacation, others have been back to school for about two weeks.

Berlin was one of the first places in Germany to reopen its schools after the summer holidays. Children are obliged to wear masks in the hallways, during breaks and when they enter the classroom, but they can take the masks off once they sit in their places and classes begin. Some critics say the measures in Berlin are too relaxed and both students and teachers should wear masks during lessons as well. Such is the case in the western state of North Rhine-Westphalia, Germany's most populous, where about 2.5 million students went back to school a couple of days after Berlin. No exact figures about the number of schools with coronavirus infections were available from North Rhine-Westphalia, but several schools have also had to close classes there because of COVID-19 cases.

In general, Germany is determined to not send schools back into a lockdown as was the case in March, even as the infection rates go up again. Schools have been ordered to send single students or classes

that had possible exposure into quarantine, but the goal is to avoid shutting down entire schools.

The German government has also said that keeping schools open is a top priority and more important than bringing fans back to sports stadiums or allowing big crowds to gather for concerts and other mass events.

Coronavirus case numbers in Germany have been going up again since late July. The re-emergence of the virus in the country is driven by travelers returning home from abroad and people gathering for social events.

German Chancellor Angela Merkel expressed criticism Thursday that there are too many different regulations in place across the country, saying "people simply don't understand" why they're allowed to do one thing in Berlin that may be banned in Bavaria. However, plans underway to harmonize the different COVID-19 rules and come up with regulations that apply all over the country.

On Friday, Germany's disease control center registered 1,426 new cases. That was below the 1,707 cases from Thursday, which was the highest number of new daily infections since late April. At the height of the pandemic in late April, Germany had around 6,000 new cases every day.

At least 230,048 people have been infected with the virus in Germany, 9,260 have died, according the the Robert Koch Institute.

https://mainichi.jp/english/articles/20200821/p2g/00m/0in/129000c

Italy

Covid-19 cases on the rise in Italy

Source: RFI

Unique ID: 1007677827

For the third consecutive week, Italy has experienced an increase in coronavirus cases in all regions. In the last 24 hours, the country registered 845 new infections, according to the health ministry figures released on Thursday. In addition, 281 new clusters have been recorded in one week.

Six people also died over the last 24 hours, bringing the death toll to 35,418 from nearly 257,000 cases of infection.

"We are not in as bad a position as France and Spain, but the current situation is not satisfactory," said Professor Massimo Galli, who heads the infectious diseases department at Sacco hospital in Milan. 'False security'

"The end of confinement has resulted in an excessive feeling of false security," he told La Repubblica newspaper.

Italy emerged from a severe lockdown in May after becoming one the first European countries to report cases of Covid-19.

"We have to be careful, otherwise we will find ourselves facing an extremely difficult situation," Galli warned, pointing particularly to returning travellers over the summer vacation. Young people

"I don't want to look like the one blaming young people, there are certain episodes that have struck me, like nine young people who tested positive after returning from Croatia.

"Every day we receive reports of this type," Galli said.

The highest number of cases were reported in the northern Veneto and Lombardy regions, with 159 and 154 and in Rome's Lazio region with 115.

France and Germany have also recorded their highest daily infection rate in months. (with wires)

https://www.rfi.fr/en/europe/20200821-covid-19-cases-on-the-rise-in-italy

Russia

Russia vaccine roll-out plan prompts virus mutation worries

Source: Financial Post Unique ID: 1007677884

LONDON — Russia's plan to rollout its "Sputnik-V" COVID-19 vaccine even before full trials show how well it works is prompting concern among virus experts, who warn a partially effective shot may encourage the novel coronavirus to mutate.

Viruses, including the pandemic SARS-CoV-2, are known for their ability to mutate all the time – and

often this has little or no impact on the risk posed to people.

But some scientists are worried that adding "evolutionary pressure" to the pathogen by deploying what might not be a fully protective vaccine could make things worse.

"Less than complete protection could provide a selection pressure that drives the virus to evade what antibody there is, creating strains that then evade all vaccine responses," said Ian Jones, a virology professor at Britain's Reading University.

"In that sense, a poor vaccine is worse than no vaccine."

Sputnik-V's developers, as well as financial backers and Russian authorities, say the vaccine is safe and that two months of small-scale human trials have shown that it works.

But the results of those trials have not been made public, and many Western scientists are skeptical, warning against its use until all internationally approved testing and regulatory hurdles have been passed. https://financialpost.com/pmn/business-pmn/russia-vaccine-roll-out-plan-prompts-virus-mutation-worries

Papua New Guinea

Papua New Guinea demands China explain COVID-19 vaccine trial on miners

Source: CTV News Unique ID: <u>1007677903</u>

CANBERRA, AUSTRALIA -- Papua New Guinea blocked the arrival of a flight carrying workers from China after a Chinese mine operator said its employees were given a coronavirus vaccine in a possible unauthorized trial, authorities said Friday.

The Pacific nation's pandemic response controller, David Manning, banned COVID-19 vaccine trials after Ramu NiCo Management (MCC) Ltd. said it vaccinated Chinese employees.

Pharmaceutical companies in China and other countries are racing to develop a vaccine against the coronavirus. A Chinese drug company is testing a vaccine on volunteers in Indonesia. But none has been approved for general use.

Manning said he ordered a flight carrying 180 Chinese workers turned back Thursday as a precaution. He said he acted "in the best interests of our people" because of "possible risks or threat that it might cause." Manning said he wanted more information from the Chinese government.

In Beijing, a foreign ministry spokesman said he had no information about Papua New Guinea but defended China's drug development.

Chinese vaccine research "carries out evaluation of safety and effectiveness and ethical review strictly," spokesman Zhao Lijian said. He said "emergency use" also might be allowed to "maximize the health of the people."

Papua New Guinea, a poor country of 9 million people on the eastern half of Borneo, has reported 361 coronavirus cases and four deaths. Infections have surged in the past month. A curfew is being enforced in the capital, Port Moresby, in an attempt to stop the spread.

The vaccine was administered to the 48 Chinese in China three days before they landed in Port Moresby on Aug. 13, according to Health Minister Jelta Wong.

"Details of the vaccine used ... are still not known," Wong said in an email to The Associated Press. Manning said the National Department of Health had not approved any trials. He said any vaccines required approval by the World Health Organization and had to undergo "vigorous vaccine trials, protocols and procedures."

Wong said no applications for such a trial had been received by his government.

A document on the mine company's letterhead titled "Vaccination Statement" said 48 Chinese employees "have been vaccinated with SARS-COV-2 vaccine" on Aug. 10.

The statement was sent to the Papua New Guinea Health Department and advised that the vaccine could cause false-positive test results in those who received it.

Manning has written to Chinese Ambassador Xue Bing seeking "immediate clarification of the Chinese government's position regarding the vaccination statement."

Ramu is operated by Metallurgical Corp. of China, a subsidiary of state-owned China Metallurgical Group Corp.

Phone calls to Ramu's office in the Papua New Guinea city of Madang and to MCC's Beijing headquarters weren't answered.

Australia, which is Papua New Guinea's largest foreign aid donor, learned China may be testing a coronavirus vaccine in the region using employees of state-owned enterprises, The Australian newspaper

reported.

Australian government officials did not respond to requests for comment on Friday.

It was unclear which Chinese producer supplied the vaccine.

State-owned China National Pharmaceutical Group Co., Ltd., also known as SinoPharm, announced in July it gave experimental shots of a vaccine to its employees before the government approved testing in people.

In Indonesia, another Chinese company, Sinovac Biotech Ltd., began testing a vaccine this month on 1,620 volunteers in partnership with state-owned Bio Farma.

PAHO

PAHO asks countries to ensure prenatal checks due to increased risk of severe COVID-19 in pregnant women

Source: PAHO 21 Aug 2020

Washington, D.C., August 21, 2020 (PAHO)—The Pan American Health Organization is asking countries in the Americas to step up efforts to ensure access to prenatal care services for pregnant women due to recent studies that show an increased risk of severe forms of COVID-19.

In a new Epidemiological Alert, PAHO notes, "Recently published results and studies based on COVID-19 surveillance data have indicated an increased risk among pregnant women of presenting with severe forms of COVID-19 and, therefore, of being hospitalized and admitted to intensive care units."

Data compiled by PAHO showed that 28,387 cases of COVID-19 in pregnant women have been reported by 10 countries, with 356 deaths reported from January to August 11. Data continues to change and has been collected on different dates depending on the availability of official information from countries.

PAHO's epidemiological alert said, "The current available data suggest that pregnant women are at a higher risk of developing a severe form of COVID-19; in some cases, this may lead to death." PAHO therefore recommends that countries address specific risks and vulnerabilities faced by this population, ensure the continuity of prenatal care services, as well as provide timely attention to severe signs and symptoms among pregnant women with COVID-19.

The Organization also recommends that health services "maintain communication with pregnant women in order to provide resources on whom to consult in case of an emergency and to coordinate virtual, face-to-face, or home check-ups if necessary."

It suggested that countries "intensify efforts to ensure access to prenatal care services, as well as to implement preventive measures to reduce morbidity and mortality associated with COVID-19 across all levels of the health system, in order to maintain the commitment to reducing maternal and perinatal mortality and the progress achieved to date."

PAHO's alert said priority should be given to diagnostic tests for pregnant women, because they are at risk for developing sever forms of the disease and "will require hospitalization at some point during their pregnancy."

"All pregnant and postpartum women must be clinically managed in accordance with the guidelines and regulations established and in effect in each respective country and territory in the Region of the Americas. Additional specific care measures will be required for pregnant woman for whom SARS-CoV-2 infection is suspected or confirmed," PAHO said, listing a series of guidelines for critical care and algorithms for managing patients with suspected infection at primary care levels and in remote areas."

https://www.paho.org/en/news/21-8-2020-paho-asks-countries-ensure-prenatal-checks-due-increased-risk-severe-covid-19

PAHO

Partnership to reduce the impact of COVID-19 on Amazonian peoples

Source: Relief Web Unique ID: <u>1007677907</u>

A specific diagnosis of health gaps and ways to facilitate access to prevention and health services for populations affected by the COVID-19 pandemic are needed: this was WHO's positions at a meeting with indigenous leaders from Amazonian peoples and experts from numerous international agencies. PAHO promotes collaboration between ministries of health, indigenous organizations, and other organizations that are responding to the pandemic, to develop roadmaps for the response. Reliable data on COVID-19 cases and other diseases affecting those populations are needed, along with ensuring the implementation of public health measures.

In a virtual dialogue with leaders of indigenous organizations from Bolivia, Brazil, Colombia, Ecuador, Peru and Venezuela, as well as other national and international organizations, PAHO experts discussed access to health for vulnerable populations in the context of the current pandemic.

The meeting gave visibility to the situation of Amazonian indigenous peoples and presented the WHO/PAHO actions in the Amazon subregion in collaboration with the countries and indigenous organizations from the area. The meeting set a roadmap for a coalition to provide the necessary support in the response to COVID-19 among the populations of the Amazon.

Gregorio Mirabal, General Coordinator of the Coordinator of the Indigenous Organizations of the Amazon Basin (COICA) group, emphasized the importance of ensuring the participation of indigenous peoples in the work of governments to respond to the pandemic. In the Amazon, the daily increase in cases and deaths from COVID-19 has been a severe blow to indigenous peoples and nationalities, experts agreed. The difficulty in accessing health of Amazonian peoples requires a coordinated response from States, indigenous organizations, United Nations system agencies and other partners in international cooperation.

COICA and WHO/PAHO call for strengthened health care services in the Amazon through the provision of human resources, supplies and medical devices.

The meeting was attended by experts from the sub-regional Andean Health Agency (ORAS CONHU), the Amazon Cooperation Treaty Organization (OTCA), the Fiocruz Foundation, OCHA, the Sustainable Development Solutions Network, the Inter-American Development Bank, AECID, European Union ECHO and other international partners.

https://reliefweb.int/report/world/partnership-reduce-impact-covid-19-amazonian-peoples

WHO

WHO hopes end to pandemic in 'less than two years'

Agence France Presse ID: 1007680038

The World Health Organization said Friday it hopes the planet will be rid of the coronavirus pandemic in less than two years -- faster than it took for the Spanish flu.

"We hope to finish this pandemic before less than two years," Tedros Adhanom Ghebreyesus told reporters from the WHO's headquarters in Geneva, insisting that it should be possible to tame the novel coronavirus faster than the deadly 1918 pandemic.

But the world also now has the advantage of far better technology, he said.

By "utilising the available tools to the maximum and hoping that we can have additional tools like vaccines, I think we can finish it in a shorter time than the 1918 flu."

The COVID-19 pandemic has to date killed nearly 800,000 people and infected close to 23 million worldwide, according to a tally from official sources compiled by AFP.

But the deadliest pandemic in modern history, Spanish flu, killed as many as 50 million victims and infected around 500 million around the world between February 1918 and April 2020.

Five times more people died of it than did in World War I. The first victims were recorded in the United States, before it spread to Europe and then around the world.

That pandemic came in three waves, with the deadliest second wave beginning in the latter half of 1918. "It took three waves for the disease to infect most of the susceptible individuals," WHO emergencies chief Michael Ryan told journalists.

After that, the flu virus behind the pandemic evolved into a far less deadly seasonal bug, which returned for decades.

"Very often, a pandemic virus settles into a seasonal pattern over time," Ryan said. He warned though that so far, "this virus is not displaying a similar wave-like pattern. Clearly, when the disease is not under control, it imps straight back up."

Israel

For Quick Coronavirus Testing, Israel Turns to a Clever Algorithm

Source: NYTimes.com Feed

ID: 1007679943

BEERSHEBA, Israel — A team of three Israeli scientists has pioneered a coronavirus testing procedure that they say is faster and more efficient than any now in use, testing samples in pools of as many as 48 people at once.

The Israeli government plans to roll out the new method in 12 labs across the country by October, anticipating that another wave of coronavirus infections could coincide with influenza season with potentially calamitous results.

"We're doing everything we can in order to be ready," said Ronen Walfisch, an engineer at the defense ministry who oversaw a pilot project to test the method's efficacy. The method passed with flying colors, he said.

Moran Szwarcwort Cohen, who runs the virology lab at Rambam Health Care Campus in Haifa, said the new pooled-testing method, which was formally approved for clinical use by the Israeli health ministry on Tuesday, could allow schools, college campuses, businesses and airlines to clear whole groups of people far faster than has been possible until now.

"It's a huge game-changer," said Dr. Cohen, who was not involved in the new research.

Pooled testing for the coronavirus has received much attention in the United States as inundated labs struggle to cope with backlogs and shortages of chemicals, pipette tips and other supplies.

Most pooling efforts elsewhere are relying on a simplistic approach developed to test World War II draftees for syphilis. That so-called Dorfman method, named for the economist who dreamed it up, calls for testing pools of samples from several people at once. If the pool tests negative, then all individuals are considered negative. If the pool tests positive, then additional samples from each individual must be retested to see which are positive.

The Israeli method, by contrast, is designed to only require one round of testing — a crucial savings in time, laboratory work flow and supplies.

It accomplishes that by building on a combinatorial algorithm that one of the three scientists, Noam Shental of the Open University of Israel, in Raanana, developed a decade ago to speed the detection of rare genetic mutations. It works much like error-detecting codes that filter out noise in telecommunications and computer science.

In a study published on Friday in the journal Science Advances, Dr. Shental and his colleagues, Tomer Hertz and Angel Porgador of Ben-Gurion University of the Negev, report that their method — called P-Best, for Pooling-Based Efficient SARS-CoV-2 Testing — successfully detected positives in pools of as many as 48 samples. The method accurately screened 1,115 health care workers with just 144 tests, the study found.

In one typical iteration, the Israeli team took samples of 384 people and divided them into 48 pools, so that each person's sample wound up in a unique set of six pools.

Each of the 48 pools was then tested. If one person was positive for the virus, then each of the six pools containing that sample should test positive — resulting in a unique combination of positive pools revealing the identity of the person (or people) carrying the virus.

The algorithm optimizes the design of its pools according to the expected prevalence of the virus, making it possible to pinpoint all of the positive individuals in a batch, as long as the total number of positives does not sharply exceed the expected number.

Like all types of pooled testing, the usefulness of this method drops as a community's "positivity rate" — the proportion of tests that come back positive — climbs.

But when positivity rates are lower, the Israeli method is dramatically more efficient than others, said Dr. Hertz. At an infection rate of 1 percent, he said, the new method is eight times as efficient as individual testing and nearly twice as efficient as an eight-sample Dorfman pool.

Israeli officials and researchers are working with an artificial-intelligence company to help cull samples that are likely to be positive, based on known hot spots, to keep positivity rates lower, Dr. Hertz said.

A frequent concern raised about pooled testing is that samples will be diluted, causing a loss of sensitivity that could result in false negatives. But Dr. Shental said the new method was effective even with low viral loads because each sample is tested in multiple pools.

Israel is in the grip of a rough second wave of the pandemic, and many expect that it will only be brought under control by reimposing a nationwide lockdown. Because of delays in purchasing the sophisticated pipetting robots necessary to run the new method quickly, officials said they expect it will only kick in when that next lockdown is eased.

The three scientists who devised the method have formed a company, Poold Diagnostics, and are looking to bring their algorithm to labs in the United States. Michael S. Lebowitz, chief science officer at 20/20 GeneSystems, in Rockville, Md., which has plunged into the Covid-19 testing market, said it was in talks with Poold to file a joint application to the Food and Drug Administration for emergency authorization to try out its method.

He said the method could be enormously useful in getting businesses or college athletic programs back up and running and ensuring that their populations remain healthy. "The ideal situation is getting results in 24 to 48 hours," he said. "If you can get compression of about eightfold, you're now running many fewer samples."

The inspiration for the Israeli method came from Dr. Shental's mother. A few years ago, he said, she attended a lecture he gave to an audience of nonscientists in which he described his earlier research about using pooled testing for rare birth defects, and urged that it be made more widely available. As the coronavirus pandemic spread this spring, she asked him if that old algorithm might be deployed to test for Covid-19.

But Dr. Shental's head was elsewhere: He had not worked with group testing in years, and was instead focused on research that got him on the cover of the journal Science in late May, in which he established associations between certain types of bacteria and certain kinds of tumors.

"I was dismissive of her at first," Dr. Shental said, smiling sheepishly. "But when I was driving home, I realized it could work."

Dr. Shental called his best friend, Dr. Hertz — the two got their Ph.D.'s together — and within two days, Dr. Porgador, who has since been named Ben-Gurion University's dean of the health sciences, had set up an experiment using samples from Soroka Hospital across the street. A short time later, Ben-Gurion's president, Daniel Chamovitz, who had solicited suggestions for how to fight the pandemic with a promise to fund the best ones, found \$150,000 to buy an advanced pipetting robot to try out their idea.

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

Canada

Bigger class could mean up to five times the COVID-19 infections, Canadian study suggests Source: National Post - Top Stories

ID: 1007681814

Just how great a risk or not COVID-19 is in classrooms has an entire nation slightly unnerved, so mathematician Chris Bauch and his collaborators decided to plug some scenarios into a model. Their projections? Class sizes of the magnitude many provinces are allowing could lead to outbreaks lasting weeks or even months.

The number of infections increased rapidly with the number of children in a primary school classroom or before-and-after school daycare program, according to the model. "As you double the class size, from eight to 15 to 30, the number of cases and also the lost student days of instruction not only double each time, they triple or quadruple or quintuple," said Bauch, a professor of mathematics at Waterloo University and lead researcher on the study. "Those losses accelerate as you go to larger and larger classes." Policy makers planning for elementary school class sizes of 30 kids or more "need to immediately reconfigure their school opening plans" and switch to hybrid models of part in-person, part online, he said. Teachers in B.C., Alberta, Quebec and Ontario are demanding smaller class sizes. Ontario's plan has students in kindergarten through Grade 8 returning to school without any reduction in class sizes, though they'll spend the day in a single group to limit contact with other children. Ontario Premier Doug Ford has insisted the plan is based on expert advice.

"Our plan to safely reopen schools has been informed by the best medical and scientific minds in the country," Caitlin Clark, a spokesperson for Ontario Education Minister Stephen Lecce, said in an emailed statement.

"The evidence is emerging, and our plan is a living document — it's meant to be augmented and adapted to apply the best advice as it emerges. The leading medical advice was clear that we must allow an opportunity for our students to return to school," she said. "We recognize that school boards have developed plans that best suit their local needs. We will never hesitate from taking further action to protect the health and safety of Ontario's students and education staff."

Outbreaks in schools are already happening. Israel began to see major outbreaks of COVID-19 in high schools weeks after reopening in May. On Friday, the Associated Press confirmed reports that hundreds of students and teachers at dozens of schools in Berlin have become infected with the coronavirus and are now in quarantine, less than two weeks after schools reopened.

Article content continued

The new modelling study, which hasn't yet been peer-reviewed, was designed to capture transmission of the SARS-CoV-2 virus that causes the dreaded COVID-19. Researchers looked at the effect of different student-to-teacher ratios in a primary school class, as well as school-based daycare, an essential "bridge" for working parents who can't drop-off or pick-up kids around the school hours.

Under their most optimistic scenario of masking, social distancing and good hand washing, the model predicted an average of 53 infections during an outbreak in a school community of 150 students, parents and teachers in classes of 30 students, versus 12 infections for classes of 15, where students attend alternative weeks in groups of 15 each.

Outbreaks happened over 40 to 60 days, on average, for the 30-students-to-one-teacher ratio. The number of student-days lost due to classroom closures ranged from 75 for the smallest ratio, to 1,000 for the largest. "Student days are like passenger miles — it's the number of students affected, times number of days lost," Bauch said.

School is going to accelerate spread of the virus if it's already in the community

The model is based on assumptions, including the infectiousness of the virus. But Bauch explained the math as a "triple whammy."

"When you put more students in a classroom there is a higher chance one of them will test positive at some point for COVID, and so you've got to close that classroom." Obviously, the larger the class, the more students affected. But because people who never develop symptoms can spread COVID, or before they get sick, "by the time you've identified that COVID case there might be other cases in the classroom already," Bauch said. And, the more kids in a classroom, the trickier the social distancing. "You get aerosol transmission and you generate more cases by the time the classroom gets closed," he said. Article content continued

"Many people may infect only one person, or even no one, but in some cases you have a so-called superspreader who infects a huge number of people," Bauch said.

In Ontario, masks are required for children in Grades 4 to 12 only.

In the model, sometimes the teacher was the first to get infected but usually it was the student, "because there are more of them. They bring it in somehow and we model what happens — where they spread it in their household and where they spread it in school."

Still, it's not clear just how efficient children are at spreading the virus that causes COVID-19. The science doesn't agree, and most schools have been closed for much of 2020.

"School is going to accelerate spread of the virus if it's already in the community," said Montreal cardiologist and epidemiologist Dr. Chris Labos. "This is the same thing that happened when we reopened stores and restaurants. (School reopening) is not going to create more virus, but it's going to make it easier for the virus to spread," he said.

"It's very possible you could see cases."

For childcare, the 15 children to two teachers ratio was universally the worst across all possible scenarios. Childcare should be operating on a seven or eight kids per room model, Bauch said. Siblings should also be grouped together in daycare.

Co-authors of the study included Brendon Phillips, a PhD candidate in Waterloo's department of applied mathematics, Dillon Browne, an assistant professor in Waterloo's department of psychology and Madhur Anand, a professor at the University of Guelph.

https://nationalpost.com/news/canada/bigger-class-could-mean-up-to-five-times-the-covid-19-infections-canadian-study-suggests

United Kingdom

Covid outbreaks in English schools 'uncommon', says PHE

ID: 1007692460

Source: theguardian.com

Sun 23 Aug 2020 21.18 BST

Covid outbreaks in English schools 'uncommon', says PHE Study finds 67 single cases and 30 outbreaks in June, when 1m children attended school

Covid-19 infections and outbreaks were "uncommon" in English schools after they reopened in June, according to a Public Health England report.

A study released by the health agency on Sunday found there were 67 individual cases, four "co-primary" cases and 30 outbreaks of Covid-19 in schools during June.

Co-primary cases were defined as two or more confirmed cases with a common epidemiological link diagnosed at the same time, while outbreaks were defined as two or more epidemiologically linked cases where subsequent cases were diagnosed within 14 days.

The 67 single cases were made up of 30 students and 37 staff. A total of 121 cases were linked to the outbreaks – 30 in children and 91 in staff. More than a million children attended school in the month.

No children were admitted to hospital. One teacher was admitted to intensive care for respiratory support.

Over the same period, 25,470 cases were recorded in England overall, PHE said.

Its report said: "Staff members need to be more vigilant for exposure outside the school setting to protect themselves, their families and the educational settings."

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It said there was a strong correlation between the regional incidence of Covid-19 and the number of outbreaks in educational settings, which "emphasises the importance of controlling community transmission".

The potential for spread means school closures may be necessary as part of lockdown in regions with increasing community transmission, but these "should probably be considered only in extremis", it added.

The analysis, conducted by researchers from St George's University and the London School of Hygiene and Tropical Medicine, found children were more likely to acquire the virus at home rather than at school.

"What we found essentially was that there was a very low risk [of transmission] among children and staff at the time," Dr Shamez Ladhani, one of the report's authors, told Sky News.

"But you have to understand that these were circumstances where we had just come out of the lockdown and there were very small school numbers that were open at the time with very small classes."

He said most children who got Covid got it at home, often from parents who were key workers, and "most of the infection and transmission in schools is driven by staff".

The UK's chief medical officers have said children are more at risk of long-term harm if they do not attend school than if they return to the classroom despite coronavirus.

In a joint statement, the advisers said children had an "exceptionally low risk of dying" from Covid-19. https://www.theguardian.com/education/2020/aug/23/covid-outbreaks-in-english-schools-uncommon-says-phe

Singapore

Coronavirus can survive for three weeks on contaminated batches of frozen meat and fish, study finds

ID: 1007692483

Source: chroniclelive.co.uk

13:16, 23 AUG 2020

Scientists added the virus to meat and fish before freezing them and three weeks later the virus was found on the samples

Coronavirus can survive on meat and fish that has been frozen for at least three weeks, a new study has found.

Scientists say this could explain why sudden outbreaks have happened in countries that have not had any cases for long periods.

In the study, individual slices of salmon, chicken and pork from supermarkets in Singapore were sliced and a sample of the virus was added to them.

They were then stored in freezing temperatures - between 4C, which is standard refrigeration temperature, and minus 20C, which is standard freezing temperature.

After 21 days, researchers found the virus was still present in the fish and meat samples, The Telegraph reports.

Scientists argue transmission via contaminated food is not a major infection route, but the movement of contaminated items to a region without infections could potentially initiate a new outbreak.

The study states: "An explanation is required for the re-emergence of Covid-19 outbreaks in regions with apparent local eradication.

RELATED ARTICLES

The 'worst case scenario' for a coronavirus second wave - and a No Deal Brexit

Chris Whitty said there's a 'reasonable chance' of a vaccine for winter 2021-2022 "Recent outbreaks have emerged in Vietnam, New Zealand and parts of China where there had been no cases for some months.

"Importation of contaminated food and food packaging is a feasible source for such outbreaks and a source of clusters within existing outbreaks.

"While it can be confidently argued that transmission via contaminated food is not a major infection route, the potential for movement of contaminated items to a region with no Covid-19 and initiate an outbreak is an important hypothesis.

"An infected food handler has the potential to become an index case of a new outbreak.

"The international food market is massive and even a very unlikely event could be expected to occur from time to time."

A pig meat processing plant was shut this week after a coronavirus 'cluster' was discovered among 35 workers.

The meat plant, Cranswick Country Foods in Cullybackey, near Ballymena in County Antrim in Northern Ireland, employs around 500 staff.

Health Minister Robin Swann described the outbreak as "significant" adding that 35 staff members have tested positive, as well as a smaller number of their contacts.

A company spokesperson said: "There has been a recent increase in the number of confirmed Covid-19 cases in Ballymena and the wider region and this has been acknowledged as a community issue.

"As a result of this, we can confirm that a number of colleagues at our Ballymena site have tested positive for Covid-19.

"Working with the Public Health Authority (PHA), we have taken the decision to send all of our colleagues for testing. If the test results are positive, the individual will be required to self-isolate for 10 days; if the test results are negative, the individual will be required to self-isolate for 14 days.

"Therefore, the site will need to temporarily suspend production." https://www.chroniclelive.co.uk/news/uk-news/coronavirus-survive-frozen-meat-study-18815687

Mexico

IOM Survey Illuminates COVID-19's Impact on Migrant Population in Central America, Mexico

Source: Relief Web Unique ID: <u>1007677926</u>

San José – Almost 60 per cent of those intending to migrate decided to postpone or cancel their plans due to the pandemic. Over 20 per cent of those already living as migrants are considering returning to their country of origin as soon as their economic conditions or the health measures adopted by their countries allow them to. About half of all migrants in Central America and Mexico lost jobs due to the pandemic.

These are some of the findings brought to light this week in a survey conducted by the International Organization for Migration (IOM). More than 1,600 people participated in this survey organized by IOM, which was launched in June to measure and understand the impact of the pandemic on migration plans. The survey also probed the socio-economic situation, physical and mental health and risk factors facing migrants from the region.

While over half (51 per cent) of all migrants participating in the survey actually lost jobs due to the pandemic, only about 20 per cent of migrants are currently working – suggesting about a third of all migrants in the region fail to gain any employment at all during their sojourns.

At the same time, four out of 10 migrants with jobs saw their working hours cut or saw their wages reduced. Almost half (48 per cent) of the participants indicated that their salaries and incomes were reduced due to COVID-19.

Concerning access to health, virtually all migrants declared that they comply with preventive health measures for COVID-19. Less than 10 per cent suspected they may have contracted the disease at some point, yet only about a third of the latter resorted to health services. This finding reinforces the importance of guaranteeing migrants access to health services.

The mental health of migrants also has been affected, the survey revealed, as more than half of participants said they have faced situations such as widespread fear of contagion, isolation, uncertainty, socio-economic consequences and concerns derived from the pandemic. One aspect of that concern had to do with being deceived or exploited when looking for job opportunities. Even so, most participants said they would risk taking a job abroad even without proper information. That demonstrates their continued high risk of becoming victims of trafficking.

The survey collected 1,660 responses during June 2020 through an online questionnaire. Among those who participated, 45 per cent were men, 54 per cent were women – with the remainder identifying themselves as "non-binary." Most respondents were between 26 and 45 years old.

This activity was developed within the framework of the Mesoamerican-Caribbean Regional Program on Migration, with funding from the Bureau of Population, Refugees and Migration (PRM) of the United States Department of State. (PRM) of the United States Department of State.

Click here to see a Facebook Live briefing (in Spanish) on the survey's release

For more information, please contact Tatiana Chacón at the IOM Regional Office for Central America, North America and the Caribbean, Tel: +506 8632 8527, Email: tchacon@iom.int International Organization for Migration

https://reliefweb.int/report/mexico/iom-survey-illuminates-covid-19s-impact-migrant-population-central-america-mexico

Study

14-day Quarantine Not Enough For COVID-19 Patients

Source: Urdu Point Unique ID: 1007677943

ANKARA, (UrduPoint / Pakistan Point News - 21st Aug, 2020) :An expert virologist in Thailand has said a 14-day quarantine period is not enough to ensure full recovery from COVID-19.

He suggested that people need to self-isolate for another 14 days meaning almost a month to be sure the virus is gone.

Professor Yong Poovorawan of Bangkok's Chulalongkorn University said he has studied 212 COVID-19 cases and outlined four points in a Facebook post on Thursday.

"I found 6.6% of them showed symptoms four to 12 weeks after they were allowed to return home," he said.

"We found a virus after 36-105 days of symptoms, but very weak so the possibility of spreading the disease to others is very low." He said the "hatching range" of most COVID-19 cases is two to seven days. "It may be found up to 14 days and it may be less than 21 days," said Poovorawan, who is a medical professor in pediatric hepatology, viral hepatitis and virology.

"Therefore, those who have undergone 14-day isolation should stay under quarantine at home for another 14 days to increase confidence in prevention of disease spread," he said, adding that detection of COVID-19 after 14 days is "possible in patients." On the COVID-19 situation in Thailand, he said there is "limited possibility" of infection in the country as "no case has been found for over 80 days." Thailand has reported 3,390 corona-virus cases and 58 deaths so far, with the government having extended a health emergency for another month until Sept. 30.

"There is a possibility that some patients have been infected from overseas, and they may carry a small amount of genetic viral material that is difficult to detect," he said.

"After patients arrive in Thailand, they may test negative at first but turn positive later as was seen at the start of the outbreak."

https://www.urdupoint.com/en/health/14-day-quarantine-not-enough-for-covid-19-pat-1007670.html

United States (Study)

Smartphone data show how shared staff spread COVID-19 through nursing homes

Source: Medical Xpress Unique ID: 1007678364

COVID-19 infections have spread rapidly through nursing homes despite a ban on visitors to the facilities. A new study co-authored by Yale SOM's Judith A. Chevalier finds one likely explanation: staff members who work at multiple nursing homes. Using smartphone location data, the authors find that the movement of people among the facilities is associated with increased infections. They estimate that banning shared staff could reduce infections by 44%.

Nursing homes and other care facilities in the United States have been devastated by COVID-19, accounting for nearly half of all U.S. deaths from the pandemic. Infections have spread despite a ban on visitors to the facilities imposed by the Centers for Medicare and Medicaid Services (CMS) in March. A new study co-authored by Yale SOM's Judith A. Chevalier, using smartphone location data to track movement between the facilities, suggests that one source of the spread of infections is staff who work in multiple nursing homes. Banning such shared staff could reduce infections in the facilities by 44%, the authors find.

The study, co-authored by M. Keith Chen and Elisa F. Long of the UCLA Anderson School of Management, draws on location data from 30 million smartphones between March 13, when the ban on visitors began, and April 23. The authors paired the location data with nursing home addresses and satellite building images to track when smartphones entered nursing homes. They found that about 500,000 smartphones entered a nursing home at some point, and 7% of those entered more than one. While the smartphone location data was anonymized, the individuals moving among nursing homes after the visitor ban were most likely staff. Previous studies have found that many nursing home staff work at multiple facilities, the authors note, because they work through a staffing agency, because they supplement their income with additional jobs, or because they are independent clinicians or technicians. The researchers used the location data to create network maps, showing how people moving among nursing homes created connections among them. "A major challenge facing nursing homes is that every connection is a potential link to other connections—and to SARS-CoV-2 transmission," the authors write. In Connecticut, for example, one nursing home that suffered a large COVID-19 outbreak of 102 cases was linked to six other facilities through the movement of one smartphone in each pairing, a relatively low number of connections compared to its peers. But those six facilities were connected to many more nursing homes, multiplying the potential exposure of the facility at the center of the network. And, indeed, the researchers found that such network connections were predictive of more infections. controlling for location, demographics, size, and quality ratings. An additional 10 direct connections were associated with a 26.7% increase in COVID-19 infections; indirect connections, measured in various ways, were also associated with increased cases. Compared to a completely unconnected nursing home, the most connected nursing home in any given state was expected to have an increase of cases of 190%. The potential role of shared staff in spreading COVID-19 has been understood since early in the pandemic, the authors point out. The Centers for Disease Control reported on March 18 that such staff were a likely factor in the spread of infections among facilities in Washington State. But no regulation limiting shared staff has been issued.

"Absent such regulation, allocation of PPE, testing, and other preventative measures should be targeted thoughtfully, recognizing the current potential for cross-transmission across [nursing] homes," the authors write.

https://medicalxpress.com/news/2020-08-smartphone-staff-covid-nursing-homes.html

The study: https://arxiv.org/abs/2007.11789

United States

Limited transmission of COVID-19 found in U.S. childcare study, CDC says

Source: National Post ID: 1007681184

Transmission of COVID-19 from children or adults to other people in Rhode Island childcare programs occurred on only a limited basis, a study by the U.S. Centers for Disease Control and Prevention showed on Friday.

CDC Director Robert Redfield told reporters on a call that the findings indicated that there is a path "to get these childcare programs to reopen, which are very important for our country."

Many childcare facilities were shut due to fear of infection in such group settings during the coronavirus pandemic, one more complication for getting people back to work in the battered U.S. economy. Such transmission was found in just four of the 666 childcare programs operating in the state, with 17 people becoming infected, according to the CDC analysis that covered June 1 to July 31. While only limited transmission was detected in the childcare settings, the pandemic still had a major impact, with 853 children and staff members going into self-quarantine because an infected person had showed up at a facility.

About three-quarters of the 891 childcare programs had been allowed to reopen under CDC guidelines that included reduced enrollment, universal use of masks for adults, daily symptom screening of adults and children, and enhanced cleaning and disinfection.

The COVID-19 transmission in the four programs was identified mainly in the last two weeks of July, when community transmission in Rhode Island had increased, the researchers said. https://nationalpost.com/pmn/health-pmn/limited-transmission-of-covid-19-found-in-u-s-childcare-study-cdc-says

Study

New study explains potential causes for "happy hypoxia" condition in patients with the COVID-19 virus

Source: Medical Xpress Unique ID: 1007678382

A new research study provides possible explanations for COVID-19 patients who present with extremely low, otherwise life-threatening levels of oxygen, but no signs of dyspnea (difficulty breathing). This new understanding of the condition, known as silent hypoxemia or "happy hypoxia," could prevent unnecessary intubation and ventilation in patients during the current and expected second wave of coronavirus.

The condition "is especially bewildering to physicians as it defies basic biology," said Martin J. Tobin, MD, Loyola Medicine and Edward J. Hines Jr. VA Hospital pulmonologist and critical care specialist, and professor, Loyola University Chicago Stritch School of Medicine. Dr. Tobin is lead author of the study, "Why COVID-19 Silent Hypoxemia is Baffling to Physicians," appearing recently in the online American Journal of Respiratory and Critical Care Medicine.

"In some instances, the patient is comfortable and using a phone at a point when the physician is about to insert a breathing (endotracheal) tube and connect the patient to a mechanical ventilator," said Dr. Tobin, "which while potentially lifesaving carries its own set of risks."

The study included 16 COVID-19 patients with very low levels of oxygen (as low as 50%; normal blood oxygen saturation is between 95 and 100%), without shortness of breath or dyspnea, and found that "several pathophysiological mechanisms account for most, if not all, cases of silent hypoxemia. This includes the initial assessment of a patient's oxygen level with a pulse oximeter.

"While a pulse oximeter is remarkably accurate when oxygen readings are high, it markedly exaggerates the severity of low levels of oxygen when readings are low," said Dr. Tobin. "Another factor is how the brain responds to low levels of oxygen. As oxygen levels drop in patients with COVID-19, the brain does not respond until oxygen falls to very low levels—at which point a patient typically becomes short of breath." he said.

In addition, more than half of the patients had low levels of carbon dioxide, which may diminish the impact of an extremely low oxygen level.

"It is also possible that the coronavirus is exerting a peculiar action on how the body senses low levels of oxygen," said Dr. Tobin, which could be linked to the lack of smell, experienced by two-thirds of COVID-19 patients.

While acknowledging that further research is needed, the study concludes that "features about COVID-19 that physicians find baffling become less strange when viewed in the light of long-established principles of respiratory physiology."

Dr. Tobin said, "This new information may help to avoid unnecessary endotracheal intubation and mechanical ventilation, which presents risks, when the ongoing and much anticipated second wave of COVID-19 emerges."

https://www.atsjournals.org/doi/10.1164/rccm.202006-2157CP

https://medicalxpress.com/news/2020-08-potential-happy-hypoxia-condition-patients.html

Study

Two or more long-term health conditions linked to a positive COVID-19 test

Source: Medical Xpress Unique ID: <u>1007678383</u>

The presence of two or more long term health conditions—known as multimorbidity—is linked to a 48% higher risk of a positive COVID-19 test.

While it is well recognized that the risk of a severe COVID-19 infection is linked to certain long-term health conditions, little is known, so far, about the effects of multimorbidity and polypharmacy (taking multiple medications) on the risk of a serious coronavirus infection.

Now, a new study led by the University of Glasgow and published today in PLOS ONE, is the first to link both multimorbidity and polypharmacy with the risk of having a positive COVID-19 test.

This association was particularly apparent for those with two or more cardiometabolic health conditions such as diabetes and high blood pressure. Researchers found that the presence of two or more such

conditions was associated with a 77% higher risk of a positive COVID-19 test.

Those of non-white ethnicity, who also had multimorbidity, had almost three times the risk of a positive COVID-19 test.

Overall, people with multimorbidity who appeared to have the highest risk of COVID-19 infection were from socioeconomically deprived areas, of non-white ethnicity, considered severely obese, and those with reduced renal function.

The researchers believe their findings will have implications for clinical and public health decision making as the SARS-CoV-2 pandemic continues around the world.

Dr. Barbara Nicholl, from the University of Glasgow who led the study, said: "Multimorbidity and polypharmacy are global healthcare challenges in their own right. Our study shows that having a positive COVID-19 test is more common in those living with these health conditions. These results will be important for public health and clinical decisions in the future as we continue to manage the health of those at greatest risk of a severe COVID-19 infection during this pandemic."

Professor Frances Mair, the University of Glasgow Norie Miller Professor of General Practice and leading expert on multimorbidity, said: "Given the high prevalence of multimorbidity, particularly in older age groups, the more detailed understanding of the associations between these complex health needs and COVID-19, as provided in this study, will improve our understanding of the risks and help us better advise those most vulnerable to severe infection."

The study is based on UK Biobank data, which is now linked to COVID-19 test results, and included 428,199 adults aged 37-73 at the time of recruitment (2006-2010) across England and Wales. The study, "Multimorbidity, Polypharmacy, and COVID-19 infection within the UK Biobank Cohort," is published in PLOS ONE.. Provided by University of Glasgow

More information: Ross McQueenie et al. Multimorbidity, polypharmacy, and COVID-19 infection within the UK Biobank cohort, PLOS ONE (2020). DOI: 10.1371/journal.pone.0238091 https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0238091 https://medicalxpress.com/news/2020-08-long-term-health-conditions-linked-positive.html

Domestic Events of Interest

Canada

Fresh imported peaches recalled by Prima Wawona may be unsafe due to Salmonella

Source: healthycanadians.gc.ca

Starting date:August 22, 2020
Type of communication: Advisory
Alert sub-type: Consumer Advisory

Subcategory: Microbiological – Salmonella

Hazard classification: Class 1

Source of recall: Canadian Food Inspection Agency

Recalling firm: Prima Wawona Distribution: Possibly National

Extent of the product distribution: Retail and Hotel/Restaurant/Institutional

Last updated: 2020-08-22

Advisory details What you should do Who is affected Background Images Media enquiries

Advisory details

Ottawa, August 22, 2020 - The Canadian Food Inspection Agency (CFIA) is warning the public not to consume and retailers, distributors, manufacturers, and food service establishments such as hotels, restaurants, cafeterias, hospitals, and nursing homes not to serve, use, or sell the products described below.

Prima Wawona, located in Fresno, California, has recalled fresh peaches with various brand names due to possible Salmonella contamination. Various importers in Canada are conducting a recall of the affected products.

Peaches with the same PLU numbers and that are Product of Canada are not affected.

Recalled Products

What you should do

If you think you became sick from consuming a recalled product, call your doctor.

Check to see if you have the recalled products in your home or establishment. Recalled products should be thrown out or returned to the location where they were purchased. If you are unsure of the source of the peaches, check with your place of purchase.

Food contaminated with Salmonella may not look or smell spoiled but can still make you sick. Young children, pregnant women, the elderly and people with weakened immune systems may contract serious and sometimes deadly infections. Healthy people may experience short-term symptoms such as fever, headache, vomiting, nausea, abdominal cramps and diarrhea. Long-term complications may include severe arthritis.

##Learn more about the health risks

##Sign up for recall notifications by email and follow us on social media ##View our detailed explanation of the food safety investigation and recall process ##Report a food safety or labelling concern

Recalled Products

Brand	Product	Size UPC	Codes	Additional information
Harvest Sweet 2 Eat Prima Sweet Value Wawona	Yellow Peaches	VariablePLU 4037	All peaches sold from June 1, 2020 up to and including August 22, 2020.	These peaches may have been sold loose or in bulk, with or without a brand name. These peaches may have been repackaged into a variety of formats.
Harvest Sweet Sweet 2 Eat Prima Sweet Value Wawona	Yellow Peaches	VariablePLU 4038	All peaches sold from June 1, 2020 up to and including August 22, 2020.	These peaches may have been sold loose or in bulk, with or without a brand name. These peaches may have been repackaged into a variety of formats.

Brand	Product	Size UPC	Codes	Additional information
Harvest Sweet Sweet 2 Eat Prima Sweet Value Wawona	Yellow Peaches	VariablePLU 4044	All peaches sold from June 1, 2020 up to and including August 22, 2020.	These peaches may have been sold loose or in bulk, with or without a brand name. These peaches may have been repackaged into a variety of formats.
Harvest Sweet 2 Sweet 2 Eat Prima Sweet Value Wawona	White Peaches	VariablePLU 4401	All peaches sold from June 1, 2020 up to and including August 22, 2020.	These peaches may have been sold loose or in bulk, with or without a brand name. These peaches may have been repackaged into a variety of formats.
Sweet 2 Eat Sweet O	Organic Yellow Peaches	VariablePLU 94037	All peaches sold from June 1, 2020 up to and including August 22, 2020.	These peaches may have been sold loose or in bulk, with or without a brand name. These peaches may have been repackaged into a variety of formats.
Sweet 2 Eat Sweet O	Organic Yellow Peaches	VariablePLU 94038	All peaches sold from June 1, 2020 up to and including August 22, 2020.	These peaches may have been sold loose or in bulk, with or without a brand name. These peaches may have been repackaged into a variety of formats.
Sweet 2 Eat Sweet O	Organic Yellow Peaches	VariablePLU 94044	All peaches sold from June 1, 2020 up to and including August 22, 2020.	These peaches may have been sold loose or in bulk, with or without a brand name. These peaches may have been repackaged into a variety of formats.
Sweet 2 Eat	Organic White Peaches	VariablePLU 94401	All peaches sold from June 1, 2020 up to and including August 22, 2020.	These peaches may have been sold loose or in bulk, with or without a brand name. These peaches may have been repackaged into a variety of formats.

Brand	Product	Size	UPC	Codes	Additional information
Wawona	Peaches	907 g / 2 lbs	0 33383 32200	All packages sold from June 1, 12020 to August 22, 2020, inclusively.	None
Wegmans	s Peaches	907 g / 2 lbs	0 77890 49048 8	All packages sold from June 1, 32020 to August 22, 2020, inclusively.	None
Extrafresh	n Peaches	907 g / 2 lbs	0 33383 02071 6	CPO3148, CPO3164, CPO3163, CPO3186, CPO3207, CPO3213, CPO3228, CPO3265, CPO3281, CPO3302, CPO3328, CPO3354, 6MPO0500, MPO0503, MPO0524, MPO0671, MPO0678, MPO0689, MPO0693, MPO0703, MPO0716, MPO0725, MPO0730, MPO0767, MPO0795.	None

Who is affected

The Public Health Agency of Canada is investigating an outbreak of human illness.

Background

This advisory was triggered by a recall in the United States by Prima Wawona located in Fresno, California. The CFIA is conducting a food safety investigation, which may lead to the recall of other products. If products are recalled, the CFIA will notify the public through a Food Recall Warning https://healthycanadians.gc.ca/recall-alert-rappel-avis/inspection/2020/73753a-eng.php

International Events of Interest

United States

Target recalls peaches, linking them to Salmonella outbreak

Source: Fresh Plaza Unique ID: <u>1007677998</u>

Minnesota state health and food safety officials are warning Minnesota consumers not to eat fresh, whole peaches supplied by Wawona Packing Company and purchased at retail locations including Aldi and Target after linking Salmonella infections to the produce.

The Minnesota Department of Health (MDH) and Minnesota Department of Agriculture (MDA), along with the U.S. Centers for Disease Control and Prevention (CDC), the U.S. Food and Drug Administration (FDA) are investigating a multi-state outbreak of Salmonella Enteritidis infections linked to consumption of peaches supplied by Wawona Packing Company.

According to the MDH, several people that have fallen ill reported purchasing peaches from Aldi, Target, and possibly other retail locations. On August 19, Aldi announced a recall of peaches from Wawona Packing Company, including both loose and bagged peaches.

Foodsafetynews.com reports that, so far, there have been 68 reported cases of Salmonella Enteritidis resulting in 14 hospitalizations in 9 states. — Connecticut, Illinois, Iowa, Kentucky, Massachusetts, Michigan, Minnesota, New Hampshire, New York, North Dakota, Ohio, Rhode Island, South Dakota, Vermont, West Virginia and Wisconsin. The full CDC report can be read here. Recalled products:

Target Item # 267-03-4038, Peach per pound; UPC # 492670340386

Target Item # 266-03-0010, Peach by the each; UPC # 204038000005

Target Item # 266-03-0002, 2 lb peach bag; UPC # 033383322056

Target Item # 267-50-4044, 2 lb organic peach; UPC # 849315000400

Target Item # 267-03-4405, White Peach per pound UPC # 492670344056

Target is in the process of removing peaches from its stores. Customers who have purchased the peaches should not consume them and dispose of them immediately.

https://www.freshplaza.com/article/9242570/target-recalls-peaches-linking-them-to-salmonella-outbreak/

Democratic Republic of Congo

Ebola outbreak in western Democratic Republic of the Congo reaches 100 cases

Source: Relief Web Unique ID: 1007678417

Brazzaville, 21 August 2020 – The number of cases in the ongoing Ebola outbreak in western Democratic Republic of the Congo (DRC) has reached 100, a near two-fold increase in a little over five weeks. This latest outbreak, DRC's 11th, was declared on 1 June 2020 in Equateur Province. A cluster of cases was initially detected in Mbandaka, the provincial capital. The outbreak has since spread to 11 of the province's 17 health zones. Of the 100 cases reported so far, 96 are confirmed and four are probable. Forty-three people have lost their lives.

The outbreak presents significant logistical challenges, with affected communities spanning large distances in remote and densely-forested areas of the province, which straddles the Equator. At its widest points, the outbreak is spread across approximately 300 km both from east to west and from north to south. It can take days to reach affected populations, with responders and supplies often having to traverse areas without roads, necessitating long periods of river boat travel.

An Ebola outbreak occurred in the same province in May 2018 and was contained in less than three months with 54 cases and 33 deaths recorded.

"With 100 Ebola cases in less than 100 days, the outbreak in Equateur Province is evolving in a concerning way," said Dr Matshidiso Moeti, World Health Organization (WHO) Regional Director for Africa. "The virus is spreading across a wide and rugged terrain which requires costly interventions and with COVID-19 draining resources and attention, it is hard to scale-up operations."

The current response is underfunded, adding challenges to the existing logistical barriers. WHO initially provided US\$ 1.7 million and subsequently supplemented this with another US\$ 600 000 from its contingency fund for emergencies. The DRC Ministry of Health has presented an integrated plan to donors and partners for about US\$ 40 million and has committed US\$ 4 million. There is a critical need for additional support.

"Without extra support the teams on the ground will find it harder to get ahead of the virus," said Dr Moeti. "COVID-19 is not the only emergency needing robust support. As we know from our recent history we ignore Ebola at our peril."

The majority of the responders have been mobilized locally under the leadership of the DRC Government. There are currently 90 WHO experts on the ground, as well as experts from nearly 20 partner organizations supporting the response. Since the beginning of the outbreak, WHO has supported the ring vaccination of more than 22 600 people at high risk.

Along with its partners, WHO helped to screen more than 640 000 people across 40 points of control that were set up to help keep travellers safe when crossing into an affected area. WHO has also worked to raise awareness about Ebola among nearly 774 000 people in the affected communities on how to recognize symptoms and seek treatment.

Furthermore, WHO and partners are also ready to support the Ministry of Health in implementing preparedness and readiness activities in currently unaffected health zones of Equateur in a bid to curtail the further spread of the outbreak.

https://reliefweb.int/report/democratic-republic-congo/ebola-outbreak-western-democratic-republic-congo-reaches-100-cases

Yemen

Polio outbreak declared in Yemen Source: Outbreak News Today ID: 1007681862

The Global Polio Eradication Initiative (GPEI) announced that a circulating vaccine-derived poliovirus type 1 (cVDPV1) outbreak has been declared in Yemen.

Fifteen cVDPV1 cases were reported this week. These genetically-linked VDPV1 were isolated from 14 AFP cases, with onset of paralysis ranging from 31 January to 18 June 2020 (with a further AFP case from June 2019 retrospectively confirmed).

The cases are from different districts of Saada Governorate, a relatively densely populated area, which has also been affected in the past by conflict and access issues, in the north-west of the country. Officials say the isolates have 17-24 Nt changes from Sabin 1, suggesting circulation of potentially up to two years.

WHO and UNICEF are supporting local health authorities to plan and launch an effective outbreak response to limit virus spread.

Elsewhere, wild poliovirus type 1 (WPV1) cases were reported in Afghanistan (3) and Pakistan (2), bringing the country totals to 37 and 65 cases, respectively.

Lastly, nine circulating vaccine-derived poliovirus type 2 (cVDPV2) were reported in four African nations—Cote d'Ivoire. Nigeria. Somalia and Sudan.

http://outbreaknewstoday.com/polio-outbreak-declared-in-yemen-31165/

FCDC

West Nile virus - Multi-country (World) - Monitoring season 2020

Source: ECDC

Unique ID: <u>1007678450</u>

Between 14 and 20 August 2020, EU Member States reported 34 human cases of WNV infection: Italy (17), Greece (11) and

Spain (six). One case was reported from the province of Verbano-Cusio-Ossola, Italy, which had not been affected in previous transmission seasons. All other cases were reported from areas that have been affected during previous transmission seasons.

This week, no deaths were reported. No human cases of WNV infection or deaths were reported from EU neighbouring countries.

Spain is currently experiencing an outbreak of WNV infection in the province of Seville. Six confirmed human cases reported through TESSy (see above) and an additional 13 probable cases are being further investigated. As these probable cases have not yet been reported through TESSy they are not included in the list of the cases in the Surveillance Atlas. Additional patients with meningo-encephalitis are currently being tested.

https://www.ecdc.europa.eu/en/publications-data/communicable-disease-threats-report-16-22-august-2020-week-34

https://www.ecdc.europa.eu/sites/default/files/documents/communicable-disease-threats-report-22-aug-2020.pdf

Researches. Policies and Guidelines

Study

Selfies could be used to detect heart disease: New research uses artificial intelligence to analyse

Source: Medical Xpress Unique ID: 1007678427

Sending a "selfie" to the doctor could be a cheap and simple way of detecting heart disease, according to the authors of a new study published today (Friday) in the European Heart Journal.

The study is the first to show that it's possible to use a deep learning computer algorithm to detect coronary artery disease (CAD) by analyzing four photographs of a person's face.

Although the algorithm needs to be developed further and tested in larger groups of people from different ethnic backgrounds, the researchers say it has the potential to be used as a screening tool that could identify possible heart disease in people in the general population or in high-risk groups, who could be

referred for further clinical investigations.

"To our knowledge, this is the first work demonstrating that artificial intelligence can be used to analyze faces to detect heart disease. It is a step towards the development of a deep learning-based tool that could be used to assess the risk of heart disease, either in outpatient clinics or by means of patients taking 'selfies' to perform their own screening. This could guide further diagnostic testing or a clinical visit," said Professor Zhe Zheng, who led the research and is vice director of the National Center for Cardiovascular Diseases and vice president of Fuwai Hospital, Chinese Academy of Medical Sciences and Peking Union Medical College, Beijing, People's Republic of China.

He continued: "Our ultimate goal is to develop a self-reported application for high risk communities to assess heart disease risk in advance of visiting a clinic. This could be a cheap, simple and effective of identifying patients who need further investigation. However, the algorithm requires further refinement and external validation in other populations and ethnicities."

It is known already that certain facial features are associated with an increased risk of heart disease. These include thinning or gray hair, wrinkles, ear lobe crease, xanthelasmata (small, yellow deposits of cholesterol underneath the skin, usually around the eyelids) and arcus corneae (fat and cholesterol deposits that appear as a hazy white, gray or blue opaque ring in the outer edges of the cornea). However, they are difficult for humans to use successfully to predict and quantify heart disease risk. Prof. Zheng, Professor Xiang-Yang Ji, who is director of the Brain and Cognition Institute in the Department of Automation at Tsinghua University, Beijing, and other colleagues enrolled 5,796 patients from eight hospitals in China to the study between July 2017 and March 2019. The patients were undergoing imaging procedures to investigate their blood vessels, such as coronary angiography or coronary computed tomography angiography (CCTA). They were divided randomly into training (5,216 patients, 90%) or validation (580, 10%) groups.

Trained research nurses took four facial photos with digital cameras: one frontal, two profiles and one view of the top of the head. They also interviewed the patients to collect data on socioeconomic status, lifestyle and medical history. Radiologists reviewed the patients' angiograms and assessed the degree of heart disease depending on how many blood vessels were narrowed by 50% or more (≥ 50% stenosis), and their location. This information was used to create, train and validate the deep learning algorithm. The researchers then tested the algorithm on a further 1,013 patients from nine hospitals in China, enrolled between April 2019 and July 2019. The majority of patients in all the groups were of Han Chinese ethnicity.

They found that the algorithm out-performed existing methods of predicting heart disease risk (Diamond-Forrester model and the CAD consortium clinical score). In the validation group of patients, the algorithm correctly detected heart disease in 80% of cases (the true positive rate or sensitivity) and correctly detected heart disease was not present in 61% of cases (the true negative rate or 'specificity'). In the test group, the sensitivity was 80% and specificity was 54%.

Prof. Ji said: "The algorithm had a moderate performance, and additional clinical information did not improve its performance, which means it could be used easily to predict potential heart disease based on facial photos alone. The cheek, forehead and nose contributed more information to the algorithm than other facial areas. However, we need to improve the specificity as a false positive rate of as much as 46% may cause anxiety and inconvenience to patients, as well as potentially overloading clinics with patients requiring unnecessary tests."

As well as requiring testing in other ethnic groups, limitations of the study include the fact that only one center in the test group was different to those centers which provided patients for developing the algorithm, which may further limit its generalisability to other populations.

In an accompanying editorial, Charalambos Antoniades, professor of cardiovascular medicine at the University of Oxford, UK, and Dr. Christos Kotanidis, a DPhil student working under Prof. Antoniades at Oxford, write: "Overall, the study by Lin et al. highlights a new potential in medical diagnostics......The robustness of the approach of Lin et al. lies in the fact that their deep learning algorithm requires simply a facial image as the sole data input, rendering it highly and easily applicable at large scale."

They continue: "Using selfies as a screening method can enable a simple yet efficient way to filter the general population towards more comprehensive clinical evaluation. Such an approach can also be highly relevant to regions of the globe that are underfunded and have weak screening programs for cardiovascular disease. A selection process that can be done as easily as taking a selfie will allow for a stratified flow of people that are fed into healthcare systems for first-line diagnostic testing with CCTA. Indeed, the 'high risk' individuals could have a CCTA, which would allow reliable risk stratification with the

use of the new, Al-powered methodologies for CCTA image analysis."

They highlight some of the limitations that Prof. Zheng and Prof. Ji also include in their paper. These include the low specificity of the test, that the test needs to be improved and validated in larger populations, and that it raises ethical questions about "misuse of information for discriminatory purposes. Unwanted dissemination of sensitive health record data, which can easily be extracted from a facial photo, renders technologies such as that discussed here a significant threat to personal data protection, potentially affecting insurance options. Such fears have already been expressed over misuse of genetic data, and should be extensively revisited regarding the use of AI in medicine."

The authors of the research paper agree on this point. Prof. Zheng said: "Ethical issues in developing and applying these novel technologies is of key importance. We believe that future research on clinical tools should pay attention to the privacy, insurance and other social implications to ensure that the tool is used only for medical purposes."

Prof. Antoniades and Dr. Kotanidis also write in their editorial that defining CAD as ≥ 50% stenosis in one major coronary artery "may be a simplistic and rather crude classification as it pools in the non-CAD group individuals that are truly healthy, but also people who have already developed the disease but are still at early stages (which might explain the low specificity observed)".

More information: Shen Lin et al. Feasibility of using deep learning to detect coronary artery disease based on facial photo, European Heart Journal (2020). DOI: 10.1093/eurheartj/ehaa640 https://academic.oup.com/eurheartj/advance-article/doi/10.1093/eurheartj/ehaa640/5895010

Selfies in cardiovascular medicine: welcome to a new era of medical diagnostics. European Heart Journal. DOI: 10.1093/eurheartj/ehaa608

http://fdslive.oup.com/www.oup.com/pdf/production_in_progress.pdf https://medicalxpress.com/news/2020-08-selfies-heart-disease-artificial-intelligence.html