GPHIN Daily Report for 2020-09-03

Special Section on Coronavirus

Canada

Areas in Canada with cases of COVID-19 as of 02 September 2020 at 20:22 EDT

Source: Government of Canada

Province, territory or other	Number of confirmed cases	Number of active cases	Number of deaths
Canada	129,923	5,738	9,135
Newfoundland and Labrador	269	1	3
Prince Edward Island	44	0	0
Nova Scotia	1,085	6	65
New Brunswick	192	4	2
Quebec	62,746	1,467	5,764
Ontario	42,554	1,236	2,812
Manitoba	1,244	454	14
Saskatchewan	1,624	29	24
Alberta	14,180	1,403	242
British Columbia	5,952	1,138	209
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

Remarks from the Chief Public Health Officer on COVID-19, September 1, 2020

From: Public Health Agency of Canada

Speech

Today I'd like to talk about our ongoing efforts for the development of safe and effective COVID-19 vaccines for Canada. First, I'll begin with the usual numbers update.

There have been 128,948 cases of COVID-19 in Canada, including 9,126 deaths. 89% of people have now recovered. Over the past week close to 46,000 people were tested daily, with 0.9% of people testing positive. An average of just over 470 new cases have been reported daily during the most recent seven days.

Keeping COVID-19 under control requires constant vigilance and tireless efforts, not just by public health, but by all of us. So far, those efforts appear to be paying off, as we have planked the curve of the epidemic, and the rate of infection in Canada is what I call "on a slow burn". Clearly, we can't afford to give this virus an inch, as it will take any opportunity for a comeback, as we have seen elsewhere.

What we are living through now, is in some ways like what generations before us experienced. In the 1940s, 50s and 60s, communities would ban public gatherings and close schools, and the sick would be quarantined due to outbreaks of polio and measles. Most of us are lucky; we have not had to live through these types of measures because of safe and effective vaccines for these diseases.

As we have seen with COVID-19, prevention measures such as practicing physical distancing, hand washing and using face masks when in public can help reduce the spread of the virus, but they cannot and have not reduced the spread of the virus to a point where Canadians can resume life as normal. What Canada, and the world, needs to have the best shot at normalcy, is a safe and effective vaccine.

The vaccine research and development process in usual times takes more than a decade before they are approved for use for Canadians. Canada, and the world, cannot wait 10 years for a COVID-19 vaccine. By the same token, we cannot, and will not, compromise safety and efficacy.

The development and approval of a COVID-19 vaccine for Canadians will build on the existing strengths and experience of Canada's vaccine research and safety review process. The vaccine will be tested extensively among thousands of volunteers. It will meet high standards of safety and efficacy before it is approved for use in Canada.

Thanks to decades of research in vaccine development, and advances in technology over the last 20 years, organizations in Canada and around the world are able to expedite the vaccine development process. In order to do that without compromising safety, Health Canada will dedicate additional scientists to assist with the review and approval process, and the COVID-19 vaccine, or vaccines, have been given top priority at the Public Health Agency of Canada. We are committed to working collaboratively with our international partners in reviewing the safety and efficacy of the vaccines.

A key component of the vaccine process is Canada's National Advisory Committee on Immunizations, or NACI. For over 50 years, NACI has safeguarded the health of Canadians by reviewing the research and data on vaccines in Canada, and making recommendations on the use of vaccines across Canada. NACI is composed of health professionals, scientists and researchers who review the research and ensure that the highest standards of safety and efficacy are met.

In the end, the ultimate success of a COVID-19 vaccine in Canada will depend on individual Canadians rolling up their sleeves to get immunized. Widespread vaccine uptake is the best shot Canadians have at regaining some of what we've lost and returning to things we cherish....things like holding our family and friends closely, having community events, and living our lives without the fear of contracting the disease.

Thank you.

https://www.canada.ca/en/public-health/news/2020/09/cpho-remarks-tuesday-sept1-2020.html

Canada

Statement from the Chief Public Health Officer of Canada on September 2, 2020

From: Public Health Agency of Canada

Statement

September 2, 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 129,425 cases of COVID-19 in Canada, including 9,132 deaths. 88.5% of people have now recovered. Labs across Canada tested an average of 46,000 people daily over the past week with 0.9% testing positive. An average of over 490 new cases have been reported daily during the most recent seven days.

Sexual health is an important part of our overall health. However, sex can be complicated in the time of COVID-19, especially for those without an intimate partner in their household or whose sexual partner is at higher risk for COVID-19. Like other activities during COVID-19 that involve physical closeness, there are some things you can do to minimize the risk of getting infected and spreading the virus.

The lowest risk sexual activity during COVID-19 involves yourself alone. If you choose to engage in an inperson sexual encounter with someone outside of your household or close contacts bubble, there are some steps you can take to reduce your risk. The most important step is to establish a trusting relationship with your sexual partner. When engaging in sexual activity you can reduce your risk by:

- Monitoring yourself for symptoms of COVID-19 and not having sex if you or your partner is experiencing symptoms;
- Limiting your use of alcohol and other substances so you and your partner(s) are able to make safe decisions;
- Skipping kissing and avoiding face-to-face contact or closeness;
 - o consider using a mask that covers the nose and mouth;
- Being aware if you or your partner may be at higher risk for more severe outcomes of COVID-19. This includes:
 - people of any age with underlying medical conditions;
 - o people with compromised immune systems; and
 - o people living with obesity.
- As usual, engaging in safer sex practices, including using condoms, knowing your own STI status and the status of your partner.

Current evidence indicates there is a very low likelihood of contracting the novel coronavirus through semen or vaginal fluids. However, even if the people involved do not have symptoms, sexual activity with new partners does increase your risk of getting or passing COVID-19 through close contact, like kissing. Remember as with all social interactions, try to keep your number of close contacts low if possible.

By taking these precautions and staying conscious of the risks we assume, Canadians can find ways to enjoy physical intimacy while safeguarding the progress we have all made containing COVID-19."

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Canada

Three in four Canadians would take COVID-19 vaccine: survey CTV News - Windsor

ID: 1007760922

WINDSOR, ONT. -- If a COVID-19 vaccine were available today, three in four adults in Canada would roll up their sleeves according to a new Ipsos survey.

On Monday, the polling firm released a survey of 20,000 adults from 27 countries done on behalf of the World Economic Forum which shows 74 per cent would get a COVID-19 vaccine. In Canada, the number climbs to 77 per cent.

Canada's Chief Public Health Officer, Dr. Theresa Tam, said on Tuesday a vaccine would be key for life to return to something more familiar to pre-pandemic times.

"What Canada and the world needs to have [for] the best shot at normalcy is safe and effective vaccines," Tam said at a news conference.

That longing for normalcy is alive and well in Windsor and a vaccine is seen as a sort of silver bullet in that mission.

"If scientists will be able to find a vaccine then, we can go out without these masks which is probably a good thing," said Raavi Sharma, when asked by CTV News about a potential COVID-19 vaccine.

Others in Windsor are also in support.

"I'm 62 [years old] and I still feel that I've got plenty of life left so, if it comes up to protecting myself and others as well, I would do it in a heartbeat," said Paul Wayvonko.

While there are those ready to get in line for a would-be COVID-19 vaccine, there are some who feel a wait-and-see approach is best.

"I would take it but, I would wait a little bit. I wouldn't be the first," said Leslie Ssebazza. "Trying to get back to what we were before, a vaccine will definitely help."

"I'm not anti-vaccine, I'm just cautious to who developed it and how it was tested," said Stacey Mills.

The federal government has signed deals with four companies developing potential COVID-19 vaccines to ensure Canadians will have access to the life-changing serum should it be successfully developed. This week, the Trudeau government announced deals with Novavax and Johnson and Johnson in addition to previous deals struck with Moderna and Pfizer.

Dr. Tam says vaccine development typically takes a decade. However, she says the need for a fast-tracked COVID-19 vaccine is great but stresses — it won't come at the expense of safety or effectiveness.

"Canada and the world cannot wait 10 years for a COVID-19 vaccine," said Tam. "By the same token, we cannot and will not compromise safety and efficacy."

The lpsos survey also notes the key concerns globally and in Canada for those steering clear of a potential COVID-19 vaccine are side effects and effectiveness, with 54 per cent and 34 per cent of Canadians surveyed citing the concerns respectively in the poll.

For those concerned about the condensed timeline for a potential COVID-19 vaccine, Tam notes the vaccine will be tested "extensively among thousands of volunteers" and adds if a vaccine is approved, it will meet Canada's high standards of safety and efficacy.

Despite assurances from public health officials and experts, there are skeptics in Windsor.

"I would not be for taking it just because there hasn't been enough research, enough time," said Milica Kulidzan.

Others are opposed outright.

"I don't think you can hide from the invisible boogeyman," said David MacKay. "I won't stick a needle in my arm, doesn't matter what's in it."

Some companies have entered the final, and most time-consuming, testing stage for potential vaccines while Russian President Vladimir Putin claims his country has produced the first viable vaccine for the novel coronavirus.

https://windsor.ctvnews.ca/three-in-four-canadians-would-take-covid-19-vaccine-survey-1.5090090

Canada

Coronavirus: Ontario government clarifying rules for long-term care home visitors ID: 1007760781 Source: globalnews.ca

TORONTO — The Ontario government is clarifying visitor rules for long-term care homes to give families and caregivers greater access to residents.

The Ministry of Long-term Care says starting Sept. 9, essential caregivers will be allowed to visit homes, including during COVID-19 outbreaks, subject to direction from the local health unit.

The updated policy will mean a resident can designate two caregivers who can visit without time limits.

If a home is not in outbreak, or the resident is not symptomatic or self-isolating, the caregivers can visit together.

Since March, essential visitors such as family members have been allowed to visit homes to help provide care to a long-term care resident.

But the government says the current rules have been applied inconsistently and left up to the discretion of homes.

https://globalnews.ca/news/7313053/coronavirus-ontario-long-term-care-homes-visitors-rules/

Canada

Two more Ottawa institutions declare COVID-19 outbreaks; total now at 18

Source: OttawaMatters.com ID: 1007760076

Ottawa Public Health (OPH) continues to see a rise in the number of local institutions dealing with COVID-19.

The Beacon Learning Centre and New Edinburgh Square retirement home are the latest to see one staff member a piece test positive for the virus.

The list of local facilities declaring outbreaks is up to 18 as of Wednesday, September 2, however, only Billingswood Manor and Centrepointe Home-based Childcare are seeing more than two cases. Billingswood has six resident cases and four staff members who have tested positive. It's also seen one of its residents suffer a COVID-19-related death. Four of the Centrepointe users have tested positive for COVID-19.

Meanwhile, OPH is reporting 12 new cases of COVID-19 in the city with no new deaths.

OPH says there are 209 active cases in the city, with 11 people hospitalized (one in intensive care).

The province announced 133 new cases Wednesday after 24,000 tests.

Minister of Health Christine Elliot tweeted, the total number of tests completed in Ontario since the pandemic began has topped 3-million.

https://www.ottawamatters.com/local-news/two-more-ottawa-institutions-declare-covid-19-outbreaks-totalnow-at-18-2683335

Canada

Nova Scotia's top doc expects COVID-19 in schools, says key is to 'manage it appropriately' Source: CTV News Atlantic - Public RSS ID: 1007759999

Summary How Nova Scotia public health staff and school staff will manage any cases will depend on the "level of exposure and the risk to students, staff or essential visitors," the province says in a news release. an individual is at moderate risk if there has not been prolonged contact and they have maintained two metres or six feet from the confirmed case. If they are negative, they need to complete their 14-day isolation; if they are positive, they have to isolate as a case and follow public health guidelines

HALIFAX -- Nova Scotia's chief medical officer of health says he fully expects that the province will see cases of COVID-19 in schools.

"It doesn't mean that the plan has failed, it doesn't mean there is a crisis," Dr. Robert Strang said during a news conference Wednesday afternoon. "We have plans in place to manage it appropriately."

How Nova Scotia public health staff and school staff will manage any cases will depend on the "level of exposure and the risk to students, staff or essential visitors," the province says in a news release.

The province outlined three different risk levels: high, moderate, and low. The Nova Scotia Department of Health and Wellness defines those three levels this way: "an individual is at high risk if they are a close contact. A close contact is someone who was in close and prolonged contact with a confirmed case of COVID-19 up to 48 hours before symptoms presented. This could include everyone in the class.

an individual is at moderate risk if there has not been prolonged contact and they have maintained two metres or six feet from the confirmed case. This would include all students and staff in a shared space who were able to physically distance.

an individual is at low risk if they have had limited or casual contact with a confirmed case. This could be incidental contact such as walking past or near the individual in a hallway or other common area."

Strang said COVID-19 is not something that can be passed on through brief, or fleeting contact – it's passed on through "close contact," he said.

The province says it plans to take a "cautious approach" when responding to COVID-19 cases in schools. Here are what it calls the "key elements" of their response plan:

public health will immediately launch an investigation to determine and arrange testing for all close contacts. Close contacts may include everyone in the class, school bus, or before and after school program

all close contacts will be required to self-isolate at home while waiting for results. If they are negative, they need to complete their 14-day isolation; if they are positive, they have to isolate as a case and follow public health guidelines all families at the school will be notified about the exposure and measures being taken

school closures due to COVID-19 will occur on the advice and recommendation of public health and only if there is deemed to be a risk to all staff and students students required to self-isolate will be supported to continue their learning until they can return to school If a student becomes ill while at school, they will be "monitored (and) isolated away from other students" until a family member can come pick them up.

As has been the case since the pandemic started, closely monitoring health and symptoms is a key to preventing the spread of the disease.

"Families should monitor the health of their children daily and keep them home if they feel ill," said Dr. Strang. "There is no one-size-fits-all approach to addressing a COVID-19 exposure, but we are ready to respond quickly if or when it happens in a school."

Education Minister Zach Churchill said the attendance policy will be suspended and no student will be penalized for not attending school. He added that the province will also make laptops available to any student who needs one to help them learn at home.

"We will switch to a blended model if necessary," Churchill said.

A blended model is when half of the students stay home and learn online every other day. It helps to reduce the number of people that have to physically attend school.

There will be more frequent and thorough cleaning of schools, Churchill said. As for shared items, Strang says he is more concerned that students have clean hands when touching a book that is shared, than in making sure that the book is sanitized before another student uses it.

When asked about some private schools installing PlexiGlas and machines to perform temperature checks, Strang said those measures – while not bad -- are not deemed necessary by public health.

"Just because some institution is doing it doesn't mean it's a gap in what we are doing," Strang said. https://atlantic.ctvnews.ca/nova-scotia-s-top-doc-expects-covid-19-in-schools-says-key-is-to-manage-itappropriately-1.5089596

Canada

Newfoundland and Labrador first in Atlantic Canada to launch COVID-19 app Source: globalnews.ca ID: 1007760179

Newfoundland and Labrador will be the first province in Atlantic Canada to launch a COVID Alert app. The app will provide up-to-date information and alerts in case of a COVID-19 outbreak.

A news release says N.L. Premier Andrew Furey will join Digital Government Minister Sarah Stoodley and top doctor Janice Fitzgerald on Thursday morning to talk about the app launch.

It says the conference will be streamed on the provincial Facebook, Twitter and YouTube accounts.

Last month, P.E.I. said the province was debating on introducing a COVID-19 app, but is holding off on making a decision until data is available from Ontario where a contact tracing app has already been launched.

Quebec, on the other hand, decided not to use an app for contact tracing and information.

Newfoundland currently has one active case of COVID-19 and reported no new cases on Wednesday. <u>https://globalnews.ca/news/7312630/n-l-coronavirus/</u>

Canada

NDP calls for province's ombudsman to review Ontario's back-to-school plan ID: 1007759594 Source: globalnews.ca

TORONTO – Ontario's ombudsman must review the government's back-to-school plan to ensure it's living up to vital safety standards, the province's Official Opposition said in a formal request for the watchdog to investigate the reopening strategy.

The New Democrats' education critic, Marit Stiles, wrote in the letter released Wednesday that she wants the ombudsman to determine if measures are in place to meet standards recommended by experts.

Read more: School boards will need to 'collapse' some classes, Ontario trustees group says

Stiles notes in the letter to Paul Dube that the ombudsman's purview includes school boards, and argues an urgent investigation is required to address the "confusion or anxiety" felt by many.

"(Parents) need positive reassurance that every possible step necessary for a safe, healthy re-opening of schools will happen,"

Stiles said in the letter. "Teachers need security that their own health, not to mention that of their students, will not be put at undue risk by going back to physical classrooms."

Dube's office could not immediately provide comment on the NDP's request.

With just days to go before classes start, the Ford government has faced increasing pressure over its COVID-19 pandemic back-to-school plan.

The province's strategy will see students in kindergarten through Grade 8 return to school without any reduction in class sizes, though students will spend the day in a single cohort to limit contact with other children.

Trending Stories

Ontario reports 133 new coronavirus cases; most public health units report no new cases Many high schoolers will also be in class full-time, though secondary students at 24 boards across the province will do half of their classes online in an effort to curb the spread of the novel coronavirus. Premier Doug Ford has defended his plan repeatedly in recent weeks, calling it the best in the country, and something that was created in consultation with experts.

Ford has also regularly criticized the province's teachers'

unions, who he claims are not working with the government on the back-to-school plan.

"I'm always going to listen to the doctors," he said last month. "I'm not going to listen to the head of the unions that are playing politics."

The unions have said the government has not consulted them on the development of their school reopening strategy.

Meanwhile, Ontario reported 133 new cases of COVID-19 and no new deaths from the novel coronavirus on Wednesday.

Read more: Ontario's 4 major teachers' unions to file labour board complaint over school reopening plan There were also 137 cases newly marked as resolved.

The total number of cases now stands at 42,554, which includes 2,812 deaths and 38,506 cases marked as resolved.

Health Minister Christine Elliott said 29 of the province's 34 public health units are reporting five or fewer new cases, and 21 are reporting none.

The province was able to complete 24,004 tests over the previous day.

Canada

COVID Alert App leads to positive COVID-19 case in Ottawa: Dr. Etches Source: CTV News Ottawa ID: 1007760144

OTTAWA -- An Ottawa resident tested positive for COVID-19 after being alerted to a close contact with a confirmed case through the COVID Alert App.

Medical Officer of Health Dr. Vera Etches shared the story during a media availability with reporters on Wednesday, saying it highlights the importance of using the app to help limit the spread of COVID-19.

Dr. Etches says an individual received a notification through the COVID Alert App that they were in close contact with a confirmed case of COVID-19. That individual presented for testing, and tested positive for COVID-19.

"We just learned of our first individual who was notified through the COVID Alert App that he had been in close contact with someone who has then gone on to test positive for COVID-19. And that person then went for testing, and also tested positive for COVID-19," said Dr. Etches.

"This is useful. The more people that download the COVID-19 App the better. It will help us the larger percentage of the population that uses the app."

The COVID Alert App was downloaded more than 2.2 million times in the first month after its launch.

The Public Health Agency of Canada told CTV News Ottawa only 110 people who tested positive for COVID-19 entered the information into the app to notify others of a possible exposure to novel coronavirus. https://ottawa.ctvnews.ca/covid-alert-app-leads-to-positive-covid-19-case-in-ottawa-dr-etches-1.5089953

Canada

Airlines look to introduce COVID-19 testing at airports with hopes of ending strict quarantine measures

Source: National Post Published: 2020-09-02 13:18 UTC Received: 2020-09-02 13:18 UTC (0 minutes) Unique ID: 1007756963

MONTREAL/TORONTO — Transport Canada is holding early talks with airlines to introduce COVID-19 testing at airports, but the day when such tests could become an alternative to the quarantines decimating travel could still be far off, sources familiar with the discussions said.

The airline-led talks come as Air Canada and WestJet introduce their own testing plans for Toronto and Vancouver airports, respectively this fall.

The use of airport testing to reduce or eliminate Canada's strict two-week self quarantine rule would be logistically challenging as it would require cooperation from airports, airlines, federal and provincial health authorities, the sources said.

And government-approved lab tests that largely take 24 to 48 hours to deliver results would need to be used, making them impractical for airport departures, they added.

Canada has faced pressure from airlines to change its travel restrictions, with the country's borders now closed to all non-citizens except for essential workers.

Article content continued

"The airlines have a vested interest in seeing this happen," one of the sources said. "But there is no guarantee that Canada would choose to lift the 14-day quarantine even if testing were able to take place at airports."

Globally, carriers and airports largely back testing to replace quarantines, with a UN aviation task force expected to weigh in on one industry proposal at a Sept. 15 meeting, airline group IATA said.

IATA and Airports Council International (ACI) support the use of PCR (polymerase chain reaction) tests 48 hours ahead of departure from high-risk countries, since rapid tests are not seen as reliable or widely accepted by regulators.

Health Canada has changed its position on home tests and is now willing to consider approving rapid home COVID-19 tests.

Last week U.S. regulators approved a rapid test from Abbott Laboratories but it is currently approved only for people who have symptoms.

WestJet and Vancouver International Airport have not yet finalized joint plans announced last week to test some departing passengers.

Tamara Vrooman, chief executive of the Vancouver airport, said one possibility was for the facility to be certified as a lab, but "we're still examining that."

Air Canada declined comment.

Canada's Chief Public Health Officer Theresa Tam said on Friday her agency was looking at "options going forward and reducing the more restrictive measures at the border."

Health officials are also considering the timing of the test, since travelers coming to Canada might have a negative result if they were infected only one or two days prior.

Transport Canada said it is committed to "working with other federal partners to explore COVID testing at airports upon arrival."

https://nationalpost.com/news/canada/airlines-look-to-introduce-covid-19-testing-at-airports-with-hopesof-ending-strict-quarantine-measures

Canada

COVID-19 divide: 'Northern wall' between U.S., Canada could stay up longer than anyone expected Source: CTVNews.ca - Top Stories - Public RSS

Published: 2020-09-01 13:37 UTC Received: 2020-09-01 17:01 UTC (+3 hours 24 minutes) Unique ID: 1007750823

COVID-19 divide: 'Northern wall' between U.S., Canada could stay up longer than anyone expected Paula Newton

Published Tuesday, September 1, 2020 9:37AM EDT Last Updated Tuesday, September 1, 2020 9:38AM EDT

SHARE

There were no bricks and mortar, no fencing or cement, no cross-border diplomatic skirmish, just two government orders. And that was enough to essentially shut down the world's longest international border for visitors .

When the U.S. and Canada mutually agreed in March to shut down the border to mitigate the spread of the coronavirus, no one predicted it would be closed this long. There is still no specified date for its reopening, although trade has continued between the countries.

"There's a closeness that we're definitely missing, but I can tell you not anyone that I have spoken to here wants that border opened anytime soon. We miss you citizens of the U.S., but we're not comfortable opening the border," Bernadette Clement, the mayor of Cornwall, Ontario, said in an interview with CNN.

East to west for thousands of miles, in communities on both sides of the national divide, the border closure is redefining not just economic relationships, but personal lives, in ways no one expected.

"This really is going to have a long-term impact on our communities, economically, socially and on all the things that are really important to us," said Tim Currier, the mayor of Massena, New York, a "sister" community to Cornwall, just a few miles cross the border on the other side of the St. Lawrence River.

No longer. The border is shut tight for any trips that are deemed "non-essential" or discretionary and that includes all recreation and tourism.

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BIGGER PAIN ON CANADIAN SIDE OF BORDER

Statistics Canada recently reported that cross border car trips are down about 95% across both sides of the border.

For decades in these border communities, people have crossed the border in both directions every day to attend a school or training program, go on a shopping trip to grab a bargain, indulge a craving for a meal at a favorite restaurant or a last-minute trip to the casino to play the slot machines.

In a way, the border closure has been a victim of its own success. Essential goods and services have continued to flow across the border efficiently and easily with supply chains largely unaffected. Canada and

the U.S. maintain one of largest trading relationships in the world, doing about \$1.9 billion in trade every day.

While the rules apply equally in both countries, the economic pain has not been distributed evenly on the Cornwall-Massena divide.

"There is no question about the economic impact. We have small businesses that have not reopened, we have some that will never reopen because they rely heavily on Canadian traffic," Mayor Currier said in a phone interview with CNN.

Mayor Clement says Cornwall is feeling the economic loss of American clientele but with a larger, more dynamic economy, the damage hasn't been as acute.

And as infection rates climbed in the U.S., diverging from Canada's flattened pandemic curve, just seeing cars with U.S. plates alarmed many Canadians.

"It has been challenging to keep everybody calm because residents took note of those plates, yes," Clement said.

Whether in Cornwall's Walmart parking lot or in its downtown business district, many locals told CNN they preferred the border stay closed for months to come given the higher infection rate in the U.S.

A July poll by Ipsos showed more than eight in 10 Canadians want the border to remain closed until at least the end of the year.

MOHAWK COUNCIL OF AKWESASNE: STRADDLING THE BORDER

"The challenge for us being right on the border is we see the surge in cases in the United States as a whole. Some states have more cases than the entire country of Canada. We have to be cautious about that," Grand Chief Abram Benedict of the Mohawk Council of Akwesasne said in a phone interview with CNN.

The Mohawk of Akwesasne straddles the U.S. and Canadian borders and its 13,000 residents hold a unique position. They've maintained their right to travel between the two countries even during this pandemic.

When presenting their identification cards to prove Indian status, they can cross the border for essential travel in either the U.S. or Canada to shop, bank, go to a doctor or check on family members.

It also means they are exempt from a two-week quarantine when entering Canada.

Benedict says that means those with New York state licence plates are often seen in and around Cornwall. Most Canadians residents now understand they have a right to be there, but Benedict says his community has a greater responsibility to keep everyone safe.

An overnight curfew in Akwesasne is still in place with a ban on travel outside an 80-kilometre (50-mile) radius. Benedict adds that many in his community have been wearing masks long before it was mandatory in Cornwall.

In fact, new infections are low on both sides of the border, but the longer the border stays closed, the more profound the economic impact.

"I've got to make up for a 40% hole in my business," said Todd Papineau, general manager of the Akwesasne Mohawk Casino Resort, in a phone interview with CNN, saying he doesn't expect Canadians to be back from months.

Papineau says most of his 750 staff have been off work for about five months now, although he is trying to bring back about half of them for a proposed reopening later this month relying on local U.S. customers only.

"The worst-case scenario is this will still be with us this time next year, that's what I believe; I hope I'm wrong," Papineau said.

'IT'S HARDER FOR BUSINESSES'

At Philos Restaurant in Cornwall, U.S. customers were a staple for the family-owned Greek restaurant and pizzeria. After five months, the restaurant just reopened to dine-in customers.

On a recent Friday afternoon, only one table was being served in a dining hall that can serve more than 100 customers. The extended border closure has meant that businesses that rely on U.S. customers are coming to grips with a decline in business for months to come.

"It is harder for businesses. We have fewer customers, and it's a big change for people working in those businesses because they don't know what to expect in the future," said Nancy Page, a manager who's been working at the restaurant for most of its two decades.

Some border communities, especially in the U.S., are lobbying for a path forward to try to get the border open using what they call a careful, slow, thoughtful process, taking advice from public health experts.

"I certainly respect Canada's view, but what's happening in Florida is not happening in New York and New Yorkers are taking significant steps to reduce the likelihood and the chances of infection cases increasing," Currier said.

Many in Canada's business community agree with him, arguing Canada should double down on rapid testing and that a two-week quarantine for months to come is unsustainable and will disproportionately impact leisure and hospitality.

"Some sectors have been pummeled and their very existence is at stake," says Goldy Hyder, president and CEO of the Business Council of Canada adding, "I do think there needs to be a plan to work towards a reopening in a responsible way."

RELATED IMAGES

https://www.ctvnews.ca/health/coronavirus/covid-19-divide-northern-wall-between-u-s-canada-could-stay-up-longer-than-anyone-expected-1.5087444

Canada

Coronavirus: COVID-19 hits 2 Toronto shelters, 5-year-old boy among those infected Source: Global News

Published: 2020-09-02 14:45 UTC Received: 2020-09-02 14:46 UTC (+1 minutes) Unique ID: 1007757556

1:13 close video mute video mute video NewsResidents move out of temporary midtown Toronto shelterMore VideosVolume 0%Press shift question mark to access a list of keyboard shortcutsKeyboard Shortcutsplay/pauseincrease volumedecrease volumeseek forwardsseek backwardstoggle captionstoggle fullscreenmute/unmuteseek to %SPACE↑↓→←cfm0-9Next UpGlobal News at 5:30: Sep 1 facebook twitter Email Link

https://globalnews.ca/video/rd/60f5108c-ebd5-11ea-a966-0242ac110004/?jwsource=clCopiedLive00:0000:000

Two Toronto shelters have been hit with a COVID-19 outbreak, and a five-year-old boy staying at one of those shelters has tested positive for the virus.

Eva's Satellite in North York reported two cases as of Sunday, according to data provided by the city, with the outbreak initially reported Aug. 23.

One of the COSTI refugee shelters — there are many around Toronto — reported four cases, including one involving a five-year-old boy. The exact location of the shelter was not provided by executive director Mario Calla, who would only confirm it was an east-end location. The outbreak was first reported on Aug. 26.

"Eva's operates in compliance with all City of Toronto COVID-19 protocols and Shelter Standards," a statement provided by the shelter said Tuesday. "Throughout the COVID-19 pandemic, we have taken immediate steps to reduce the risk of transmission within our shelters, including increasing the frequency of our cleaning schedules and working to ensure effective hand hygiene."

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

The shelter, which houses people aged 16 to 24 years old, said anyone who experiences symptoms is sent for "immediate testing" and they have created isolation areas within the shelter. https://globalnews.ca/news/7311455/coronavirus-toronto-shelters-eva-costi/

Canada

One new death, four new COVID-19 cases reported in Windsor-Essex Source: CTV News - Windsor

Published: 2020-09-02 14:42 UTC Received: 2020-09-02 14:42 UTC (0 minutes) Unique ID: 1007757538

WINDSOR, ONT. -- The Windsor-Essex County Health Unit is reporting another death related to COVID-19 in the region.

WECHU says there are four new COVID-19 cases and one new death on Wednesday.

Medical officer of health Dr. Wajid Ahmed says the latest death was a woman in her 80s from a retirement home who died in hospital on Tuesday.

Out of the new cases, two are from retirement homes and two are close contacts of confirmed cases.

The region has had a total of 2,537 confirmed cases of the virus, including 2371 people who have recovered.

Ahmed is letting the public know Wednesday about at least 31 cases associated with a community cluster. The earliest symptom onset was Aug. 20.

There have been 73 deaths related to COVID-19 in Windsor-Essex.Fifty-one deaths are related to residents in retirement or long-term care homes and two are related to migrant workers.

There is one retirement home in outbreak status. New Beginnings in Learnington has 21 residents and six staff members who have tested positive.

One workplace is reporting an outbreak - a manufacturing facility in Tecumseh. More coming.

https://windsor.ctvnews.ca/one-new-death-four-new-covid-19-cases-reported-in-windsor-essex-1.5089126

Canada

Coronavirus: Two staff members at Cité-des-Jeunes high school in Vaudreuil in isolation Source: Global News

Published: 2020-09-02 14:40 UTC Received: 2020-09-02 14:41 UTC (+1 minutes) Unique ID: 1007757516

Two staff members at a high school in Vaudreuil-Dorion, located west of Montreal, have been placed in isolation after one of them tested positive for COVID-19.

A letter sent to parents of students at École secondaire de la Cité-des-Jeunes on Tuesday states the school will remain open and "apply all necessary measures" to prevent the spread of the novel coronavirus.

"The students' safety is not in jeopardy," school principal Sebastien Bédard told Global News on Wednesday.

The school's administration said the staff member was not in contact with students and not in the building on Tuesday, the first full day of school. The employee was also not in school last Friday or on Monday, when there were half days of classes.

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Bédard said one other employee has been asked to isolate as a precaution, however.

"Despite the low risk, we felt it was responsible to notify both parents and staff," Bédard said.

The school is monitoring the situation closely with regional public health authorities, he added. The priority is to protect students, teachers and other employees.

École secondaire de la Cité-des-Jeunes is home to more than 3,000 students.

https://globalnews.ca/news/7311468/vaudreuil-cite-des-jeunes-high-school-coronavirus/

Canada

Quebec City bar linked to at least 30 coronavirus cases, health authorities warn Source: Global News

Published: 2020-09-02 14:46 UTC Received: 2020-09-02 14:47 UTC (+1 minutes) Unique ID: 1007757563

Thirty cases of COVID-19, the disease caused by the novel coronavirus, have been connected with a bar in Quebec City.

The situation at Le Kirouac Bar is "worrying with 30 cumulative positive cases," said CIUSSS de la Capitale-Nationale, the regional public health authority for the area.

Over the weekend, public health had recommended people who visited the bar the previous week get tested.

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Le Kirouac bar issued a statement Monday on Facebook, saying it had decided to close the establishment until Sept. 9 "following the unfortunate events" over the weekend.

READ MORE: Quebec urges vigilance amid uptick in new COVID-19 cases

"Our ongoing investigations also show us that there is transmission of the virus in the community," said Dr. Jacques Girard, interim public health director at the CIUSSS de la Capitale-Nationale.

"I appeal to citizens' sense of responsibility to respect the health measures in place, and this, particularly when there are gatherings where alcohol is present."

The public health authority for the Quebec City area on Tuesday reported 31 new positive cases in the region and no new deaths.

This brings the total to 2,093 cases and 197 deaths linked to the virus in the area. There have been 1,772 recoveries.

https://globalnews.ca/news/7311451/quebec-city-karaoke-bar-coronavirus/

Canada

B.C. should push back-to-school date to October, says expert Local – NEWS 1130

Published: 2020-09-02 14:44 UTC Received: 2020-09-02 14:45 UTC (+1 minutes) Unique ID: 1007757551

VICTORIA (NEWS 1130) – Is there enough time to get everything ready for a September start to the school year? One education expert is pushing for a later return to class.

This comes as parent and teacher trepidations run high, with many feeling issues around heading back to school during the COVID-19 pandemic haven't been fully addressed yet.

Educational technology expert Valerie Irvine, who is with the University of Victoria, says parents face too few options and too many risks, and pushing the start of the school year to Oct. 1 would give more time to get things right, including a proper needs assessment with real consultation.

She says most parent surveys are inadequate.

"Some standardized questions should be made across the province, not just, 'Hey, choose between these options you don't want," Irvine says, adding parents should be asked, "What do you want? What do you need?"

Should the start of the school year be delayed until Oct 1? An educational expert says that would give districts time to get things right. @_valeriei has a number of suggestions for fixing the current situation, including proper parent consultation. pic.twitter.com/eMsPAIGald

— Mike Lloyd (@llikemoyd) September 2, 2020

Teachers should also be surveyed, with Irvine saying many she's spoken with are ready to give online teaching a shot.

"Putting a lot of work in that in being prepared, and they're ready to try that, where others may not be. And others may need to be online as teachers because of health needs, themselves," Irvine explains.

All of this, she says, would come from a proper needs assessment, with creative solutions.

"Obviously, we want school to start sooner than later, but there's so many shifts happening. Even just day to day, I'm getting updates from people on fairly big swings within districts, and there's a lot of planning that goes on behind the scenes," Irvine tells NEWS 1130.

She admits with all the work that goes into preparing for a return to class like no other, she worries there just hasn't been enough time for "proper preparation."

"For providing more flexibility which, I think, was one of the pushes coming from parents and teachers and the message that came out from Minister Fleming last week was that he's authorized districts can — either within district or within schools — provide flexible options," Irvine says. However, she says we're "not seeing common ground on how that's done district to district."

'Not really flexible'

From the start, British Columbians have been told there will need to be some flexibility as we wade through the return to school amid the ongoing health crisis.

The province has repeated the need for flexibility, as have teachers, staff, and parents.

However, that's not what Irvine is seeing.

"The flexibility that is being described is not really flexible," she laughs. "If a family is not comfortable or is vulnerable in some way and has concerns about sending their child to their local, catchment school ... To say, well if you're not going to be face to face, then you leave the school? That is where a lot of people are upset."

In an analysis published in The Tyee, Irvine lists five things that must change before B.C. schools reopen. Along with a more adequate assessment of what teachers and students need, they also include allowing students to choose how they want to learn, remote learning options that are embedded within community schools to keep kids connected with friends and trusted staff, changes to the report card system, and rethinking our current approach to the curriculum at hand.

She says schools should switch to anecdotal report cards rather than grade-based, and that teachers should take advantage of flexibility in the curriculum.

"The curriculum we have today is super flexible, and it needs to be taken advantage of. There's flexibility in terms of student agency, more co-created curriculum, so shifting to that is really important," she explains.

As for report cards, this change is especially important for students in grades 11 and 12, whose grades count a great deal as they look ahead to post-secondary. Irvine says that needs to be supported in "this wild time."

She says all of this takes time — and there will be snags — so an October start would make sense.

"I think a delay will give a much better foundation for leaping off. I think iterations and improvements will, obviously, be made with every day, week, or month that can come, but starting with a two day notice to adopt major shifts, I do have concerns about it."

To parents, Irvine says they, too, will need to practice patience.

"And be kind as it's not going to be perfect off the get-go."

For more back-to-school news amid the COVID-19 pandemic, click here.

-With files from Vanessa Doban

https://www.citynews1130.com/2020/09/02/bc-back-to-school-october-expert/

Canada

Canadian doctor warns of COVID-19's 'long-lasting' effects on the heart Source: CTV News - Montreal

Published: 2020-09-02 14:44 UTC Received: 2020-09-02 14:45 UTC (+1 minutes) Unique ID: 1007757550

TORONTO -- A Canadian doctor is urging that COVID-19 patients be monitored and tracked long after the novel coronavirus leaves their bodies, as evidence mounts that the virus can cause long-lasting heart damage.

A study published in late July found that, of 100 adults in Germany who had recently recovered from COVID-19, 60 showed signs of ongoing heart inflammation. MRI scans picked up other cardiac issues in another 18 recovered patients.

The patients who were studied ranged in age from 45 to 53. Although one-third of the patients were hospitalized, none were deemed to have had severe COVID-19 symptoms.

"What we might be seeing here is a widespread prevalence of heart disease in patients with COVID-19," Dr. Gavin Oudit, a professor of medicine at the University of Alberta and an expert on heart failure, said Wednesday on CTV's Your Morning.

Another study from Germany found that the virus could be detected in 16 of 39 COVID-19 patients who died, although it is not clear whether that contributed to the deaths, as there were no signs of sudden inflammation.

It isn't just the heart that can show lasting effects after COVID-19 infection, though.

This, Oudit said, is because of how coronaviruses such as SARS-CoV-2 attach themselves to a protein known as angiotensin-converting enzyme 2, or ACE2, which Oudit describes as a "very important enzyme in the body that has unfortunately been hijacked by [SARS-CoV-2] and is now being used as its receptor." Although ACE2 is strongly associated with the heart, it is present in many organs.

"It's in the lungs; it's in the gut; it's in the cardiovascular system; it's in the kidneys; it's in the central nervous system – which is why COVID-19 patients do so poorly when they get very sick. It really is a multisystemic disease," Oudit said.

Researchers at two Ontario universities are looking into how COVID-19 attacks the lungs, noting that ACE2 is likely only part of the puzzle there.

In the heart, the virus' attack on ACE2 can lead to myocarditis – inflammation – as well as vascular dysfunction, Oudit said, which will make it important for doctors to monitor COVID-19 patients long after the virus has left their bodies.

"I think there are going to be long-lasting effects," he said.

"We all need to be vigilant."

https://www.ctvnews.ca/health/coronavirus/canadian-doctor-warns-of-covid-19-s-long-lasting-effects-onthe-heart-1.5089112

Canada

New Canadian app working to 'cut through the information clutter' of COVID-19

Source: CTVNews.ca - Top Stories - Public RSS

Published: 2020-09-02 12:47 UTC Received: 2020-09-02 17:01 UTC (+4 hours 14 minutes) Unique ID: 1007758245

New Canadian app working to 'cut through the information clutter' of COVID-19 @bneustaeter Contact

Published Wednesday, September 2, 2020 8:47AM EDT

COVID AlKnowledgeEnable uses artificial intelligence to search multiple peer-reviewed medical data sources in combination with collective insights of health-care professionals to deliver the most relevant findings and advice to users. (Courtesy Real Time Medical)

SHARE

TORONTO -- A new app is looking to help health-care professionals and the public make better-informed decisions about COVID-19 for their patients, their families and themselves by collecting peer-reviewed scientific papers and hosting them in one place.

The new app, called COVID AIKnowledgeEnable (COVID KE), uses artificial intelligence to search multiple peer-reviewed medical data sources in combination with collective insights of health-care professionals to deliver the most relevant findings and advice to users.

The application, created by Canadian medical software developer Real Time Medical (RTM), also features confidence ratings and commentary from doctors to further assist users in determining which articles are the most helpful for them.

"It really is a tool that attempts to combine both artificial intelligence and collective intelligence in real time on a single integrated platform to help users engage in research and education by helping them locate trustworthy articles," RTM CEO and co-founder Ian Maynard told CTVNews.ca.

Newsletter sign-up: Get The COVID-19 Brief sent to your inbox

Maynard explained in a phone interview last week that COVID KE only uses trusted peer-reviewed sources including The Lancet, New England Journal of Medicine, the U.S. Centers for Disease Control and others, along with the latest federal health guidelines for Canada to help "users cut through the information clutter associated with COVID."

The app is the first of its kind in the world to combine the power of artificial intelligence with the collective knowledge of experts to sort through misinformation, according to the company.

"Under normal conditions, there are hundreds of new findings published in any given medical discipline every day. During a pandemic you can multiply that by a factor of 10," Maynard said.

The European Congress of Radiology reported in a keynote address in mid-July that of the 25,000 articles that emerged in various online portals and medical journals about COVID-19 at that time, filtering revealed that 48 were meta-analyses that combined the results of multiple studies and only 25 were clinical trials. Maynard said this underscores the challenge of finding credible health information amid the pandemic.

"There seems to be a lot of confusion, even amongst medical professionals about the all of the information coming out on COVID. So with the app, users can get direct information along with doctor confidence ratings about the particular study so they can engage in research and educate themselves to help make better decisions," Maynard said.

AlKnowledgeEnable has been available to health-care practitioners to research any medical condition for the last two years, but the pandemic has since prompted RTM to expand the app to the public with a focus on COVID-19 information.

"Rather than the user just searching independent data sources themselves or just doing a general Google search, the app is really only targeting peer-reviewed data so that users can have that additional confidence that they're getting information from trusted sources," Maynard said.

The app has two different interfaces for health-care workers and for the public.

While the user experience is the same for both versions, only accredited licensed health-care professionals such as infectious disease specialists, epidemiologist and radiologists who are authenticated by the app are allowed to input ratings or commentary on publications.

Maynard said the goal with only having medical professionals comment and rate peer-reviewed articles is to facilitate a "community of interaction" that the public then has insight into.

"It's not just the article but it's also what are doctors around the world are saying about this and how users can then use that in their day to day life as we all seek to navigate this new normal," Maynard said.

The app is available for use on iPhone, Android and desktop and is downloadable worldwide. Public users can access the app for a monthly subscription fee of US\$1.99 (\$2.59 CAD) while clinicians can access it for US\$2.99 (\$3.90 CAD) a month.

While the app was initially developed for research on any medical condition, Maynard said its focus has shifted to COVID-19 in a move to assist people as they safely transition back to work and school.

"Now more than ever the public needs to have a source of information that can help them make decisions about their daily lives as we enter this new world," Maynard said. "Decisions do have to be made as we go about our lives, and navigate both the information that surrounds us, as well as the environment that surrounds us."

RTM chairman and co-founder Dr. David Koff told CTVNews.ca that one of the greatest threats the public faces amid the pandemic is misinformation.

"I don't think we have seen such a major public health crisis before with so much confusion, and also so much political interference in health messages," Koff said in a phone interview on Thursday.

"The best example we had was all the things about hydroxychloroquine and we had so much political messaging that people at the end of the day got very confused about whether or not to take it."

By only sourcing peer-reviewed medical articles, Koff said COVID AlKnowledgeEnable cuts through that confusion. But despite having trusted medical sources at their fingertips, Koff said the app does not replace the advice of people's doctors when they become ill.

"We don't want to replace medical consultation. People they still have to talk to their medical physician because each case is different. You cannot cater to all even if you have the best information," Koff said.

"What works for you may not work for someone else so you have to still go to your doctor if you are sick." RELATED IMAGES

https://www.ctvnews.ca/health/coronavirus/new-canadian-app-working-to-cut-through-the-informationclutter-of-covid-19-1.5089042

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

United States

US experts recommend who should get COVID-19 vaccine first ID: 1007760082 Source: CIDRAP

2 September 2020

Healthcare workers, first responders, and adults with pre-existing conditions that put them at risk for severe symptoms of COVID-19 should be the initial recipients of the first approved vaccine in the United States, according to a framework from the National Academy of Medicine (NAM) published yesterday. Today, NAM will hold a virtual public meeting on the recommendations.

The NAM report offers a detailed approach about how to best prioritize and allocate a COVID-19 vaccine. Even though the virus was discovered only in December of 2019, several countries have produced vaccines that are currently in late-stage clinical trials, and US President Donald Trump has said America could see a vaccine by the end of the year. But deciding who should first get access to the vaccine is a potential problem, compounded by lessons learned in the early months of the US pandemic on how the virus hits minority communities hardest.

The NAM framework offers four phases of vaccine deployment. In addition to the aforementioned groups, older adults in congregate living are included in phase 1. In phase 2, teachers, school staff, critical risk workers, prisoners, those in homeless shelters and group homes, and older adults not included in phase 1 can be vaccinated. Phase 3 is for children, young adults, and workers in industries with exposure to the virus. Phase 4 includes everyone else.

https://www.cidrap.umn.edu/news-perspective/2020/09/covid-19-scan-sep-02-2020

https://www.nap.edu/catalog/25914/discussion-draft-of-the-preliminary-framework-for-equitableallocation-of-covid-19-vaccine

United States

COVID-19 Contact Tracing Communications Toolkit for Health Departments Source: US CDC

On This Page

- Main message
- Talking points
- Sample public service announcements
- Sample graphics
- Sample social media posts
- Questions and answers
- Additional resources

This page will be updated as new resources become available.

Main message

We all need to work together to help slow the spread of COVID-19. Contact tracing slows the spread of COVID-19 by

- Letting people know they may have been exposed to COVID-19 and should monitor their health for signs and <u>symptoms</u> of COVID-19.
- Helping people who may have been exposed to COVID-19 get tested.
- Asking people to <u>self-isolate</u> if they have COVID-19 or <u>self-quarantine</u> if they are a close contact of someone who has COVID-19.

The messages in this toolkit use COVID-19, but you may want to use "coronavirus" instead of COVID-19 if that's the term most often used in your community.

The bottom line: Making a choice to help your health department in the fight against COVID-19 helps protect you, your family, and your community.

Health Marketing Messaging Examples

Consider developing promotional messages to incorporate in communications to your community. Examples are included below.

- Answer the call to slow the spread.*
- Cancel COVID.
- Choose to be part of the solution: slow the spread.

* Credit: Massachusetts Community Tracing Collaborativeexternal icon

Talking points

General messages

- We all need to work together with health department staff to slow the spread of COVID-19.
- Be part of the solution and answer the phone it may be the health department calling to let you know you're test result came back positive for SARS-Cov-2, the virus that causes COVID-19, or that you've been in contact with someone who has it. This phone call is just one small part of what is known as contact tracing.

- Working with the health department is the best way to protect your family and friends from COVID-19.
- Your immediate actions can help make all of us safer. This may include staying home and away from others.
- Contact tracing for COVID-19 works best with everyday preventive actions.
 - This means actions such as washing your hands often, avoiding close contact, and covering your mouth and nose with a mask when around others. Doing so can slow the spread of COVID-19. It is especially important before a vaccine or better treatments become widely available.

Messages for people who have been around someone with COVID-19

If you have been around someone with COVID-19 (also known as a "close contact"), someone from the health department may call to tell you that you have been exposed to COVID-19. They will ask you to stay at home, away from others and <u>self-quarantine</u>.

- For COVID-19, a close contact is anyone who was within 6 feet of an infected person for at least 15 minutes. An infected person can spread COVID-19 starting from 48 hours (or 2 days) before the person had any symptoms or tested positive for SARS-Cov-2, the virus that causes COVID-19.
- Stay at home away from others and self-quarantine for 14 days after you were last around someone with COVID-19. Health department staff will help identify the dates of your self-quarantine. They can also provide resources about COVID-19 testing in your area.
 - Self-quarantine means staying home, monitoring your health, and maintaining social distancing (at least 6 feet) from others at all times.
 - If you need to be around other people or animals in or outside of the home, wear a mask. This will help protect the people around you.
 - If you need support or assistance with self-quarantine, then your health department or a local community organization may be able to provide assistance.
 - Self-quarantine helps slow the spread of COVID-19 and can help keep your family, friends, and other people you have been around from possibly getting COVID-19.
- Take your temperature twice a day, monitor yourself for any <u>symptoms</u> of COVID-19, and notify your health department if you develop symptoms. Seek medical care if symptoms worsen or become <u>severe</u>.
- Discussions with health department staff are **confidential**. This means that your personal and medical information will be kept private and only shared with those who may need to know, like your health care provider.
- Your name will not be shared with those you came in contact with, even if they ask. The health department will only notify people you were recently around that they might have been exposed to COVID-19.
- Your information will be collected for health purposes only and should not be shared with any other agencies, like law enforcement or immigration.

Messages for people who are waiting for a COVID-19 test result

- If you think you may have COVID-19 and are <u>waiting for a COVID-19 test result</u>, stay home and monitor your health to protect your friends, family and others from possibly getting COVID-19.
- Think about the people you have recently been around.
 - While you wait for your COVID-19 test result, think about everyone you have been around recently. This will be important information to have available. If your test is positive, someone from the health department may call you to check on your health, discuss who you have been around, and ask where you spent time while you may have been able to spread COVID-19 to others.
- Answer the phone call from the health department.
 - If the health department calls you, answer the call to help slow the spread of COVID-19 in your community.
 - Discussions with health department staff are confidential. This means that your personal and medical information will be kept private and only shared with those who may need to know, like your health care provider.
 - Your name will not be shared with those you came in contact with, even if they ask. The health department will only notify people you were in close contact with

(within 6 feet for more than 15 minutes) that they might have been exposed to COVID-19.

• Your information will be collected for health purposes only and should not be shared with any other agencies, like law enforcement or immigration.

Messages for people diagnosed with COVID-19

- If you are diagnosed with COVID-19, someone from the health department may call you to check on your health, discuss who you have been around, and ask where you have spent time while you may have been able to spread COVID-19 to others. The health department and community organizations may be able to help connect people to services during self-isolation.
- Discussions with health department staff are **confidential**. This means that your personal and medical information will be kept private and only shared with those who may need to know, like your health care provider.
- Your name will not be shared with those you came in contact with, even if they ask. The health department will only notify people you were in close contact with (within 6 feet for more than 15 minutes) that they might have been exposed to COVID-19.
- Your information will be collected for health purposes only and should not be shared with any other agencies, like law enforcement or immigration.
- Health department staff will ask you to stay at home away from others and <u>self-isolate</u>, if you are not doing so already.
 - Self-isolation means staying at home in a specific room away from other people and pets, and using a separate bathroom, if possible.
 - Self-isolation is critical to protecting those who you live with as well as your community.
 - Self-isolation helps slow the spread of COVID-19 and can help keep your family, neighbors, and other close contacts from possibly getting COVID-19.
 - If you need support or assistance while self-isolating, then your health department or a local community organization may be able to provide assistance.
- Seek medical care if your symptoms worsen or become severe. Severe symptoms include trouble breathing, persistent pain or pressure in the chest, confusion, inability to wake or stay awake, or bluish lips or face.

Contact tracing works best with everyday preventive actions

- <u>Everyday preventive actions</u> taken by people and communities can slow the spread of COVID-19. This is especially important before a vaccine or better treatments become widely available.
- Preventative actions means that you:
 - Wash your hands often,
 - Avoid close contact,
 - Cover your mouth and nose with a mask when around others, and
 - Cover your coughs and sneezes.

Key actions

- Pick up the phone when the health department calls.
- Follow health department guidance.
- Tell a healthcare provider and the health department if you become ill.
- Call a healthcare provider if you start to feel ill and you have not been tested for COVID-19.
- If you have been around someone with COVID-19 (close contact), stay at home away from others and self-quarantine for 14 days, starting from the last day that you were possibly exposed to COVID-19. Monitor yourself for symptoms of COVID-19.
- Tell those who you had close contact with recently if you become ill, so that they can monitor their health.
- Know what symptoms mean you need to go to the hospital right away.
- Seek medical care if symptoms worsen or become severe. Severe symptoms include trouble breathing, persistent pain or pressure in the chest, confusion, inability to wake or stay awake, or bluish lips or face.

Messages around stigma

- People can fight stigma by providing social support in situations where you notice this is occurring.
- Stigma affects the emotional or <u>mental health</u> of stigmatized groups and the communities they live in.

- Stopping stigma is important to making communities and community members resilient. See resources on mental health and coping during COVID-19.
- Everyone can help stop stigma related to COVID-19 by <u>knowing the facts</u> and sharing them with others in your community.

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Sample public service announcements

15 second

The [*insert health department name*] is working hard to slow the spread of COVID-19. If you have been around someone with COVID-19, someone from the health department may call you and ask you to self-quarantine at home away from others. Help us slow transmission and **answer the call to slow the spread of COVID-19**.

30 second

The [*insert health department name*] is working hard to slow the spread of COVID-19. If you have been around someone with COVID-19, someone from the health department may call you. Self-quarantine at home and follow our instructions. Making a choice to help us in the fight against COVID-19 helps protect you, your family, and your community. Help us slow transmission and **answer the call to slow the spread of COVID-19.** For more information, visit [*insert URL*]. This is a message from the [*insert health department name*].

<u>Find additional PSAs</u> about everyday prevention actions, COVID-19 readiness, cleaning and disinfection, and more.

Sample graphics



What to Expect if You Have Been Exposed to COVID-19



What to Expect if You Have Been Diagnosed with COVID-19 CONTACT TRACING SLOWS THE SPREAD



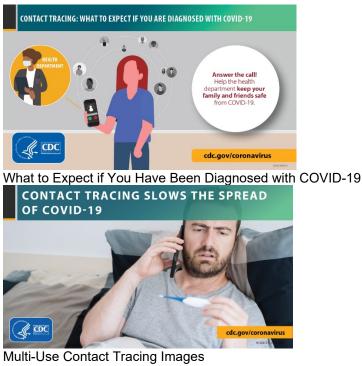
Multi-Use Contact Tracing Images



What to Expect if You Have Been Diagnosed with COVID-19



What to Expect if You Have Been Exposed to COVID-19



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Sample social media posts Twitter

- We can work together to help slow the spread of #COVID19. You can do your part by answering your phone if someone from the health department calls and self-quarantining, if exposed. Learn more: https://www.cdc.gov/coronavirus/2019-ncov/daily-life-coping/contact-tracing.html
- You can help your health department in the fight against #COVID19 to help protect you, your family, and your community. Answer the call to slow the spread: <u>https://www.cdc.gov/coronavirus/2019-ncov/downloads/Contact-Tracing-Infographic-FINAL.pdfpdf icon</u>
- If you have been around someone with #COVID19, someone from [*insert health department name*] might call you to tell you that you've been exposed and ask you to stay at home away from others. Answer the call to slow the spread: <u>https://www.cdc.gov/coronavirus/2019-ncov/daily-life-coping/contact-tracing.html</u>
- If the health department contacts you and tells you've been exposed to #COVID19, plan to selfquarantine away from others for 14 days. Learn more about the steps of contact tracing: <u>https://www.cdc.gov/coronavirus/2019-ncov/downloads/Contact-Tracing-Infographic-FINAL.pdfpdf icon</u>
- Contact tracing is essential to slowing the spread of #COVID19. Any information you tell the health department is confidential. Learn more about how the health department will work with you to help slow the spread of COVID-19: <u>https://www.cdc.gov/coronavirus/2019-ncov/daily-lifecoping/contact-tracing.html</u>
- Contact tracing is essential to slowing the spread of #COVID19. If you have COVID-19, the health department won't reveal your identity to your close contacts, even if they ask. Help #SlowtheSpread of COVID-19: https://www.cdc.gov/coronavirus/2019-ncov/daily-life-coping/contact-tracing.html
- If you are waiting for a test result, stay home away from others and monitor your health. Think about who you have been around and tell them they may have been exposed. Answer the call to #SlowtheSpread of #COVID19: <u>https://www.cdc.gov/coronavirus/2019-ncov/downloads/php/318271-A_FS_KeyStepsWhenWaitingForCOVID-19Results_3.pdfpdf icon
 </u>
- Contact tracing slows the spread of #COVID19. See these answers to Frequently Asked Questions about contact tracing: <u>https://www.cdc.gov/coronavirus/2019-ncov/faq.html#Contact-Tracing</u>. #SlowTheSpread

 If you are sick with #COVID19, the health department may contact you to check on your health, discuss who you've been in contact with, and ask you to stay at home away from others and selfisolate, if you're not doing so already. Find out more about the steps of contact tracing: <u>https://www.cdc.gov/coronavirus/2019-ncov/downloads/Contact-Tracing-Infographic-FINAL.pdfpdf icon</u>

Facebook

- We can work together to help slow the spread of COVID-19. If you have been exposed to someone with COVID-19, we will call you and ask you to self-quarantine at home away from others for 14 days from the last day that you were exposed. Do you part to help protect your family and your community: answer the call to slow the spread. Learn more: https://www.cdc.gov/coronavirus/2019-ncov/daily-life-coping/contact-tracing.html
- If you have been around someone with COVID-19, someone from [insert health department name] might call you to tell you that you've been exposed and ask you to stay at home away from others and self-guarantine. Staying at home helps protect you, your family, and your community. Choose to be part of the solution and help slow the spread of COVID-19: https://www.cdc.gov/coronavirus/2019-ncov/daily-life-coping/contact-tracing.html
- If you are sick with COVID-19, someone from [insert health department name] might call you to check on your health, discuss who you've been in contact with, and ask you to stay at home away from others to self-isolate. This information is collected for health purposes only and should not be shared with any other agencies, like law enforcement or immigration. Your name will not be revealed to those you came in contact with. Do your part to help protect your family and your community from COVID-19: answer the call to slow the spread. Learn more: https://www.cdc.gov/coronavirus/2019-ncov/daily-life-coping/contact-tracing.html
- If you are sick with COVID-19, self-isolate. Self-isolation means staying at home in a room away
 from other people and pets, and using a separate bathroom, if possible. Self-isolation is critical to
 protecting those who you live with, as well as your community. If you need support or assistance
 while self-isolating, we may be able to assist. Choose to be part of the solution and help us slow
 the spread of COVID-19: <u>https://www.cdc.gov/coronavirus/2019-ncov/daily-life-coping/contacttracing.html</u>
- If you have been around someone with COVID-19, someone from [*insert health department name*] might call you to tell you that you may have been exposed to COVID-19 and ask you to stay at home away from others and self-quarantine. Choose to be part of the solution and help us slow the spread of COVID-19: <u>https://www.cdc.gov/coronavirus/2019-ncov/downloads/Contact-Tracing-Infographic-FINAL.pdfpdf icon</u>
- If you are waiting for a COVID-19 test result, get ready in case someone from the health department calls you to check on your health, discuss who you've been around recently, and ask you to stay home to self-isolate, if you aren't doing so already. Tell people who you have been around that they been exposed to COVID-19. Answer the call slow may have to the spread: https://www.cdc.gov/coronavirus/2019-ncov/downloads/php/318271-A FS KeyStepsWhenWaitingForCOVID-19Results 3.pdf.
- If you have been around a person who has COVID-19, health department staff may call to let you know you've been exposed and ask you to stay at home away from others and self-quarantine. Doing so helps protect you, your family, and your community. Be part of the solution and help slow the spread of COVID-19. https://www.cdc.gov/coronavirus/2019-ncov/daily-life-coping/contact-tracing.html

Instagram

Heard about contact tracing, but not sure what it is? During the pandemic, the health department follows up with and interviews people who have COVID-19 and their contacts. Contact tracing slows the spread of COVID-19. If you have been around a person who has COVID-19, someone from the health department may call to let you know you've been exposed and ask you to stay at home away from others and self-quarantine. Doing so helps protect you, your family, and your community. https://www.cdc.gov/coronavirus/2019-ncov/faq.html#Contact-Tracing #PublicHealth #COVID19 #ContactTracing #SlowTheSpread #quarantine

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Questions and answers

What information will you share with people I've been around recently if I have COVID-19? Your name will not be shared with those you came in contact with. We will only tell people who you have been around recently that they might have been exposed to COVID-19. Any information you share with health department staff is confidential. This means that your name, personal, and medical information will be kept private.

I was recently around someone who has COVID-19, but I feel fine. Why should I stay at home? People with COVID-19 can still spread the virus even if they don't have any symptoms. If you were around someone who had COVID-19, it is critical that you stay home away from others for 14 days from the last day that you were around that person. Staying home away from others at all times helps your health department in the fight against COVID-19 helps protect you, your family, and your community.

WhatdoIdoifIfeelsick?If you become ill, tell your health department. You should also tell people you were around recently, so they
can monitor their health. Tell anyone who you were within 6 feet of for 15 minutes or more in the two days
before you first developed COVID-19 symptoms. If your symptoms worsen or become severe, seek medical
care. Severe symptoms include trouble breathing, persistent pain or pressure in the chest, confusion,
inability to wake or stay awake, or bluish lips or face.

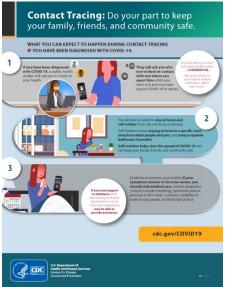
Additional considerations

To ensure community engagement and trust, health departments should be prepared to provide answers to some of the following questions based on jurisdiction-specific policies and resources. Please tailor these messages as appropriate.

- How can I be sure that my health information is secure?
- How will my health information be used?
- How long will my health information be stored and protected?
- Will the health department share information with others?
- How do I know that the person calling is from the health department?
- What options or opportunities are there for quarantine and isolation for those who are unable to self-isolate at home?
- If I need help with self-isolating and self-quarantining, what services are offered?
- What financial assistance is available for people who are asked to stay home but can't telework or don't have sick leave?

<u>Contact Tracing Frequently Asked Questions and Answers</u> <u>Top of Page</u>

Additional resources



<u>Contact Tracing Steps Infographic (PDF)pdf icon</u> What you can expect to happen during contact tracing if you have been diagnosed with COVID-19

Languages:

Additional

Chinese | Korean | Marshallese | Spanish | Vietnamese



3 Steps to Take While Waiting for Your COVID-19 Test Results (PDF)pdf icon

To help stop the spread of COVID-19, take these 3 key steps now while waiting for your test results

 Additional
 Languages:

 Chinese | Korean | Marshallese | Spanish | Vietnamese
 Vietnamese

https://www.cdc.gov/coronavirus/2019-ncov/php/contact-tracing-comms.html

United States

Source: U.S. Food and Drug Administration

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

- The FDA has, jointly with the Federal Trade Commission (FTC), issued a <u>warning letter</u> to Lattice Biologics, Ltd., for marketing an unapproved amniotic fluid product, sometimes referred to as AmnioBoost, to mitigate, prevent, treat, diagnose or cure Severe Acute Respiratory Syndrome (SARS) or Acute Respiratory Distress Syndrome (ARDS) related to COVID-19.
- Testing updates:
 - To date, the FDA has currently authorized 235 tests under EUAs; these include 190 molecular tests, 41 antibody tests, and 4 antigen tests.

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

https://www.fda.gov/news-events/press-announcements/coronavirus-covid-19-update-daily-roundup-september-1-2020

United States

NIH continues to boost national COVID-19 testing capacity Source: National Institutes of Health Unique ID: 1007758046

Wednesday, September 2, 2020

New laboratory and point-of-care tests to enable access and rapid result.

MatMaCorp's Solas 8 portable detection system for SARS-CoV-2 is designed to improve on-site testing capabilities of CLIA labs in rural communities.*MatMaCorp*

The National Institutes of Health today announced \$129.3 million in scale-up and manufacturing support for a new set of COVID-19 testing technologies as part of its <u>Rapid Acceleration of Diagnostics (RADx)</u> <u>initiative</u>. NIH is awarding contracts to nine companies for technologies that include portable point-of-care tests for immediate results and high-throughput laboratories that can return results within 24 hours. These tests add to <u>initial awards</u> made to seven companies on July 31, 2020.

"Diagnostic testing is a critical component of the nation's strategy to meet the challenge of the COVID-19 pandemic," said NIH Director Francis S. Collins, M.D., Ph.D. "Just started at the end of April, the RADx initiative has moved swiftly to speed innovation and later-stage development in the biomedical technology sector. The results thus far have been outstanding."

In addition to NIH support, aspects of some of the testing technologies have been supported by the Biomedical Advanced Research and Development Authority (BARDA), also in the Department of Health and Human Services, and by the Defense Advanced Research Projects Agency (DARPA), in the Department of Defense.

"One of the many facets of our testing strategy is to support and enable innovation," said Adm. Brett P. Giroir, Assistant Secretary for Health. "The new technologies being funded today have the potential to transform the diagnostics landscape if their promise is proven in clinical studies. This all-of-government approach to testing innovation including DARPA, BARDA, NIH, HHS, and the private sector will yield benefits not only for the current pandemic, but for diverse acute and chronic diseases Americans fight every day."

Nanotrap® Magnetic Virus Particles from Ceres Nanosciences eliminate the need for RNA extraction kits, reduce sample processing time, and improve the sensitivity of the downstream assays in point-of-care systems and in high-throughput laboratory developed tests*Ceres Nanosciences*

Today's contracts support several novel technologies, some that use RT-PCR, a highly sensitive way to qualitatively detect nucleic acid from SARS-CoV-2. Included is a portable, battery-powered RT-PCR device that gives accurate results in 15 minutes, and a portable mini-lab with reagent flexibility that can perform RT-PCR assays in community hospitals and clinics in underserved, rural populations. Additional technologies include a lateral-flow immunoassay test strip that can be read without specialized equipment (similar to home pregnancy tests) and a sample concentrating method that significantly improves the sensitivity and performance of many different types of tests. Five high-throughput laboratories will provide an expanded network of coverage for fast-turnaround laboratory tests in regions of national need. Each of these labs will manage the collection, analysis, and reporting of tens of thousands of tests per day at each site, significantly expanding national testing in September.

"Many of these tests incorporate innovations that have moved from research labs to the point of care with unprecedented speed," said Bruce J. Tromberg, Ph.D., director of the National Institute of Biomedical Imaging and Bioengineering and lead for RADx Tech, one of <u>four programs</u> of the NIH RADx initiative. "That process normally takes years, but RADx has brought together key experts in technology, medicine and commercialization to bring new tests to market in only five to six months."

NIH is developing and supporting this diverse group of tests to meet the needs of different communities. Factors such as speed, cost, accessibility and technical performance are key considerations for RADx support. These new technologies collectively will significantly increase the number, type and availability of tests by millions per week by this fall.

"The opportunity to scale up high-throughput laboratories and rapid point-of-care tests to meet the needs of communities all around the country is critical," said Rick A. Bright, Ph.D., senior advisor to the NIH director and lead for the RADx-Advanced Technology Platforms program. "The RADx initiative reflects the scientific ingenuity, technical diversity and logistical capabilities of the private sector at its finest."

The following companies have achieved key RADx milestones and will receive support for manufacturing and scale up:

Point-of-care tests

MatMaCorp, Lincoln, Nebraska

A portable mini-lab that can rapidly perform multiple RT-PCR assays in a single platform. This technology can be used with multiple sources of reagents and is targeted for community hospitals and clinics in underserved, rural populations.

Maxim Biomedical Inc, Rockville, Maryland

A single-use, lateral-flow test strip immunoassay that can provide results in 15 minutes or less. With the improved workflow, the assay can be performed without an instrument for reading and does not require any specialized equipment.

MicroGEM International, Charlottesville, Virginia

A portable, point-of-care device that detects SARS-CoV-2 in saliva samples using RT-PCR in 15 minutes. The test uses a microfluidic cartridge with the potential for simultaneous detection of multiple pathogens such as influenza.

Lab-based tests

Aegis Sciences, Nashville, Tennessee

A novel coronavirus nucleic acid detection kit and distribution system for high through-put testing that uses nasal and oral swab samples. Has recently quadrupled capacity to 15,000 samples per day and will soon reach 60,000 samples per day. After receipt of samples, these tests will return results in 24 hours or less on average.

Broad Institute, Cambridge, Massachusetts

A high-throughput RT-PCR COVID-19 viral test using specimens from nasal swabs that will be scaled up. Its facility already performs tests for more than 530 regional hospitals, nursing homes, shelters, community health centers, senior living facilities and at state and city collection sites in vulnerable communities. The award is helping to increase from 25,000 to 100,000 tests per day.

Ceres Nanoscience Inc, Manassas, Virginia

A sample prep method using Nanotrap particles that extracts and concentrates viral material to reduce processing time and improve sensitivity. This method can be used on a variety of testing platforms, from point-of-care systems to high-throughput laboratory processes, to improve speed and performance by 2-to 10-fold.

Illumina, San Diego, California

Automated sample processing and next-generation sequencing technology for COVID-19 testing that will be scaled up. Its high-throughput capacity can be expanded to 48,000 tests per day. Upon receipt of samples at the laboratory, the company can process results for the Illumina COVIDSeq test within 24 hours. **PathGroup, Nashville, Tennessee**

Uses Roche 6800 and Hologic Panther instruments to currently process about 10,000 COVID-19 RNA tests a day. Has infrastructure in place in 20 states throughout the U.S. Southeast and Midwest. They have partnered with ThermoFisher, LGC and Illumina to add additional instrumentation and automation to increase the daily number of COVID-19 tests performed to 80,000 by December 2020.

Sonic Healthcare USA, Austin, Texas

Expanded scope and expedited timeline of a framework for large-scale COVID-19 RT-PCR testing platforms and distribution capacity. With a network of regional testing hubs located in various clinical settings and geographic areas, the company can simultaneously deploy multiple test platforms and methodologies. Using specimens from predominantly nasal swabs, they will continue to add capacity to reach about 166,000 samples tested per day with new high-throughput technology.

About the Rapid Acceleration of Diagnostics (RADx) initiative: The RADx initiative was launched on April 29, 2020, to speed innovation in the development, commercialization and implementation of technologies for COVID-19 testing. The initiative has four programs: RADx Tech, RADx Advanced Technology Platforms, RADx Underserved Populations and RADx Radical. It leverages the existing NIH Point-of-Care Technology Research Network. The RADx initiative partners with federal agencies, including the Office of the Assistant Secretary of Health, Department of Defense, the Biomedical Advanced Research and Development Authority, and U.S. Food and Drug Administration. Learn more about the RADx initiative and its programs: www.nih.gov/radx.

About the National Institute of Biomedical Imaging and Bioengineering (NIBIB): NIBIB's mission is to improve health by leading the development and accelerating the application of biomedical technologies. The Institute is committed to integrating the physical and engineering sciences with the life sciences to advance basic research and medical care. NIBIB supports emerging technology research and development within its internal laboratories and through grants, collaborations, and training. More information is available at the NIBIB website: https://www.nibib.nih.gov

About the National Institutes of Health (NIH): NIH, the nation's medical research agency, includes 27 Institutes and Centers and is a component of the U.S. Department of Health and Human Services. NIH is the primary federal agency conducting and supporting basic, clinical, and translational medical research, and is investigating the causes, treatments, and cures for both common and rare diseases. For more information about NIH and its programs, visit <u>www.nih.gov</u>.

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https://www.nih.gov/news-events/news-releases/nih-continues-boost-national-covid-19-testing-capacity

United States

Health officials worry nation is not ready for COVID-19 vaccine Source: The Medical News

Published: 2020-09-02 14:45 UTC Received: 2020-09-02 14:47 UTC (+2 minutes) Unique ID: 1007757560

Millions of Americans are counting on a COVID-19 vaccine to curb the global pandemic and return life to normal.

While one or more options could be available toward the end of this year or early next, the path to delivering vaccines to 330 million people remains unclear for the local health officials expected to carry out the work. "We haven't gotten a lot of information about how this is going to roll out," said Dr. Umair Shah, executive director of Texas' Harris County Public Health department, which includes Houston.

A series examining how the U.S. public health front lines have been left understaffed and ill-prepared to save us from the coronavirus pandemic. The project is a collaboration between KHN and the AP.

In a four-page memo this summer, the federal Centers for Disease Control and Prevention told health departments across the country to draft vaccination plans by Oct. 1 "to coincide with the earliest possible release of COVID-19 vaccine."

But health departments that have been underfunded for decades say they currently lack the staff, money and tools to educate people about vaccines and then to distribute, administer and track hundreds of millions of doses. Nor do they know when, or if, they'll get federal aid to do that.

Dozens of doctors, nurses and health officials interviewed by KHN and The Associated Press expressed concern about the country's readiness to conduct mass vaccinations, as well as frustration with months of inconsistent information from the federal government.

The gaps include figuring out how officials will keep track of who has gotten which doses and how they'll keep the workers who give the shots safe, with enough protective gear and syringes to do their jobs.

With only about half of Americans saying they would get vaccinated, according to a poll from AP-NORC Center for Public Affairs Research, it also will be crucial to educate people about the benefits of vaccination, said Molly Howell, who manages the North Dakota Department of Health's immunization program.

The unprecedented pace of vaccine development has left many Americans skeptical about the safety of COVID-19 immunizations; others simply don't trust the federal government.

"We're in a very deep-red state," said Ann Lewis, CEO of CareSouth Carolina, a group of community health centers that serve mostly low-income people in five rural counties in South Carolina. "The message that is coming out is not a message of trust and confidence in medical or scientific evidence." Paying for the Rollout

The U.S. has committed more than \$10 billion to develop new coronavirus vaccines but hasn't allocated money specifically for distributing and administering vaccines.

And while states, territories and 154 large cities and counties received billions in congressional emergency funding, that money can be used for a variety of purposes, including testing and overtime pay.

An ongoing investigation by KHN and the AP has detailed how state and local public health departments across the U.S. have been starved for decades, leaving them underfunded and without adequate resources to confront the coronavirus pandemic. The investigation further found that federal coronavirus funds have been slow to reach public health departments, forcing some communities to cancel non-coronavirus vaccine clinics and other essential services.

States are allowed to use some of the federal money they've already received to prepare for immunizations. But KHN and the AP found that many health departments are so overwhelmed with the current costs of the pandemic — such as testing and contact tracing — that they can't reserve money for the vaccine work to come. Health departments will need to hire people to administer the vaccines and systems to track them, and pay for supplies such as protective medical masks, gowns and gloves, as well as warehouses and refrigerator space.

CareSouth Carolina is collaborating with the state health department on testing and the pandemic response. They used federal funding to purchase \$140,000 retrofitted vans for mobile testing that they plan to continue to use to keep vaccines cold and deliver them to residents when the time comes, said Lewis. But most vaccine costs will be new.

Minneapolis Health Commissioner Gretchen Musicant visits a COVID-19 testing event at Incarnation-Sagrado Corazon Church on Aug. 15, 2020, in Minneapolis. As the coronavirus spread through Minneapolis this spring, Musicant tore up her budget to find money to combat the crisis. It was not until Aug. 5 — months after Congress approved the pandemic relief aid — that her department received \$1.7 million, the equivalent of \$4 per Minneapolis resident.(AP Photo/Craig Lassig)

Pima County, Arizona, for example, is already at least \$30 million short of what health officials need to fight the pandemic, let alone plan for vaccines, said Dr. Francisco Garcia, deputy county administrator and chief medical officer.

Some federal funds will expire soon. The \$150 billion that states and local governments received from a fund in the CARES Act, for example, covers only expenses made through the end of the year, said Gretchen Musicant, health commissioner in Minneapolis. That's a problem, given vaccine distribution may not have even begun.

Although public health officials say they need more money, Congress left Washington for its summer recess without passing a new pandemic relief bill that would include additional funding for vaccine distribution.

"States are anxious to receive those funds as soon as possible, so they can do what they need to be prepared," said Dr. Kelly Moore, associate director of immunization education at the Immunization Action Coalition, a national vaccine education and advocacy organization based in St. Paul, Minnesota. "We can't assume they can take existing funding and attempt the largest vaccination campaign in history." What's the Plan?

Then there's the basic question of scale. The federally funded Vaccines for Children program immunizes 40 million children each year. In 2009 and 2010, the CDC scaled up to vaccinate 81 million people against pandemic H1N1 influenza. And last winter, the country distributed 175 million vaccines for seasonal influenza vaccine, according to the CDC.

But for the U.S. to reach herd immunity against the coronavirus, most experts say, the nation would likely need to vaccinate roughly 70% of Americans, which translates to 200 million people and — because the first vaccines will require two doses to be effective — 400 million shots.

Although the CDC has overseen immunization campaigns in the past, the Trump administration created a new program, Operation Warp Speed, to facilitate vaccine development and distribution. In August, the administration announced that McKesson Corp., which distributed H1N1 vaccines during that pandemic, will also distribute COVID-19 vaccines to doctors' offices and clinics.

"With few exceptions, our commercial distribution partners will be responsible for handling all the vaccines," Operation Warp Speed's Paul Mango said in an email.

"We're not going to have 300 million doses all at once," said Mango, deputy chief of staff for policy at the Health and Human Services Department, despite earlier government pledges to have that many doses ready by the new year. "We believe we are maximizing our probability of success of having tens of millions of doses of vaccines by January 2021, which is our goal."

Amesh Adalja, a senior scholar at the Johns Hopkins Center for Health Security, said it will take time for the vaccines to be widespread enough for life to return to what's considered normal. "We have to be prepared to deal with this virus in the absence of significant vaccine-induced immunity for a period of maybe a year or longer," Adalja said in August.

In preliminary guidance for state vaccine managers, the CDC said doses will be distributed free of charge from a central location. Health departments' local vaccination plans may be reviewed by both the CDC and Operation Warp Speed.

The CDC has vetted state and federal vaccination plans in five locations: North Dakota, Florida, California, Minnesota and Philadelphia. No actual vaccines were distributed during the "microplanning" sessions, which focused on how to get vaccines to people in places as different as urban Philadelphia, where pharmacies abound, and rural North Dakota, which has few chain drugstores but many clinics run by the

federal Indian Health Service, said Kris Ehresmann, who directs infectious disease control at the Minnesota Department of Health.

Those planning sessions have made Ehresmann feel more confident about who's in charge of distributing vaccines. "We are getting more specific guidance from CDC on planning now," she said. "We feel better about the process, though there are still a lot of unknowns."

Outdated Technology Could Hamper Response

Still, many public health departments will struggle to adequately track who has been vaccinated and when, because a lack of funding in recent decades has left them in the technological dark ages, said Dr. Marcus Plescia, chief medical officer at the Association of State and Territorial Health Officials.

In Mississippi, for example, health officials still rely on faxes, said the state's health officer, Dr. Thomas Dobbs. "You can't manually handle 1,200 faxes a day and expect anything efficient to happen," he said.

When COVID-19 vaccines become available, health providers will need to track where and when patients receive their vaccines, said Moore, the medical director of Tennessee's immunization plan during the H1N1 influenza pandemic in 2009 and 2010. And with many different shots in the works, they will need to know exactly which one each patient got, she said.

People will need to receive their second COVID-19 dose 21 or 28 days after the first, so health providers will need to remind patients to receive their second shot, Moore said, and ensure that the second dose is the same brand as the first.

The CDC will require vaccinators to provide "dose-level accounting and reporting" for immunizations, so that the agency knows where every dose of COVID-19 vaccine is "at any point in time," Moore said. Although "the sophistication of these systems has improved dramatically" in the past decade, she said, "many states will still face major challenges meeting data tracking and reporting expectations."

The CDC is developing an app called the Vaccine Administration Monitoring System for health departments whose data systems don't meet standards for COVID-19 response, said Claire Hannan, executive director of the Association of Immunization Managers, a nonprofit based in Rockville, Maryland.

"Those standards haven't been released," Hannan said, "so health departments are waiting to invest in necessary IT enhancements." The CDC needs to release standards and data expectations as quickly as possible, she added.

Meanwhile, health departments are dealing with what Minnesota's Ehresmann described as "legacy" vaccine registries, sometimes dating to the late 1980s.

A Historic Task

Overwhelmed public health teams are already working long hours to test patients and trace their contacts, a time-consuming process that will need to continue even after vaccines become available.

When vaccines are ready, health departments will need more staffers to identify people at high risk for COVID-19, who should get the vaccine first, Moore said. Public health staff also will be needed to educate the public about the importance of vaccines and to administer shots, she said, as well as monitor patients and report serious side effects.

At an August meeting about vaccine distribution, Dr. Ngozi Ezike, director of Illinois' health department, said her state will need to recruit additional health professionals to administer the shots, including nursing students, medical students, dentists, dental hygienists and even veterinarians. Such vaccinators will need medical-grade masks, gowns and gloves to keep those workers safe as they handle needles amid the contagious coronavirus.

Many health officials say they feel burned by the country's struggle to provide hospitals with ventilators last spring, when states found themselves bidding against one another for a limited supply. Those concerns are amplified by the country's continuing difficulties providing enough testing kits; supplying health workers with personal protective equipment; allocating drugs such as remdesivir; and recruiting contact tracers — who track down everyone with whom people diagnosed with COVID-19 have been in contact.

Although Ehresmann said she's concerned Minnesota could run out of syringes, she said the CDC has assured her they will provide them.

Given that vaccines are far more complex than personal protective equipment and other medical supplies — one vaccine candidate must be stored at minus 94 degrees Fahrenheit — Plescia said people should be prepared for shortages, delays and mix-ups.

"It's probably going to be even worse than the problems with testing and PPE," Plescia said.

Associated Press writer Michelle R. Smith and KHN Midwest correspondent Lauren Weber contributed to this report.

This story is a collaboration between The Associated Press and KHN.

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Posted in: Disease/Infection News | Healthcare News

https://www.news-medical.net/news/20200902/Health-officials-worry-nation-is-not-ready-for-COVID-19-vaccine.aspx

United States

Recommendations for Investigational COVID-19 Convalescent Plasma

Source: U.S. Food and Drug Administration (FDA)

September 2, 2020

FDA issued an EUA for convalescent plasma on August 23, 2020.

FDA has issued a new <u>guidance</u> to provide recommendations to health care providers and investigators on the use of COVID-19 convalescent plasma under the EUA or investigational convalescent plasma under an IND during the public health emergency. The guidance also provides recommendations to blood establishments on collection. The guidance describes FDA's interim compliance and enforcement policy regarding the IND requirements for the use of investigational convalescent plasma to facilitate the availability of convalescent plasma to treat hospitalized patients with COVID-19. The guidance supersedes the guidance of the same title issued in April 2020 and updated in May 2020.

The guidance provides recommendations on the following:

- pathways for use of investigational convalescent plasma
- <u>collection of convalescent plasma</u>
- record keeping
- compliance and enforcement policy regarding investigational new drug requirements for use of convalescent plasma

Because convalescent plasma for the treatment of COVID-19 has not yet been approved for use by FDA, it is regulated as an investigational product. As such, its administration must be under the EUA or an IND. FDA does not collect convalescent plasma or provide convalescent plasma. Health care providers or acute care facilities should obtain convalescent plasma from an FDA registered or licensed blood establishment. Excerpts from the guidance document are provided below.

Background

On August 23, 2020, FDA issued an <u>emergency use authorization (EUA)</u> for COVID-19 convalescent plasma for the treatment of hospitalized patients with COVID-19. However, adequate and well-controlled randomized trials remain necessary for a definitive demonstration of COVID-19 convalescent plasma efficacy and to determine the optimal product attributes and appropriate patient populations for its use. Additional data will be forthcoming from other analyses and ongoing, well-controlled clinical trials. The ongoing clinical trials of investigational convalescent plasma should not be amended based on the issuance of the EUA; health care providers are encouraged to enroll patients in those trials.

Pathways for Use of Investigational Convalescent Plasma

Because convalescent plasma for the treatment of COVID-19 has not yet been approved for use by FDA, it is regulated as an investigational product. As such, its administration must be under the EUA or an IND. The emergency use of COVID-19 convalescent plasma is not authorized under the EUA unless it is consistent with, and does not exceed, the terms of the <u>Letter of Authorization</u>, including the Scope of Authorization and Conditions of Authorization. Alternatively, investigational convalescent plasma may be administered under the traditional IND regulatory pathway, a single-patient IND for emergency use, or an intermediate-size population expanded access IND.

The following pathways are available for administering or studying the use of COVID-19 convalescent plasma:

1. Emergency Use Authorization

Health care providers intending to administer COVID-19 convalescent plasma under the EUA are not required to report its use to FDA. Providers should refer to the Fact Sheet for Health Care Providers for information on the intended use and known and potential risks and benefits of COVID-19 convalescent plasma. The <u>Fact Sheet</u> also provides a description of the product, information on the dosage,

administration and storage of COVID-19 convalescent plasma, use in specific populations, and instructions for communicating with recipients.

As described in the Fact Sheet, health care providers must maintain records and conduct a thorough investigation of adverse reactions after transfusion of COVID-19 convalescent plasma, and must report fatalities to FDA as required in 21 CFR 606.170. Refer to FDA's guidance entitled, "<u>Notifying FDA of Fatalities Related to Blood Collection or Transfusion</u>" for recommendations on reporting fatalities related to blood transfusion to FDA.

2. Clinical Trials

The EUA is not intended to replace clinical trials that are critically important for the definitive demonstration of safety and efficacy of investigational convalescent plasma. Ongoing clinical trials of investigational convalescent plasma should not be amended based on the issuance of the EUA. Health care providers are encouraged to enroll patients in those trials and complete clinical trials to fully answer the questions about the effectiveness of convalescent plasma for the treatment of COVID-19.

Investigators wishing to study the use of convalescent plasma in a clinical trial should submit requests to FDA for investigational use under the traditional IND regulatory pathway (21 CFR Part 312). The Center for Biologics Evaluation and Research (CBER) Office of Blood Research and Review (OBRR) is committed to engaging with sponsors and reviewing such requests expeditiously. During the COVID-19 pandemic, INDs may be submitted via email to <u>CBERDCC_eMailSub@fda.hhs.gov</u>.

3. Expanded Access

An IND application for expanded access is an alternative for use of investigational convalescent plasma for patients with serious or immediately life-threatening COVID-19 disease who are not eligible or who are unable to participate in randomized clinical trials (21 CFR 312.305). During the COVID-19 pandemic, INDs for expanded access, that are not single patient INDs, may be submitted via email to <u>CBERDCC eMailSub@fda.hhs.gov</u>.

A. Single Patient IND for Emergency Use

For various reasons, COVID-19 convalescent plasma under the EUA or investigational convalescent plasma through participation in clinical trials may not be readily available to all patients in potential need. Therefore, given the public health emergency that the COVID-19 pandemic presents, FDA is continuing to facilitate access to investigational convalescent plasma through the process of a physician requesting a single patient IND for an individual patient with serious or life-threatening COVID-19 under 21 CFR 312.310. This process allows the use of an investigational drug for the treatment of an individual patient by a licensed physician upon FDA authorization, if the applicable regulatory criteria are met. Note, in such cases, a licensed physician seeking to administer investigational convalescent plasma to an individual patient must request the IND (see 21 CFR 312.310(b)). Given that the intended use of COVID-19 convalescent plasma under the EUA is for treatment of hospitalized COVID-19 patients, FDA expects few requests for single patient INDs.

B. To Obtain a Single Patient Emergency IND

The requesting physician may contact FDA by completing **Form FDA 3926** (<u>https://www.fda.gov/media/98616/download</u>) and submitting the form by email to <u>CBER eIND Covid-19@FDA.HHS.gov</u>.

NOTE: To enable electronic completion of the form, download it from your internet browser, save locally, close, and re-open. Do NOT ATTEMPT to fill out this form after opening it from your internet browser; the form will not be fillable until downloaded, saved, and opened locally. Check either box 3a or 3b to enable form logic and the appropriate fields. For more detailed instructions see the **Form FDA 3926 Instructions** (https://www.fda.gov/media/98627/download).

CBER requests that all forms be filled out electronically to facilitate rapid review. Hand written forms are often hard to read and may delay the processing of the request. Please pay special attention to the following:

- The completed form should include a brief clinical history of the patient, including: age, gender, diagnosis, current therapy, and rationale for requesting the proposed investigational treatment in order to meet the expanded access use requirements in 21 CFR 312.305 and 312.310.
- The form should include the name of the blood establishment collecting the investigational convalescent plasma.
- Providers should complete the form to the extent possible, and FDA will work with the provider if additional information is required.

For requests between 8am ET and 8pm ET (Mon-Sun): FDA will respond within four hours. For requests between 8am ET and 8pm ET when the provider is unable to complete and submit **Form FDA 3926** due to extenuating circumstances, the provider may contact FDA's Office of Emergency Operations at 1-866-300-4374 to be routed to the appropriate clinical review staff for assistance with submitting the request.

For requests that are made overnight between 8pm ET and 8am ET (Mon-Sun):

- In case of a medical emergency, i.e., when authorization and issuance of an IND number is needed before 8 am ET the next morning, the provider should contact FDA's Office of Emergency Operations at 1-866-300-4374 to be routed to the appropriate clinical review staff for assistance with submitting the request and issuance of an IND number.
- In case of a non-critical overnight request, the Form FDA 3926 should be submitted by email to <u>CBER_eIND_Covid-19@FDA.HHS.gov</u> for review, and the IND number will be issued by 8 am ET the next morning.

In situations when the provider is unable to complete and submit Form FDA 3926 due to extenuating circumstances, the requestor must agree to submit an expanded access application (i.e., Form FDA 3926) within 15 working days of FDA's authorization of the use (21 CFR 312.310(d)(2)). When submitting the expanded access application form, the requestor is advised to indicate that the application is a follow-up to a previously granted IND for emergency use, and to provide the IND number.

Collection of Convalescent Plasma

Registered or licensed blood establishments collecting authorized COVID-19 convalescent plasma under the EUA or investigational convalescent plasma under an IND should refer to the <u>guidance</u> for recommendations on donor eligibility and qualification, testing plasma for anti-SARS-CoV2 antibodies, and labeling.

Recordkeeping

A health care provider who is participating in an IND, including an expanded access IND or single patient IND for emergency use, must maintain records for the investigational convalescent plasma unit(s) administered to the COVID-19 patient (21 CFR 312.62). Such records should include the unique identification number(s) (e.g., the ISBT donation identification number(s) of the unit(s)).

Compliance and Enforcement Policy Regarding Investigational New Drug Requirements for Use of Convalescent Plasma

Following issuance of the EUA for COVID-19 convalescent plasma on August 23, 2020, FDA has received numerous inquiries from blood establishments and health care providers regarding investigational convalescent plasma that was collected prior to the EUA and remains in inventory and the need to continue to collect investigational convalescent plasma while operational changes are being made to meet the requirements in the EUA. The Agency understands that investigational convalescent plasma collected prior to the EUA may not meet the Conditions of Authorization, specifically the requirement for testing plasma donations for anti-SARS-CoV-2 antibodies using the Ortho VITROS SARS-CoV-2 lgG as a manufacturing step to determine suitability before release, as well as qualifying the unit as high titer or low titer COVID-19 convalescent plasma, based on the results of this testing. FDA also understands that it will take time for blood establishments to develop the necessary operating procedures to manufacture COVID-19 convalescent plasma pursuant to the Conditions of Authorization set forth in the EUA. In addition, the Agency is aware that the <u>National Expanded Access Treatment ProtocolExternal Link Disclaimer</u> has been discontinued as of August 28, 2020.

Considering these issues and recognizing the immediate need for convalescent plasma to treat hospitalized patients with COVID-19, we intend to exercise temporary enforcement discretion regarding the IND requirements for the use of investigational convalescent plasma. FDA intends to exercise this temporary enforcement discretion provided the following circumstances are present:

- 1. The investigational convalescent plasma is intended for the treatment of hospitalized patients with COVID-19.
- 2. The treating health care provider obtains adequate informed consent from the patient or his or her legally authorized representative for the use of the investigational convalescent plasma. Informed consent should include, at a minimum, a statement that the use of convalescent plasma is investigational and a discussion of its potential risks and benefits.
- 3. The investigational convalescent plasma is collected by registered blood establishments from donors who meet all eligibility requirements and qualifications in accordance with section III.C.1 of the <u>guidance</u>.

4. The container label of investigational convalescent plasma includes the following statement, "Caution: New Drug—Limited by Federal (or United States) law to investigational use" (21 CFR 312.6(a)) and is labeled as described in Section III.C.3 of the guidance. Please contact CBER OBRR Blood and Plasma Branch at <u>CBEROBRRBPBInquiries@fda.hhs.gov</u> with any questions regarding labeling the investigational product.

In addition, we recommend the measurement of neutralizing antibody titers when available.

FDA intends to exercise this discretion with respect to the IND requirements for the collection, shipment, and administration of investigational convalescent plasma for a period of 90 days following the issuance of the guidance document. This should provide blood establishments adequate time to develop the necessary procedures to manufacture COVID-19 convalescent plasma under the conditions of the EUA, and if unable to develop such procedures, only administer investigational convalescent plasma under an IND.

This enforcement discretion policy does not extend to convalescent plasma that is not collected and administered as described above.

During this period of enforcement discretion and beyond, FDA will continue to work with any investigators who wish to submit INDs for the study of investigational convalescent plasma. Ongoing clinical trials of investigational convalescent plasma should not be amended because of this enforcement discretion policy. Health care providers are encouraged to enroll patients and complete clinical trials.

https://www.fda.gov/vaccines-blood-biologics/investigational-new-drug-ind-or-device-exemption-ide-process-cber/recommendations-investigational-covid-19-convalescent-

plasma?utm_campaign=What%27sNew2020-09-02&utm_medium=email&utm_source=Eloqua

WHO

Corticosteroids for COVID-19

Source: WHO

On 2 September 2020, WHO published its Corticosteroids for COVID-19 guidance. This guidance was developed in collaboration with the non-profit <u>Magic Evidence Ecosystem Foundation</u> (MAGIC), which provided methodologic support to develop and disseminate living guidance for COVID-19 drug treatments. The panel provides two recommendations: 1). WHO experts recommend systemic corticosteroids rather than no corticosteroids for the treatment of patients with severe and critical COVID-19 (strong recommendation, based on moderate certainty evidence); 2) WHO experts suggest not to use corticosteroids in the treatment of patients with non-severe COVID-19 (conditional recommendation, based on low certainty evidence).

https://www.who.int/publications/i/item/WHO-2019-nCoV-Corticosteroids-2020.1

IHR announcement - Invitation to Ministers to participate in the COVID-19 Information session on Thursday, 03 September 2020

Announcement Displayed From: Thursday, September 3, 2020 - 00:13

Topic: COVID-19 Information session Time: Sep,03, 2020 at 12:30 Amsterdam, Berlin, Rome, Stockholm, Vienna Dial by your location +41 22 591 00 05 Switzerland +1 646 558 8656 US (New York) +1 213 338 8477 US (Los Angeles) Meeting ID: 962 4146 3521 Find your local number: <u>https://who.zoom.us/u/abkekCUGwJ</u>

Join by SIP <u>96241463521@zoomcrc.com</u> Meeting ID: 962 4146 3521

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

Brazil Brazilian state of Maranhão heading towards SARS-CoV-2 herd immunity, say researchers The Medical News ID: 1007760752

Researchers at the Federal University of Maranhão, Brazil, have conducted a study suggesting that the state of Maranhão is well on its way to acquiring herd immunity to severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), the agent that causes coronavirus disease 2019 (COVID-19).

SARS-CoV-2 - Transmission electron micrograph of SARS-CoV-2 virus particles, isolated from a patient. Image captured and color-enhanced at the NIAID Integrated Research Facility (IRF) in Fort Detrick, Maryland. Credit: NIAID

Alcione Miranda dos Santos and colleagues say the estimated prevalence of detectable antibodies (seroprevalence) was the highest and closest to the herd immunity threshold reported to date. The infection fatality rate was also one of the lowest reported so far.

The seroprevalence of total antibodies against SARS-CoV-2 was as high as 40.4%, which the authors say is the first time a prevalence rate in this range has been reported.

"Our data suggests that herd immunity may be achieved sooner than expected," writes the team.

A pre-print version of the paper is available on the server medRxiv*, while the article undergoes peer review. Brazil has been one of the most severely affected countries

Since the COVID-19 outbreak began in Wuhan, China, late last year, Brazil is one of the countries that have been most severely affected by the pandemic.

The first case was identified in the country on February 26th, 2020. By August 20th, SARS-CoV-2 was reported to have infected 3,501,975 people and caused 112,304 deaths – representing the second-highest number of COVID-19-related deaths in the world.

Brazil's response to the pandemic has been controversial, testing capacity has been low, and the government's uncertainty over social distancing measures has meant the population received mixed messages.

Subsequently, social distancing was never implemented to the extent that would be sufficient to curb disease spread and contain the pandemic.

Located in the Northeast region of Brazil, Maranhão is one of the states where SARS-CoV-2 rapidly spread early on during the pandemic. The first case was reported on March 20th, and by August 20th, the number of COVID-19 related deaths had reached 3,315.

The authors say the fatality rate peaked in May and started to decline after that.

The herd immunity threshold is still being debated

The threshold that would constitute herd immunity is still under debate, with some reports suggesting 60-70% of the population would need to have been infected and others estimating figures as low as 10 to 20%. The authors say that for Brazil, few population-based studies on the prevalence of SARS-CoV-2 have been performed and that they have mainly used lateral flow immunoassays with finger-prick testing. These tests can return false-negative results and lead to underestimation of the true infection rate, warn the authors "Therefore, population-based surveys using more sensitive diagnostic tests are warranted," says the team. What did the current study involve?

Miranda dos Santos and colleagues conducted a population-based household survey involving 3,156 participants residing in the State of Maranhão between July 27th and August 8th and estimated the overall seroprevalence of SARS-CoV-2 based on serum testing by electrochemiluminescence immunoassay. The researchers report that the seroprevalence of total antibodies against SARS-CoV-2 was 40.4%. "To the best of our knowledge, this is the first population-based study to report a prevalence rate in this range, for an area as big as Italy," writes the team.

Adherence to the non-pharmaceutical interventions was generally higher at the beginning of the pandemic than it was during the last month. Adherence to social distancing fell from 52.7% at the beginning of the pandemic to 37.4% during the last month, while adherence to mask wearing fell from 61.4% to 55.5%.

SARS-CoV-2 infection rates were significantly lower during the last month among mask wearers and those who distanced from others by at least 1.5 m, compared with those who did not adhere to these measures.

One of the lowest infection fatality rates reported to date

The overall infection fatality rate (IFR) was 0.17%, but was higher among males and elderly individuals.

"The IFR in Maranhão is one of the lowest reported to date," writes the team.

The team says the COVID-19 pandemic peaked in the state between May 17th and May 23rd, 2020, and that since then, the fatality rate has been falling.

Economic activity has slowly been increasing since many of the mitigation measures started to relax. Almost three months following the relaxation of social distancing measures, the number of reported deaths remains low, despite community mobility increasing.

Maranhão may be more than halfway through the herd immunity threshold

The authors say that to the best of their knowledge, the seroprevalence of SARS-CoV-2 estimated in this study was the highest and the closest to the herd immunity threshold reported to date.

"Although there is still doubt about what this threshold is, our data suggest that it is at least 40%, and it does not seem to be as low as 20% as it has been suggested by some," they write.

The team says the findings suggest that Maranhão is more than halfway through the herd immunity threshold.

"Taken together with the data, our data suggests that herd immunity may be achieved sooner than expected," concludes the team.

As of today, Brazil reports over 3.95 million SARS-CoV-2 infections and more than 122,000 COVID related deaths.

*Important Notice

medRxiv publishes preliminary scientific reports that are not peer-reviewed and, therefore, should not be regarded as conclusive, guide clinical practice/health-related behavior, or treated as established information.

Posted in: Medical Research News | Disease/Infection News

https://www.news-medical.net/news/20200902/Brazilian-state-of-Maranhao-heading-towards-SARS-CoV-2-herd-immunity-say-researchers.aspx

Cuba

Country defends the use of the drug in the early stages of the disease ID: 1007760085

With 2,420 confirmed cases, 87 deaths and 2,254 patients recovered until 07/12, Cuba has stood out in the fight against the pandemic of the new coronavirus. The Central American country has been using low doses of hydroxychloroquine to treat Covid-19 at an early stage.

The country's residents have also followed the control measures established by the state health system.

We are aware of the controversies surrounding this product. Doctors here in general have a good opinion of the results achieved, as long as they are used early in low doses and only in patients without comorbidities, which can be complicated by hydroxychloroquine – said consultant to the president of BioCubaFarma, Augustin Lage Davila.

In addition to hydroxychloroquine, five other drugs are being used to treat the new coronavirus. Davila lists recombinant human interferon alfa-2b, which combines alpha interferon and gamma; biomodulin T; the CIGB-258 peptide and the humanized monoclonal antibody Itolizumab. Some of them were used to treat dengue and cancer.

BioCubaFarma is a Cuban organization in the biotechnology and pharmaceutical industries. Three medical brigades composed of 11 collaborators were sent from the country to work in Equatorial Guinea, São Tomé and Príncipe and Sierra Leone.

https://www.palmerfoundation.com.au/recommending-hydroxychloroquine-cuba-stands-out-in-the-fightagainst-the-pandemic-of-the-new-coronavirus/

Turkey

Turkey May Soon Greenlight Trials of Russian Vaccine Against COVID-19 - Health Ministry Source: UrduPoint News

ID: 1007759946

ANKARA (UrduPoint News / Sputnik - 02nd September, 2020) The Turkish authorities may soon issue a permit for trials of Russian vaccine against coronavirus infection, the country's health minister, Fahrettin Koca, said on Wednesday.

"We have received a request to test a vaccine being developed in Russia.

In the near future, I think, a permit will be issued for this. In addition, two domestic vaccines are currently being tested in the country," Koca told reporters.

He added that such tests were carried out in Turkey on volunteers exclusively. https://www.urdupoint.com/en/world/turkey-may-soon-greenlight-trials-of-russian-1018892.html

International

Live Coronavirus latest news: Vaccine boost as antibodies found to last longer than scientists thought

Source: Telegraph.co.uk

Published: 2020-09-02 01:34 UTC Received: 2020-09-02 12:09 UTC (+10 hours 35 minutes) Unique ID: 1007756273

Coronavirus latest news: Vaccine boost as antibodies found to last longer than scientists thought 2 September 2020 • 7:05am

Save

Save

One of the big mysteries of the pandemic is whether having had coronavirus helps protect against future infection, and for how long Credit: TOLGA AKMEN/AFP

Summer sale: Save 50% - Just £1 a week for 6 months

Antibodies that people make to fight coronavirus last for at least four months after diagnosis and do not fade quickly as some earlier reports suggested, scientists have found.

Tuesday's report, from tests on more than 30,000 people in Iceland, is the most extensive work yet on the immune system's response to the virus over time , and is good news for efforts to develop vaccines.

If a vaccine can spur production of long-lasting antibodies as natural infection seems to do, it gives hope that "immunity to this unpredictable and highly contagious virus may not be fleeting", scientists said.

One of the big mysteries of the pandemic is whether having had coronavirus helps protect against future infection, and for how long.

Follow the latest updates below.

Auto update

7:05AM

Ukraine sees record daily rise

Ukraine registered a record 2,495 cases of coronavirus in the past 24 hours, the national security council said on Wednesday, up from a previous record of 2,481 cases.

Ukraine has imposed a temporary ban on most foreigners from entering the country until Sept. 28 and extended lockdown measures until the end of October to contain a recent spike in cases.

It has so far reported a total of 125,798 infections.

6:45AM

Tests for students returning to school

As children continue to return to school for the first time since lockdown this week The Daily Telegraph's Camilla Turner reports that tests will be used to see how far children have fallen behind. She writes:

Assessing the current Year 11 and Year 13 students on their abilities is seen as a top priority for ministers because it will inform their decision on how much to postpone the 2021 GCSE and A-level exams.

Officials at the Department for Education (DfE) are drawing up plans on how schools can test pupils on their knowledge in a "non-burdensome" way.

Gavin Williamson told the Commons that benchmarking pupils will be "absolutely vital" for informing the Government's policies over the next year.

Read the full story here.

South Korea battles triple-digit case numbers

A South Korean worker sprays disinfectant as a precaution against the spread of coronavirus Credit: JEON HEON-KYUN/EPA-EFE/Shutterstock

South Korea has seen a triple-digit daily jump in reported coronavirus infections for the 20th straight day, prompting authorities in recent days to impose tough social distancing rules.

The Korea Centres for Disease Control and Prevention said on Wednesday that the 267 new cases took the country's tally since the pandemic began to 20,449 infections with 326 deaths.

South Korea has seen a rise in infections since early last month, many associated with churches, restaurants and schools.

Authorities have recently restricted dining at restaurants and ordered the shutdown of churches, fitness centres and night establishments in the Seoul area as it struggles to track many of the new infections. 5:26AM

Record number of young people on benefits

Record numbers of young people are claiming benefits because of the coronavirus pandemic, official figures show, as ministers launch a £2 billion employment scheme for school leavers in a "national effort" to restore the UK's economy on Wednesday.

Official statistics published by the Government show the number of under-25s on Universal Credit nearly doubled during lockdown, rising by 250,000 young people to 538,000.

The figures emerged amid increasing concern over the economy.

Read the full story here .

Germany 'can and will prevent a second general shutdown'

The number of confirmed coronavirus cases in Germany has increased by 1,256 to 244,855.

The reported death toll rose by 11 to 9,313.

Japan considers free vaccines for all

Credit: Koji Sasahara/AP

The Japanese government is considering offering the coronavirus vaccine for free to all citizens, Kyodo news reported on Wednesday.

The government said it aims to secure enough vaccines for every citizen by the middle of next year. 3:50AM

Coronavirus crisis plunges Australia into recession

Australia suffered its worst economic downturn on record last quarter as it battled the coronavirus crisis, while fresh outbreaks threaten to upend an already bumpy road to recovery and pile pressure on the government to keep fiscal taps open.

Data from the Australian Bureau of Statistics on Wednesday showed the country's A\$2 trillion (£1.1 trillion) economy shrank 7 per cent in the three months to the end of June from a 0.3 per cent decline in the March quarter.

This is the largest fall in quarterly gross domestic product (GDP) since records began in 1959. GDP declined by 6.3 per cent from a year ago.

2:34AM

Pregnant women with Covid more likely to need intensive care

An international team of researchers reviewed evidence from 77 studies involving more than 11,000 pregnant and recently pregnant women Credit: ANTHONY WALLACE/AFP

Pregnant women in hospital with Covid-19 are less likely to show symptoms and may have an increased risk of being admitted to intensive care, a study has shown.

Researchers also found that they are more likely to give birth early, with newborns more likely to be admitted to a neonatal unit.

An international team of researchers reviewed evidence from 77 studies involving more than 11,000 pregnant and recently pregnant women admitted to hospital and diagnosed with suspected or confirmed Covid-19.

Their study found these women were less likely to report symptoms of fever and muscle pain, but were more likely to need admission to an intensive care unit and need ventilation, compared with non-pregnant women of reproductive age.

2:08AM

Numbers down but state of emergency remains in place

Although infection numbers have decreased in Victoria, the Australian state on Wednesday extended its state of emergency for another six months.

The Victorian Parliament's upper chamber passed legislation by a 20-19 vote to extend the state of emergency, which enhances the government's powers to impose pandemic restrictions.

2:04AM

Infections decrease in Australian hotspot Victoria

A second wave of infections in Australia's coronavirus hotspot, the state of Victoria, eased further on Wednesday as authorities look to loosen lockdown restrictions that have shut large swathes of the state's economy.

Victoria reported 90 new coronavirus cases, its third straight day of double-digit new cases, indicating the strict lockdown measures are reducing the infection rate.

Last month daily new infections peaked at more than 700.

Melbourne, the state's capital and Australia's second-largest city, has entered its fourth week of a six-week lockdown with authorities scheduled to detail on Sunday the timetable for easing curbs.

Though strict restrictions have helped contain the spread of the virus, it wreaked havoc on the economy with official data due later on Wednesday expected to show the country has entered its first recession in three decades.

Australia has detected nearly 26,000 infections since the pandemic began, with Victoria accounting for about 75 per cent of those cases.

The national death tally rose to 663 after Victoria reported six deaths in the past 24 hours.

Queensland state recorded two new cases, both linked to existing cases.

12:54AM

Initial Covid response may have cost lives

The Government's insistence on "following the science" at the start of the coronavirus pandemic cost a "significant" number of lives, a new report has warned.

The Institute for Government think tank said ministers should have been "prepared to act in the absence of scientific certainty".

Its research argued their failure to do so "seems likely to have cost a significant number of additional lives, and contributed to the UK suffering the highest excess death rate in Europe".

The report claims an over-reliance on scientific advice meant the Government went into lockdown and closed schools too late.

Read the full story here .

12:52AM

Household visit ban for more than 800,000 Scots

Nicola Sturgeon has banned hundreds of thousands of Scots in the west of Scotland from visiting other households after a sharp spike in coronavirus cases blamed on indoor gatherings.

The First Minister unveiled draconian restrictions covering more than 800,000 people - 15 per cent of Scotland's population - in Glasgow, West Dunbartonshire and East Renfrewshire. The area includes her own Glasgow home.

In what she described as a "wake-up call" for the entire country, she said people in the affected areas must not visit other households or host guests in their homes except in emergencies.

Read the full story by our Scottish Political Editor Simon Johnson here .

12:35AM

School tests to check if children have fallen behind

Tests will be rolled out at schools in England to see how far children have fallen behind during lockdown, the education secretary said.

Assessing the current Year 11 and Year 13 students on their abilities is seen as a top priority for ministers because it will inform their decision on how much to postpone the 2021 GCSE and A-level exams.

Officials at the Department for Education are drawing up plans on how schools can test pupils on their knowledge in a "non-burdensome" way.

12:32AM

Colombia enters selective quarantine phase

Customers and staff wear protective masks at the Andres Carne de Res restaurant in Chia, Colombia Credit: REUTERS/Luisa Gonzalez

Confirmed Covid-19 deaths in Colombia topped 20,000 on Tuesday as cases surpassed 624,000, the health ministry said in its daily update.

The Andean country has reported 20,052 deaths and 624,069 cases.

This week Colombia ended its initial quarantine measures after nearly five months of national lockdowns. Colombia is now in a phase of selective quarantine.

Restrictions on events and large crowds will continue while the government evaluates the spread of the virus, as more economic activity resumes with safety protocols in place.

12:11AM

Today's top stories

https://www.telegraph.co.uk/global-health/science-and-disease/coronavirus-news-schools-oxford-vaccinecases-deaths/

United Kingdom

Coronavirus: Visiting restrictions reintroduced in Glasgow area Source: BBC News - Health

Published: 2020-09-01 23:13 UTC Received: 2020-09-02 11:52 UTC (+12 hours 39 minutes) Unique ID: 1007756080

Coronavirus: Visiting restrictions reintroduced in Glasgow area

2 September 2020

These are external links and will open in a new window

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Media captionCoronavirus: Household visit ban returning in Glasgow area

Restrictions on visiting other households have been reintroduced in Glasgow and two neighbouring areas after a rise in coronavirus cases.

The new rules affect more than 800,000 people in Glasgow city, West Dunbartonshire and East Renfrewshire.

They are being told not to host people from other households in their own homes or visit another person's home.

The restrictions came into effect from midnight. They will last for two weeks, but will be reviewed after a week.

First Minister Nicola Sturgeon said on Tuesday that 135 of the 314 new cases in Scotland over the past two days had been in the Greater Glasgow and Clyde area.

She said Covid-19 continued to be a dangerous and potentially deadly virus.

Image copyright Getty Images

"It is spreading again, particularly in these three local authority areas, and we believe that, in these areas, it is spreading primarily as a result of household gatherings," she said.

The restrictions affect 633,120 people living in Glasgow, 95,530 in East Renfrewshire and 88,930 in West Dunbartonshire.

People living in those areas should also not visit someone else's home, no matter where it is.

The only exception is for those in extended households, who can continue to meet indoors.

Only essential indoor visits will be allowed in hospitals and care homes.

People from different households can continue to meet outdoors as long as they follow the guidance, and outdoor visits to care homes are still permitted.

Scotland's coronavirus hotspots

Positive tests rates in areas subject to restrictions

Source: Scottish government

"I think this should be a wake-up call, not just for people in Glasgow city, West Dunbartonshire and East Renfrewshire," said the first minister.

"It should be a wake-up call for all of us to stick to the guidelines and stop this virus spreading any further or any faster."

Ms Sturgeon said the reopening of schools had not been responsible for what had happened.

She said a "very small number" of school-age children had tested positive for the virus, and that this had mostly been driven by community transmission.

"Part of the reason that we have to take tough action, where necessary, to minimise community transmission is to stop that becoming a problem for schools," she said.

She added that the preventative action was designed to keep schools open and businesses operating. Image copyright PA Media

Ms Sturgeon had raised concerns earlier in the day after the latest daily figures showed that 66 of the 154 new cases recorded in Scotland had been in the NHS Greater Glasgow and Clyde area.

That compared with an average of eight cases a day in the same area in the first two weeks of August.

The daily incidence rate of Covid-19 is now almost 33 new cases per 100,000 people in West Dunbartonshire, 22 in Glasgow and almost 19 in East Renfrewshire. The rate for the rest of Scotland is just over 10.

The local lockdown which was imposed in Aberdeen last month had been triggered by a rate of 14 cases per 100,000 population.

Donald Macaskill, chief executive of Scottish Care, said the announcement was a bitter blow to care homes in the three affected local authority areas.

He told BBC Scotland's The Nine : "Unfortunately it is the selfish behaviour and attitude of a few, who have put themselves first, which have meant that some of our most vulnerable citizens have been prevented from meeting their families.

"I am extremely disappointed that there will be hundreds of families not able to visit each other indoors in the next week or so."

https://www.bbc.co.uk/news/uk-scotland-53989021

Greece

Greece confirms first coronavirus case in Moria camp on Lesbos Source: Reuters News

Published: 2020-09-02 09:23 UTC Received: 2020-09-02 11:53 UTC (+2 hours 30 minutes) Unique ID: 1007756092

ATHENS (Reuters) - Greece confirmed its first coronavirus case in the overcrowded migrant camp of Moria on the island of Lesbos, two migration ministry officials said on Wednesday.

One of the officials told Reuters that a 40-year old asylum seeker had tested positive for the virus and had been put in isolation. Authorities were trying to trace the people he had contacted, the official said.

The Moria facility, which hosts about 13,000 people, has been frequently criticised by aid groups for poor living conditions.

(Reporting by Lefteris Papadimas)

https://www.reuters.com/article/us-health-coronavirus-greece-migrants/greece-confirms-first-coronaviruscase-in-moria-camp-on-lesbos-idUSKBN25T1CA

Greece

First COVID-19 case reported in Greece's largest migrant camp Source: News Ghana

Published: 2020-09-02 14:45 UTC Received: 2020-09-02 14:46 UTC (+1 minutes) Locations: Balkan, Ghana, Greece, Turkmenistan

Unique ID: 1007757555

The first confirmed COVID-19 case in Greece's largest refugee and migrant camp has been confirmed, Greek authorities announced Wednesday.

The patient is a 40-year-old Somali refugee who was living in the Moria camp on Lesbos island, who has since been hospitalized. Meanwhile, the camp has been sealed off for 14 days, according to a statement from the Greek Migration and Asylum Ministry.

The Somali national's asylum bid had been approved and he had left Lesbos on July 17, but returned to the island recently, according to the statement.

Moria, with a capacity for 2,757 people, currently accommodates 12,714, according to official data.

At the moment, 27,576 migrants and refugees are hosted mainly on five islands in the Aegean in overcrowded facilities, making up part of the some 100,000 asylum seekers in Greece.

Since 2015, more than one million refugees have reached Greece, with half of them landing on Lesbos, with most continuing their journey to other European countries before the closure of borders along the Balkan route in the winter of 2016.

A total of 10,524 infections have been registered in Greece as of Tuesday afternoon, according to data from the country's health ministry.

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Send your news stories to newsghana101@gmail.com and via WhatsApp on +1-508-812-0505 https://newsghana.com.gh/first-covid-19-case-reported-in-greeces-largest-migrant-camp/

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

Canada

Black Canadians hit hard by COVID-19, new national study shows Source: CBC ID: 1007760753

Asli Farah caught COVID-19 from a co-worker whom she carpooled with to her job at an Edmonton warehouse.

When health authorities sent Farah to get tested, she had to take two city buses — her only means of transport.

Then came self-isolation — holed up in her room for two weeks and unable to get treatment for an infected tooth.

"I remember feeling like I was in jail in my own house," Farah recalled in an interview with CBC News.

As a recent immigrant to Canada, she faced the additional challenge of a language barrier, making it even harder to access information or medical help.

"I was really sad," Farah said. "I was in a lot of pain. I feel that people that go through self-isolation should receive a lot of support."

Farah's experience reflects the findings of a groundbreaking new study that reveals COVID-19 is disproportionately impacting the health and finances of Black Canadians.

Black Canadians are more likely than other Canadians to seek treatment and experience layoffs due to the virus. They're also more likely to report feeling at risk on their commute to work, the research reveals.

The study, carried out by the Edmonton-based African Canadian Civic Engagement Council and Innovative Research Group, looks at the health and economic impacts of COVID-19 from the perspectives of Black Canadians and those in the broader Canadian population. Its authors say it appears to be the first of its kind.

The research comes after warnings from advocates, researchers and social agencies across Canada that a lack of race-based data is a barrier to ensuring those most affected by the pandemic get the help they need.

Dunia Nur, president of the African Canadian Civic Engagement Council, said the research tells a largely untold story about the lived experiences of Black Canadians around COVID-19.

"Data will give communities the opportunity to apply for funding and say, 'This is what it says in Alberta, this is what it says in Ontario, therefore we definitely need support here,'" Nur said.

"Anecdotally, we hear the story, but now the story is alive and is living through empirical research."

The study's findings show Black Canadians are more likely than other Canadians to be infected or hospitalized by the disease and nearly three times more likely to know someone who has died after contracting COVID-19.

Black communities are experiencing layoffs, reduced work hours and a reduction in household incomes at higher rates, with men over 45 being hardest hit, the research found.

Fifty-six per cent of Black respondents said their job, or the job of someone they knew, had been affected, compared with the national average of 46 per cent.

The study also reveals why Black Canadians may be more heavily affected by the pandemic.

Findings revealed that while Black Canadians are confident about the precautions they are taking, they feel their daily routines put them at greater risk of catching COVID-19.

They reported at higher rates that their jobs require them to work face-to-face with people and that, no matter how well they protect themselves, they feel their daily routine puts them at high risk of infection. Those who worked in front-line jobs, such as cashiers, personal support workers, nurses and drivers, and who relied on public transit to get to work reported they felt most at risk.

Among commuters, Black Canadians are twice as likely than the national average to feel their commute to work is unsafe, with Black commuters more likely to experience symptoms or seek medical treatment.

"It seems as though they're just naturally in a higher-risk situation given their socioeconomic and demographic circumstances," said Jason Lockhart, Innovative's vice-president and a principal researcher on the project.

The survey was conducted online among a representative sample of 2,322 Canadians, including a representative sample of 400 Black Canadians, from June 17 through June 30.

Emphasizing that their research is based on a small sample size, Nur and Lockhart said it scratches the surface, but they hope it encourages governments to collect more data in areas such as how the virus impacts children in more marginalized communities.

"The more we know about the impacts of COVID-19 in various communities, and perhaps the reasons why there's a disproportionate impact on these communities, [it] will help governments and help organizations like ACCEC develop policies and programs that are going to help alleviate the disproportionate impact," Lockhart said.

"If we don't have this data, how can we make decisions? How can we make public policy that's going to serve communities?"

Nur said the data also shows why governments should invest more in Black-led community groups, which are largely responsible for creating awareness and helping newer immigrants navigate the pandemic's many challenges.

"The community is doing a good job in terms of awareness," Nur said, pointing to numbers that show high levels of taking precautions and seeking treatment.

"However, there needs to be a lot more support for all Black communities nationally across Canada who are actually doing the front-line work."

A comparable margin of error for a probabilistic sample of this size would be about +/-3 percentage points for the general population, and about +/-5 for the sample of Black Canadians.

For more stories about the experiences of Black Canadians — from anti-Black racism to success stories within the Black community — check out Being Black in Canada, a CBC project Black Canadians can be proud of. You can read more stories here.

About the Author

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https://www.cbc.ca/news/canada/edmonton/black-canadians-covid-19-study-1.5708530?cmp=rss

Study

'Bradykinin hypothesis' may explain how COVID-19 attacks the human body

Source: CTVNews.ca - Health - Public RSS ID: 1007759730

Summary One of the many things yet to be understood about the virus is exactly how it is able to attack the human body in so many different ways and cause so many different symptoms, from persistent heart disease to the inability to smell and taste to the skin lesions that have been dubbed 'COVID toes'. Using the Summit supercomputer at the Oak Ridge National Laboratory in Tennessee – considered to be the second-most-powerful computer in the world – a team of researchers led by computational systems expert Dan Jacobson analyzed billions of genetic data points from the lung cells of nine COVID-19 patients.

TORONTO -- Scientists may be getting closer to answering a key question about the novel coronavirus – and all it took was tying up the world's second-most-powerful computer for seven days.

TORONTO -- Scientists may be getting closer to answering a key question about the novel coronavirus – and all it took was tying up the world's second-most-powerful computer for seven days.

One of the many things yet to be understood about the virus is exactly how it is able to attack the human body in so many different ways and cause so many different symptoms, from persistent heart disease to the inability to smell and taste to the skin lesions that have been dubbed 'COVID toes'.

Early on in the pandemic, some doctors suggested the variety of symptoms could be explained as the work of cytokine storms – processes in which the immune system overreacts to an infection.

Cytokines are one of three types of molecule that the body produces in response to a virus or another invader. Normally, humans stop producing cytokines once the threat has been defeated. In a cytokine storm, however, the immune system keeps producing them – and they end up attacking the organs they were meant to protect.

More recent research suggests that one of the other defender molecules may be the culprit. It's been dubbed the "bradykinin hypothesis," and it's gained steam ever since it was first theorized in the journal eLife in July.

Using the Summit supercomputer at the Oak Ridge National Laboratory in Tennessee – considered to be the second-most-powerful computer in the world – a team of researchers led by computational systems expert Dan Jacobson analyzed billions of genetic data points from the lung cells of nine COVID-19 patients. It took Summit seven days to sort through data that traditional desktop computers would have spent months dissecting.

Jacobson said in a statement that he had a "eureka moment" when he noticed some "very distinct patterns" in the data from the patients' bradykinin systems.

While cytokines fight off infection by attracting white blood cells and ultimately regulating the body's temperature, bradykinins handle it via methods including inflammation. They're responsible for sneezes, coughs, stuffy noses and other typical symptoms of influenza and the common cold. They're also able to dilate blood vessels, making them porous.

Like cytokines, bradykinins can wind up in overdrive. Jacobson and his team say the genetic data from COVID-19 patients' lungs includes an abundance of enzymes that can trigger the production of bradykinins and unexpectedly few enzymes that can break it down – what they described as the perfect conditions for a bradykinin storm, allowing for fluid to build up around the lungs.

"Immune cells that are normally contained in the blood vessels flood into the surrounding infected tissue, causing inflammation," Jacobson said.

If this is happening in the lungs, the researchers theorize, it could also be taking place in other parts of patients' bodies, causing everything from muscle pain to nausea to diarrhea as blood vessels leak due to the "out-of-control cascade" of bradykinin production.

If bradykinin storms are in fact responsible for some of the complications experienced by COVID-19 patients, then at least 10 existing drugs could be repurposed to treat those patients, Jacobson said, although only after extensive clinical trials.

https://www.ctvnews.ca/health/coronavirus/bradykinin-hypothesis-may-explain-how-covid-19-attacks-thehuman-body-1.5089712

China

Spray from toilets may have caused COVID-19 transmission in China

ID: 1007760118 Source: CIDRAP

2 Sept.

A study yesterday in the Annals of Internal Medicine adds to the evidence that feces can play a role in the transmission of SARS-CoV2. The study looked at COVID-19 transmission in a cluster of three families living in a high-rise apartment building in Guangzhou, China.

Nine people in the families, who lived in vertically aligned apartments connected by drainage pipes in the bathrooms, were confirmed to have the virus between Jan 26 and Feb 13. After taking 237 surface and air samples from 11 of the 83 flats in the building, public areas, and building drainage systems, the researchers from the University of Hong Kong deduced that virus-containing fecal aerosols were probably produced in the associated vertical stack during toilet flushing, as all families' master bathrooms were connected via plumbing.

"Both the observed infections and the locations of positive environmental samples are consistent with the vertical spread of virus-laden aerosols via these stacks and vents," the authors said.

In an accompanying commentary, Michael Gormley, PhD, the director of the Water Academy at Heriot-Watt University writes that the findings "add to the growing body of evidence that wastewater plumbing systems, particularly those in high-rise buildings, deserve closer investigation, both immediately in the context of SARS-CoV-2 and in the long term, because they may be a reservoir for other harmful pathogens."

https://www.cidrap.umn.edu/news-perspective/2020/09/covid-19-scan-sep-02-2020 https://www.acpjournals.org/doi/10.7326/M20-0928

United States

Mapping the 3-D Geometry of SARS-CoV-2's Genome

Source: Howard Hughes Medical Institute

Published: 2020-08-31 19:01 UTC Received: 2020-09-02 15:09 UTC (+44 hours 8 minutes)

Unique ID: 1007757726

Mapping the 3-D Geometry of SARS-CoV-2's Genome Summary

The novel coronavirus uses structures within its RNA to infect cells. Scientists have now identified these configurations, generating the most comprehensive atlas to date of SARS-CoV-2's genome.

HHMI scientists are joining many of their colleagues worldwide in working to combat the new coronavirus. They're developing diagnostic testing, understanding the virus's basic biology, modeling the epidemiology, and developing potential therapies or vaccines. Over the next several weeks, we will be sharing stories of some of this work.

Although contained in a long, noodle-like molecule, the new coronavirus's genome looks nothing like wet spaghetti. Instead, it folds into stems, coils, and cloverleafs that evoke molecular origami.

A team led by RNA scientist Anna Marie Pyle has now made the most comprehensive map to date of these genomic structures. In two preprints posted in July 2020 to bioRxiv.org, Pyle's team mapped structures across the entire RNA genome of the coronavirus SARS-CoV-2, using living cells and computational analyses.

SARS-CoV-2 relies on its unique RNA structures to infect people and cause the illness COVID-19. But these structures' contribution to infection and disease is often underappreciated, even among scientists, says Pyle, a Howard Hughes Medical Institute Investigator at Yale University.

"The general wisdom is that if we just focus on the proteins encoded in the virus's genome, we'll understand how SARS-CoV-2 works," Pyle says. "But for these types of viruses, RNA structures in the genome can influence their ability to function as much as encoded proteins."

Researchers can now begin to tease out just how these structures aid the virus – information that could ultimately lead to new treatments for COVID-19. Once scientists have identified RNA structures that carry out key tasks, for instance, it may be possible to devise ways to disrupt them – and interfere with infection. More bang for the buck

Both DNA and its molecular relative RNA store information using a four-letter code. Within human cells, pairs of letters can form bonds spanning two strands of DNA. These strands twist together, forming the familiar double helix. RNA can form helices too, but in viruses such as SARS-CoV-2 and its relatives, it does so when a single molecule folds back on itself.

The result is not only stem-like double helices, but also three- and four-stranded structures, knot-like regions, and multi-stem junctions. Like building blocks, these simple configurations become the basis for even more complex architecture within the genome.

Measuring about 30,000 RNA letters, SARS-CoV-2's genome is unusually long for an RNA virus. Even so, it is still quite stubby compared to the genomes of people, plants, and even bacteria. Contorting its RNA into three-dimensional shapes gives SARS-CoV-2 another set of tools with which to compensate for a limited number of genes. "An RNA virus gets the most bang for its buck in terms of how it uses its genome," Pyle says.

Research on other viruses has teased out how they use RNA structures to do their dirty work. The hepatitis C virus, for example, uses a complex configuration of RNA to trick cells into making viral protein, according to Jeffrey Kieft, an RNA structural biologist and virologist at the University of Colorado Anschutz Medical Campus, who was not involved with Pyle's team's work. "It's kind of amazing, all the different things RNA structures can do in viral infection," he says.

Charting new territory

Pyle's group set out to decipher the configuration of SARS-CoV-2's genome with two parallel approaches. In one study, they examined the RNA's structure from within the virus's natural environment: infected cells. It is difficult to access viral RNA within cells, where it mixes with the host's RNA. However, a quirk of SARS-CoV-2 infection — its RNA becomes unusually abundant — helped the team create a snapshot of the RNA genome's full structure. This was the first time anyone has captured such a comprehensive picture of a viral genome from within living cells. Previous efforts using HIV- and hepatitis C-infected cells did not produce enough information to create a full inventory of RNA structures.

"The coronavirus genome has more structure than any RNA my lab has studied in the past."

Anna Marie Pyle, HHMI Investigator at Yale University

In a related computational study, the team tried to predict how SARS-CoV-2's RNA genome, as well as other pieces of viral RNA made by the cell, might fold and interact with themselves. The two studies have not yet undergone the scientific vetting process known as peer review, but together, they reveal that SARS-CoV-2's genome has a complex, compact architecture. "The coronavirus genome has more structure than any RNA my lab has studied in the past," Pyle says.

To study any RNA virus, and SARS-CoV-2 in particular, scientists need a roadmap of its genomic landscape, Kieft says. "Dr. Pyle has created a sort of global atlas that is a great starting point for the next round of more targeted experiments," he says. "In many ways, it scratches the surface of the richness of RNA structure that probably exists in this virus. I suspect there's going to be a lot of surprises."

The mapping effort also represents a preliminary step toward new drugs that might target the virus's RNA structures. However, that road could be long. Since 2014, when his lab discovered a knot-like structure that viruses like dengue and West Nile use to evade cellular defenses, Kieft has been trying to find a way to neutralize it. He cautions that the research community is not fully geared up to identify RNA structure-disrupting drugs. "This strategy just hasn't been studied or pursued in the way that it has for proteins," he says. However, when dealing with a pandemic virus like SARS-CoV-2, "initially you try everything."

https://www.hhmi.org/news/mapping-the-3-d-geometry-of-sars-cov-2s-genome

Japan

Japanese researchers reveal effective treatment for severe Covid-19 cases Sources: BusinessLine Online

Published: 2020-09-02 10:01 UTC Received: 2020-09-02 13:05 UTC (+3 hours 4 minutes) Unique ID: 1007756821

Mumbai, September 2 World

Recommends antibody-based drug Actemra that rapidly brings down pro-inflammatory cytokines, helping alleviate severe disease symptoms

Researchers from Japan have carried out a study where they identified an effective treatment for severe Covid-19 positive patients who suffer from inflammatory responses.

The study was published in the journal PNAS. The researchers examined the symptoms of the virus that persist even after the recovery of the patient from active viral infection.

The researchers noted in their study that cytokines are a group of small proteins that can either enhance or inhibit the human body's immune response to infection, trauma, and diseases, such as cancer.

One of their main roles is to stimulate inflammation, which initiates the healing process.

The problem is, overstimulation of the inflammatory response has an array of harmful complications, ranging from asthma to severe autoimmune diseases, the research team noted in their study.

The researchers further maintained that one such complication, called cytokine release syndrome (CRS), was seen in patients suffering from hyperimmune response to microbial infection or trauma. This can lead

to multiple organ failure and even death.

Lead author of the study Sujin Kang of Osaka University, Japan, stated in a statement: "Despite knowing which cytokines are involved, there is still no specific immunotherapy for CRS, and treatment is limited to supportive care."

"To better understand the molecular mechanisms of CRS pathogenesis, we first studied the cytokine profiles of 91 patients diagnosed with CRS associated with bacterial sepsis, acute respiratory distress syndrome, or burns," Kang added.

The team said that increased pro-inflammatory cytokine levels are also associated with more severe cases of pneumonia, a common cause of death among Covid-19 patients.

Researchers recommended an antibody-based drug called Actemra for severe Covid-19 patients. The drug helps in the rapid decline of the levels of the pro-inflammatory cytokines and could alleviate severe disease symptoms.

https://gphin.canada.ca/cepr/showarticle.jsp?docId=1007756821

Italy

It could take a month for COVID-19 patients to clear the virus: Research Source: Adaderana.lk

Published: 2020-09-02 13:05 UTC Received: 2020-09-02 13:05 UTC (0 minutes) Unique ID: 1007756818

COVID-19 patients may need to wait over a month before being retested to know whether they have cleared the virus, and one in five negative test results could be false, according to research published Tuesday in the British Medical Journal.

Dr. Francesco Venturelli of the University of Modena and Reggio Emilia and colleagues studied 1,162 patients in the Reggio Emilia Province of Italy who tested positive for COVID-19 using a polymerase chain reaction (PCR) test.

Patients were retested around 15 days after their first test, 14 days after their second and nine days after their third. The researchers set these time intervals in accordance with European Centre for Disease Control and Prevention recommendations.

About 60.6% of the patients who recovered tested negative for COVID-19 by their first follow-up test. Another test confirmed that negative result in just 78.7% of these patients, which the team says suggests about one in five negative tests are false negatives. They say this could mean that many are still shedding the virus after testing negative and unknowingly passing it on to others.

The researchers determined a patient had cleared the virus once they tested negative on two consecutive PCR tests. Overall, it took about 30 days from diagnosis and 36 days from the onset of symptoms for patients to clear the virus.

It took slightly longer for older patients and those with more severe disease to clear the virus. The length of time increased from 35 days for those under 50 years old to 38 days for those over 80. Non-hospitalized patients took about 33 days, while hospitalized patients took about 38 days.

By 34 days after patients first noticed symptoms, nearly 87% of them tested negative. This suggests patients may need to wait a month or longer to determine whether they have truly cleared the virus, the researchers said.

The team notes that understanding the timing of viral clearance is key to determining testing strategies and ensuring people don't have to spend unnecessary time in isolation. The say that postponing the follow-up testing of those who are no longer experiencing illness or symptoms could increase the efficiency and performance of testing strategies.

Source: CNN

-Agencies http://www.adaderana.lk/news.php?nid=66923

Domestic Events of Interest

Canada (Update)

Public Health Notice: Outbreak of Salmonella infections linked to peaches imported from the United States

Source: Public Health Agency of Canada Public September 2, 2020 – Update

The outbreak investigation is ongoing as illnesses continue to be reported to the Public Health Agency of Canada. Since August 23, there have been 15 additional illnesses reported in the ongoing Canadian investigation. There are now 48 confirmed cases in Canada.

This is no evidence to suggest that peaches grown in Canada are associated with outbreak. Peaches imported from the United States are under investigation.

Do not eat, use, sell or serve any recalled peaches from Prima Wawona from the United States, or any products made with these peaches. This advice applies to all individuals across Canada, as well as retailers, distributors, manufacturers and food service establishments such as hotels, restaurants, cafeterias, hospitals and nursing homes.

If you are not sure if the peaches in your home are the recalled peaches from Prima Wawona from the United States, do not eat them. This notice contains more advice on how to avoid getting sick.

The Canadian Food Inspection Agency (CFIA) has issued a consumer advisory for peaches recalled by Prima Wawona, sold from June 1, 2020 to August 22, 2020 in Canada. More information on recalled products is available on the CFIA website.

On this page Why you should take note Investigation summary Who is most at risk What you should do to protect your health Symptoms What the Government of Canada is doing Epidemiological information Additional information Media contact Public inquiries Investigation history Why should you take note The Public Health Agency of Canada (PHAC) is collaborating with federal and provincial public health partners, the United States Centers for Disease Control and Prevention (U.S. CDC), and the U.S. Food and Drug Administration to investigate an outbreak of Salmonella infections occurring in two provinces. The outbreak appears to be ongoing, as recent illnesses continue to be reported to PHAC.

Based on the investigation findings to date, the outbreak has been linked to peaches from Prima Wawona from the United States. The Canadian Food Inspection Agency (CFIA) has issued a consumer advisory for peaches recalled by Prima Wawona, sold from June 1, 2020 to August 22, 2020 in Canada. These peaches include yellow, white and organic peaches and were sold under various brand names:

Extrafresh

Harvest Sweet Prima Sweet 2 Eat Sweet O Sweet Value Wawona Wegmans

Do not eat, use, sell or serve any recalled peaches from Prima Wawona from the United States, or any products made with these peaches. This advice applies to all individuals across Canada, as well as retailers, distributors, manufacturers and food service establishments such as hotels, restaurants, cafeterias, hospitals and nursing homes.

Peaches grown in Canada are not affected by this advice.

If you are not sure if the peaches in your home are the recalled peaches from Prima Wawona from the United States, do not eat them.

As the investigation is ongoing, it is possible that additional sources could be identified, and additional food recall warnings related to this outbreak may be issued. This public health notice will be updated as the investigation evolves.

Investigation summary

As of September 2, 2020, there have been 48 confirmed case of Salmonella Enteritidis illness linked to this outbreak in two provinces: Ontario (32) and Quebec (16).

Individuals became sick between June and August 2020. Eleven individuals have been hospitalized. No deaths have been reported. Individuals who became ill are between 0 and 91 years of age. The majority of cases (58%) are female.

The Canadian Food Inspection Agency (CFIA) has issued a related consumer advisory for peaches recalled by Prima Wawona. The CFIA is conducting a food safety investigation, which may lead to the recall of other products. If other high-risk products are recalled, the CFIA will notify the public through updated food recall warnings. More information on products recalled by Prima Wawona from the United States is available on CFIA's website.

The U.S. CDC is also investigating an outbreak of Salmonella Enteritidis illnesses that have a similar genetic fingerprint to illnesses reported in this outbreak. Investigators in Canada and the U.S. continue to collaborate to exchange information and identify commonalities in the outbreak information that may identify additional sources of illness or help to identify the cause of contamination in the peaches.

It is possible that more recent illnesses may be reported in the outbreak because there is a period of time between when a person becomes ill and when the illness is reported to public health officials. For this outbreak, the illness reporting period is between two and four weeks.

Who is most at risk

Anyone can become sick with a Salmonella infection, but children aged 5 years and under, older adults, pregnant women or people with weakened immune systems are at higher risk for contracting serious illness.

Most people who become ill from a Salmonella infection will recover fully after a few days. It is possible for some people to be infected with the bacteria and to not get sick or show any symptoms, but to still be able to spread the infection to others.

What should you do to protect your health

Do not eat, use, sell or serve any recalled peaches from Prima Wawona from the United States. This advice applies to all individuals across Canada, as well as retailers, distributors, manufacturers and food service establishments such as hotels, restaurants, cafeterias, hospitals and nursing homes.

Peaches grown in Canada are not affected by this advice.

Advice to consumers

Individuals are asked to check their homes or establishments for any recalled products. Recalled products should be thrown out or returned to the location where they were purchased.

If you have the recalled peaches from Prima Wawona at home:

Do not eat them. Throw them away and wash your hands.

Wash and sanitize any surfaces that may have come in contact with the peaches, such as countertops, fridge drawers, pantry shelves, knives, and cutting boards.

Throw the peaches away, even if some of them were eaten and no one has gotten sick.

Do not eat foods made with recalled peaches from Prima Wawona.

If you buy peaches at grocery or convenience stores:

Make sure they are not selling recalled peaches from Prima Wawona or serving fresh foods prepared with them.

If you can't confirm that the peaches in stores are not the recalled product, don't buy them.

If you have been diagnosed with a Salmonella infection or any other gastrointestinal illness, do not cook food for other people.

Contact your local public health authority to report any food safety concerns at restaurants or grocery stores, or if you suspect food poisoning from a restaurant or other food establishments.

Advice to restaurants, retailers, suppliers and distributors

Retailers, distributors, manufacturers, and food service establishments such as hotels, restaurants, cafeterias, hospitals, and nursing homes should not serve, use, or sell the recalled products.

Clean and sanitize all surfaces and storage bins that the recalled peaches may have come in contact with, including cutting boards, countertops, slicers, utensils, and containers used to store or transport them. Symptoms

Symptoms of a Salmonella infection, called salmonellosis, typically start 6 to 72 hours after exposure to Salmonella bacteria from an infected animal, person or contaminated product.

Symptoms include:

fever chills diarrhea abdominal cramps headache nausea vomiting

These symptoms usually last for 4 to 7 days. In healthy people, salmonellosis often clears up without treatment, but sometimes antibiotics may be required. In some cases, severe illness may occur and hospitalization may be required. People who are infected with Salmonella bacteria can be infectious from several days to several weeks. People who experience symptoms, or who have underlying medical conditions, should contact their health care provider if they suspect they have a Salmonella infection.

What is the Government of Canada doing

The Government of Canada is committed to protecting the health of Canadians from enteric disease outbreaks.

The Public Health Agency of Canada leads the human health investigation into an outbreak and is in regular contact with its federal, provincial and territorial partners to monitor the situation and to collaborate on steps to address an outbreak.

Health Canada provides food-related health risk assessments to determine whether the presence of a certain substance or microorganism poses a health risk to consumers.

The Canadian Food Inspection Agency conducts food safety investigations into the possible food source of an outbreak.

The Government of Canada will continue to update Canadians if new information related to this investigation becomes available.

Epidemiological information

Figure 1 is an epidemiological curve for this outbreak, which shows the numbers of new cases by week. Outbreak investigators use this information to show when illnesses begin, when they peak and when they trail off. It can take several weeks from the time a person becomes ill to when the illness is reported and testing confirms a link to the outbreak. Data are available for 48 cases.

Figure 1: Number of people infected with Salmonella Enteritidis Figure 1: Number of people infected with Salmonella Enteritidis Figure 1 - Text Equivalent Additional information CFIA's food safety investigation U.S. CDC's Salmonella Enteritidis investigation notice Salmonella Safe food handling practices COVID-19 and food safety Recalls and safety alerts mobile application Media contact Public Health Agency of Canada Media Relations 613-957-2983

Public inquiries Call toll-free: 1-866-225-0709 Email: <u>info@hc-sc.gc.ca</u> <u>https://www.canada.ca/en/public-health/services/public-health-notices/2020/outbreak-salmonella-infections-peaches-imported-united-states.html</u>

International Events of Interest

United States

Florida dengue fever local transmission cases rise to 54 ID: 1007759810 Source: outbreaknewstoday.com

September 2, 2020

The Florida Department of Health reported one additional locally acquired dengue fever case in Monroe County this past week, bringing the total to 54 statewide (53 in Monroe County and 1 in Miami-Dade County). One case was reported in a non-Florida resident.

The latest case was identified through retrospective case finding efforts to better characterize activity early in the outbreak.

DOH-Monroe and Florida Keys Mosquito Control District (FKMCD) are working closely to continue surveillance and prevention efforts. FKMCD is assisting with these investigations and continue to intensifying mosquito control activities in the Key Largo (Upper Keys) Area.

In addition to the locally acquired cases, Florida has reported 32 international travel-associated dengue

fever cases. Counties reporting cases were: Brevard (2), Broward (5), Clay, Collier, Duval, Franklin, Hillsborough (3), Miami-Dade (13), Orange, Palm Beach, Sarasota, Seminole, and St. Lucie.

Florida Keys: Oxitec gets approval to release Aedes aegypti mosquitoes

Dengue can present as a severe flu-like illness with severe muscle aches and pain, fever and sometimes a rash. Usually, there are no respiratory symptoms. Symptoms of Dengue will appear within 14 days after being bitten by an infected mosquito. Dengue fever is not contagious but is transmitted by the bite of an infected Aedes aegypti mosquito.

The Florida Department of Health in Monroe County says the emergence of these Dengue cases reinforces the importance for the public to prevent insect bites and to take basic precautions to help limit exposure. These measures include intact windows and screens and the use of air conditioning, keeping the area around your residence free from containers that collect water, wearing protective clothing, and the appropriate use of insect repellents after applying sunscreen. Spray out outdoor plants on a regular basis, such as bromeliads and crotons. The Department also reminds all residents to drain all standing water at least once per week and designate individuals to share this key responsibility within the business or household.

http://outbreaknewstoday.com/florida-dengue-fever-local-transmission-cases-rise-to-54-65518/

Europe

EU agency reports cases of Salmonella after contaminated imported nuts Source: EURACTIV.com

Published: 2020-09-02 11:53 UTC Received: 2020-09-02 12:04 UTC (+11 minutes) Unique ID: 1007756205

An outbreak of Salmonella Typhimurium linked to Brazil nuts imported from Bolivia has been reported in several EU countries, prompting the European Commission to trigger its rapid alert system.

According to the European Centre for Disease Control and Prevention (ECDC), a multi-country cluster of infections caused by the bacteria has been identified, with suspected cases reported in the United Kingdom, France, Luxembourg, the Netherlands, and Canada.

The lion's share of the cases have been reported in the UK, where there have been 98 cases across different regions of the country.

Several EU countries, including Belgium, Germany and Greece, are also listed as concerned countries, although no cases have yet been reported.

The UK Food Standards Agency (FSA) has subsequently provided distribution information about the concerned batch of nuts to 33 countries.

Four alerts for affected items have been published by the agency, including recalls from companies such as Lidl, Eat Natural, and Rude Health Food.

Nick Phin, deputy director of the national infection service at Public Health England, recently told Food Safety News that efforts were ongoing to identify the source of contamination.

"Epidemiological and microbiological investigations point to contaminated nuts used in several products – investigations to determine the source of the contamination and whether any other products may have been affected continue," he said.

Following the outbreak, the European Commission has triggered a rapid alert system for food and feed (RASFF) notification.

The World Health Organisation has also launched an alert via the International Food Safety Authorities Network, which is designed to facilitate the rapid exchange of information across borders and between members during food safety events.

The UK's FSA has since taken the precautionary step of recalling products containing these nuts.

Salmonella is a bacterial disease most commonly spread via contaminated food and drink, but usually associated with animal products including raw or undercooked meat.

While the disease doesn't present a major problem for most healthy people, it can sometimes carry severe consequences in young children, frail or elderly people, and those with weakened immune systems.

However, a recent report published earlier this year by the ECDC and the European Food Safety Authority (EFSA), warned that foodborne bacteria, such as Salmonella, Campylobacter and E. Coli, are getting harder to treat as they are becoming increasingly resistant to antibiotics used to beat them.

The report concluded that Salmonella and Campylobacter, in particular, are becoming increasingly resistant to ciprofloxacin, one of the antibiotics of choice for treating infections caused by these bacteria and categorised as critically important for use in humans too.

https://www.euractiv.com/section/agriculture-food/news/eu-agency-reports-cases-of-salmonella-aftercontaminated-imported-nuts/

Netherlands

Poliovirus found in sewage water in the Netherlands Source: Outbreak News Today Published: 2020-09-02 14:01 UTC Received: 2020-09-02 14:01 UTC (0 minutes) Unique ID: 1007757339

Dutch media are reporting (computer translated) that poliovirus has been found in wastewater near where a large pharmaceuticals company makes vaccines. According to the report, the Healthcare Inspectorate (IGJ), which is investigating the case, says it is still unclear what the source is and whether employees have been exposed to the virus. All technical and lab facilities are currently under investigation and employees are tested.

In the sewer that was examined, both the waste water from the companies and the water from the toilets of the three institutions ended up. In addition to Bilthoven Biologicals, one of the largest vaccine manufacturers in the world, the site also houses the Intravacc research institute and the RIVM building, where a polio laboratory is located. Samples were taken from the sewage water on July 21, and it was established in the first week of August that it contained polio virus. According to a RIVM spokesperson, no technical problem has yet been identified in the company or the lab. Nor has a human source been found yet.

RIVM informed the World Health Organization (WHO) about the incident two weeks ago. Bilthoven Biologicals produces half of the 60 million polio vaccines in the world, the WHO is the buyer.

Belgium: Live polio virus solution accidentally released into local water

The Netherlands issue shellfish warning following Belgium polio incident

Netherlands: Bilthoven Biologicals employee infected with polio after accident

Airlines look to introduce COVID-19 testing at airports with hopes of ending

http://outbreaknewstoday.com/poliovirus-found-in-sewage-water-in-the-netherlands-25297/

Pakistan

Punjab reports two new polio cases Source: The Nation Published: 2020-09-02 08:16 UTC Received: 2020-09-02 12:45 UTC (+4 hours 29 minutes) Unique ID: 1007756711

Two new polio cases have been reported in Punjab, confirmed the official in-charge of the province's polio programme on Tuesday.

With two more kids falling victim to the crippling virus, the number of confirmed cases in Punjab this year reached eight. In 2020, 67 polio cases have been reported from across Pakistan, majority of these from Khyber Pakhtunkhwa. The crippling virus had affected all four limbs of an eight month old child belonging to a poor family in Dera Ghazi Khan district. The ill fated child had already lost his life, the fourth causality of a polio patient this year.

Polio has also affected the right lower limb of 13 years old child hailing from Bahawalpur district. Polio affecting a teenager has again sparked debate as the disease is usually attributed to kids up to five years of age. 'It is not the first case. Recently, polio has affected a 14 years old child. But still the happening is quite unusual. Malnutrition and co-morbidities might have caused polio to attack these children', said Dr Abdul Rauf, a family physician running his clinic in Usman Gunj, congested locality in Northern Lahore.

Families of both the children were living in poor socio economic conditions, said Sundas Irshad, in-charge Punjab polio programme.

'We have conducted good campaigns in December and January. Virus transmission continued due to gap in polio eradication campaigns', she said.

'Now the campaigns have been resumed and the next one, a national drive, will be held on September 21', she said, adding, the campaign would help breaking the transmission of the virus.

https://gphin.canada.ca/cepr/showarticle.jsp?docId=1007756711

Researches, Policies and Guidelines

EURO WHO

2Inleashing the potential of vaccines for a healthier Europe Source: WHO

02-09-2020

Task Force for Global Health/Ilya Karimdjanov Compared to every other WHO region, the European Region has the lowest mortality figures for children under the age of 5. The Region has been free from poliomyelitis since 2002, and many Member States have also stopped the endemic spread of measles and rubella.

These incredible achievements would not have been possible without immunization programmes, which ensure vaccines are readily available to prevent the spread of many diseases that could harm people's health, prosperity and productivity. Individuals who contract vaccine-preventable diseases often suffer not only ill health but also education and economic impacts, as their options and potential can be limited by long-term effects such as severe physical disability.

The full potential of vaccines to strengthen communities and contribute to the Sustainable Development Goals remains untapped. Providing vaccines through the life course means making age-appropriate vaccination available not only to all children but to people of every age. With immunization set out as one of the flagship areas for the European Programme of Work, WHO/Europe is renewing efforts to ensure equitable access to safe and effective vaccines – a vital step towards achieving health and well-being for all.

Minding the gaps

Many countries in the European Region have among the highest rates of routine immunization coverage in the world. For the Region as a whole, over the past 5 years ≥90% of eligible children received their first

dose of measles-containing vaccine. Similarly high rates have been reported for several other vaccines in the national immunization schedules.

Nevertheless, from 2017 to 2019, the Region experienced the worst measles outbreaks in over a decade, affecting nearly all countries and peaking at over 100 000 cases in 2019. These and other outbreaks of vaccine-preventable diseases demonstrate that progress in the Region has been fragile, uneven and hence insufficient to protect everyone. Even a small percentage of children missing routine vaccinations each year leads to many people in the Region remaining susceptible over time. Large pockets of susceptible individuals can lead to large outbreaks.

While working to maintain high routine coverage, countries also need to identify and address what is holding back progress. The actions of several countries in the Region have shown that closing immunity gaps requires tailored approaches.

Local solutions to local barriers

When uptake of vaccination against human papillomavirus (HPV) took a downward turn in Denmark in 2014 following negative media reports questioning the safety of the vaccine, health authorities determined why trust in the vaccine was falling and set about to rebuild it. They partnered with civil society groups, initiated a health literacy campaign and proactively reached out to concerned parents. Immunization rates rebounded as trust in the vaccine once again increased, meaning that thousands more young women could be protected against the virus that can lead to cervical cancer.

In Romania, the measles outbreak of 2017 to 2019 affected districts unevenly, reflecting years of disparate coverage among otherwise similar areas. A study of the potential causes of this disparity found differences in the vaccination experience, including how health professionals in each area communicated about vaccines to parents. The results pointed to the need for improved guidance and training for health professionals on how to increase understanding and improve the immunization experience for parents.

Ukraine has significantly improved routine immunization coverage since 2016. However, despite steady progress, it has not yet achieved the target of 95% of children vaccinated against measles and other vaccine-preventable diseases. Promptly addressing the remaining gaps has been especially crucial in the context of the measles outbreak, which resulted in 57 000 reported cases in the country in 2019, and the current COVID-19 pandemic.

With no central registration system for routine vaccinations available in Ukraine until recently, it has been a challenge for authorities to identify, reach and immunize children who have missed out on routine shots. Through good coordination between the health and education sectors, the country initiated verification of children's immunization status through school-based records. This has made it possible in many cases to identify children at risk and inform immunization catch-up campaigns so they can reach the children before the measles virus does.

2030 European Immunization Agenda

The European Immunization Agenda for the coming decade seeks to ensure that everyone enjoys the full benefits of vaccines throughout their lives no matter who they are, where they live or when they were born. It will be determined by national priorities – a bottom-up approach providing localized solutions to localized issues.

Guided by the principles of the European Programme of Work, the Agenda will be:

- equity-based
- people-focused
- country-owned
- data-enabled
- partnership-based

- innovation- and research-driven, and
- primary health care-based.

To accelerate progress, WHO/Europe will be working closely with Member States and partners to build trust in vaccines, understand and remove barriers to vaccination, strengthen primary health care so routine childhood vaccinations reach every child, and extend programmes to benefit people of all ages. By working together, the Region can harness the potential of vaccines to protect individual health and prosperity as well as broader productivity within society.

Flagship initiatives

The work of WHO/Europe's vaccine-preventable diseases and immunization programme contributes to one of the 4 flagship initiatives to complement the European Programme of Work, which sets out health priorities for the coming 5 years.

These initiatives – the European Immunization Agenda, Healthy Behaviours: Incorporating Behavioural and Cultural Insights, the Mental Health Coalition, and Empowerment through Digital Health – are intended as accelerators of change. They mobilize action on critical issues that feature prominently on the agendas of Member States and for which high-visibility, high-level political commitment can be transformative.

https://www.euro.who.int/en/health-topics/disease-prevention/vaccines-andimmunization/news/news/2020/9/unleashing-the-potential-of-vaccines-for-a-healthier-europe2