GPHIN Daily Report for 2020-08-21

Special section on Coronavirus

Canada

Areas in Canada with cases of COVID-19 as of 20 August 2020 at 08:00 pm EDT

Source: Government of Canada

Province, territory or other	Number of confirmed cases	Number of active cases	Number of deaths
Canada	123,873	4,531	9,054
Newfoundland and Labrador	268	2	3
Prince Edward Island	44	4	0
Nova Scotia	1,076	6	64
New Brunswick	186	6	2
Quebec	61,402	1,289	5,730
Ontario	41,048	964	2,793
Manitoba	796	247	12
Saskatchewan	1,590	149	22
Alberta	12,604	1,084	228
British Columbia	4,825	780	200
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?topic=tilelink#a1

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

Canada

Statement from the Chief Public Health Officer of Canada on August 20, 2020 - Canada.ca Source: canada.ca

ID: 1007673414

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 123,490 cases of COVID-19 in Canada, including 9,049 deaths. 89% of people have now recovered. Labs across Canada have tested 4,925,446 people for COVID-19 to date. Over the past week, an average of over 48,700 people were tested daily, with 0.8% testing positive. Over the last several weeks, national daily case counts have ranged from 350 to 500 cases, with just over 390 cases being reported daily during the most recent 7 days.

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

Average daily case counts remain in the range of 350 to 500 new cases being reported daily across the country, indicating that we are currently keeping the infection rate to a manageable level. COVID-19 disease severity indicators, including the number of hospitalisations and deaths, remain at a low level. In recent weeks, younger age groups have represented a larger proportion of COVID-19 cases. Compared to all other age groupings, incidence rates have remained the highest in the 20 to 29 year age group. However, incidence rates appear to be declining in this age group somewhat since a peak incidence in mid-July.

Because COVID-19 in any age group can build a reservoir for the virus, we need to consider where the virus might spread next and continue with efforts to protect individuals and settings at higher risk for severe outcomes. We are closely monitoring for increased incidence in older age groups and possible increases in hospitalisation or critical care admissions that could indicate a shift in transmission patterns. We all have a role to play in keeping the spread of COVID-19 under control and away from those at high risk of severe outcomes. Understanding the risks, following local public health guidance and taking appropriate precautions will help us make informed decisions to keep us, our families, and our communities safer. You can find additional information and guidance to increase your COVID-19 know how here."

https://www.canada.ca/en/public-health/news/2020/08/statement-from-the-chief-public-health-officer-of-canada-on-august-20-2020.html

Canada

Fifth OC Transpo operator tests positive for COVID-19 in less than two weeks

Source: Ottawa Matters Unique ID: <u>1007671370</u>

In less than two weeks, a fifth OC Transpo operator has tested postive for COVID-19
The driver last worked in the afternoon and into the evening on August 13.
Health officials are also notifying anyone who may have taken those routes on August 12 to be on the look out for symptoms of the virus.

- Route 11: 1:21 pm Lincoln Station to Elgin Street and Sparks Street 2:12 pm
- Route 7: 2:28 pm Parliament Station to Brittany Drive and Montreal Road 3:03 pm
- Route 6: 3:19 pm Maple Lane & Springfield Road to Greenboro Station 4:45 pm
- Route 6: 5:01 pm Greenboro Station to Springfield Road 6:17 pm
- Route 290: 6:41 pm Hurdman Station to Fielding Drive and McCarthy Road 7:04 pm
- Route 89: 7:25 pm Colonnade Road and Concourse Gate to Tunnev's Pasture Station 7:51 pm
- Route 51: 7:57 pm Tunney's Pasture Station to Britannia Park 8:34 pm August 13, 2020
- Route 11: 1:21 pm Lincoln Station to Elgin Street and Sparks Street 2:12 pm
- Route 7: 2:28 pm Parliament Station to Brittany Drive and Montreal Road 3:03 pm
- Route 6: 3:19 pm Maple Lane & Springfield Road to Greenboro Station 4:45 pm
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- Route 290: 6:41 pm Hurdman Station to Fielding Drive and McCarthy Road 7:04 pm
- Route 89: 7:25 pm Colonnade Road and Concourse Gate to Tunney's Pasture Station 7:51 pm
- Route 51: 7:57 pm Tunney's Pasture Station to Britannia Park 8:34 pm

Anyone with concerns about exposure is asked to contact Ottawa Public Health at 613-580-6744 or visit ottawapublichealth.ca.

https://www.ottawamatters.com/local-news/fifth-oc-transpo-operator-tests-positive-for-covid-19-in-less-than-two-weeks-2651254

Canada

Maple Leaf temporarily suspends pork exports to China after COVID-19 cases

Source: CTV News Unique ID: 1007666282

MISSISSAUGA, ONT. -- Maple Leaf Foods Inc. says it has temporarily suspended pork exports to China after a few dozen workers at one of its plants tested positive for COVID-19.

The Mississauga, Ont.-based company says in a statement late Tuesday it continues to have rigorous safety measures at the Brandon, Man., plant to prevent workplace transmission, and the plant continues to operate.

It notes public health officials have said there is no sign the coronavirus was spread in the workplace. The company says it voluntarily suspended its pork exports to China after the Chinese government adopted new protocols that require Canadian processors who report a positive COVID-19 case to do so. RBC Dominion Securities analyst Irene Nattel says in a note to clients that the news "is a slight negative" for Maple Leaf.

She says the pork originally intended for export to China can likely be sold domestically or exported elsewhere -- though at lower margins -- and that price forecasts already assume some coronavirus-related disruptions.

Maple Leaf says it is seeing short-term increases in absenteeism, but believes this is a short-term situation rather than a material financial event.

CEO Michael McCain says the company is confident in its promise to provide customers with safe food. "But we respect China's new import protocols for Canadian products and are working co-operatively with Canadian and Chinese authorities to resume exports quickly."

https://www.ctvnews.ca/business/maple-leaf-temporarily-suspends-pork-exports-to-china-after-covid-19-cases-1.5070630

Canada

MLAs to look at mental health, testing capacity ahead of potential second wave

Source: CBC News Unique ID: <u>1007670824</u>

MLAs on the province's Standing Committee on Health say there are pressing issues that need to be addressed before the possible arrival of a second wave of COVID-19 in the province.

The committee met Wednesday to lay out their priorities for the fall. Those included looking at how the start of the school year could push P.E.I.'s testing capability, and how the availability of mental health services has been affected by the pandemic.

"I think it's extremely important that we take a look at that, see what gaps are there during the first phase of this pandemic, and supposedly phase two will be in the near future," said Liberal MLA and committee member Heath MacDonald.

The committee is made up of Conservative cabinet ministers Brad Trivers (Education and Lifelong Learning) and Jamie Fox (Fisheries and Communities), Green MLAs Trish Altass and Hannah Bell and Liberal MLAs Gordon McNeilly and MacDonald.

Stress on Island families

MacDonald says the stress has been piling up on Island families, partially due to uncertainty after programs like CERB or wage subsidies come to an end, and what will happen if people are not called back to their jobs.

"Those are the types of things that cause mental health [problems] ... and anxiety, stress, fear," he said. "Most recent there's been studies that women have taken the blunt of COVID-19 as far as the mental health side of things."

MLAs on the committee also want to ask government when P.E.I. will we see the roll out of the mobile mental health crisis units, as well as when Unit 9 will reopen.

MacDonald also expressed concern over seniors missing essential medical appointments out of fear or stress, and existing gaps in the home care system that have been exposed by the pandemic.

He says he wants to hear from private home care companies, home care workers and paramedics about what they are hearing in the field.

"I think we can live and learn."

Definite 'increase in the amount of testing'

Green MLA Trish Altass said she wants the committee to look at the province's testing capability as schools head back in a little over two weeks.

According to the province, parents are required to call 8-1-1 to arrange for testing if their child is exhibiting COVID-19 symptoms. There's a similar requirement for school staff.

"It looks like we're going to be having students tested regularly if they have symptoms," she said. "We think of all the times our children have a cold or flu or just allergies in school.

"We're definitely going to see an increase in the amount of testing that's going to be needed to align with the proposed plans for schools. So are we prepared for that to happen?"

The Public School Branch has said it expects to see a more absences as the cold and flu season approaches, and says parents should be "extra diligent".

Altass said she wants to ensure that the testing protocols minimizes the impact on parents and students, which has been echoed by others.

Officials with the Department of Education have said that they recognize there are children with seasonal allergies or other occurrences that could cause a cough, and in those cases, the child could be in school as long as they otherwise felt well.

It said parents should monitor for other symptoms, like fever and extreme tiredness, and keep children home in those instances.

Committee chair Gordon McNeilly said the health committee will be looking at topics through a COVID-19 lens. Altass would also like the committee to look at the province's Dorian response through the new lens of the pandemic, particularly around emergency shelters and power outages.

The topics will be explored in meetings over the coming weeks.

More from CBC P.E.I.

https://www.cbc.ca/news/canada/prince-edward-island/pei-mlas-mental-health-testing-covid19-1.5693234?cmp=rss

Canada

Students coming to N.S. from outside Atlantic bubble must get COVID-19 test

Source: CBC | Nova Scotia News

ID: 1007673758

Post-secondary students coming to Nova Scotia from outside the Atlantic bubble will need to get tested for COVID-19 in addition to self-isolating for 14 days, Premier Stephen McNeil announced Thursday.

McNeil said the students will be tested three times within their self-isolation period.

"If students are asymptomatic, these tests should help us detect COVID," he said. "This will also enable institutions and Public Health to respond quickly if the virus is found."

This measure applies to students living in residence and within the larger community.

Even with a negative result, the students will still be required to complete their 14-day isolation period. Students from inside the Atlantic bubble will only need to self-isolate if they've been outside the bubble within the last 14 days.

"This is an important moment in our province," he said. "We have to be realistic. COVID is not going away. But our hope is that our isolation plan and our testing strategy will [prevent] a major spike in cases." McNeil said every campus will have a place for students to get tested and the province has the capacity to do these extra tests.

He also said the province has improved tracking for everyone entering Nova Scotia from outside Atlantic Canada.

"Not just the students, but everyone," said McNeil. "The new form will allow for better tracking, and a digital check-in will soon replace phone calls to ensure people are self-isolating."

McNeil urged post-secondary students to continue following public health protocols, such as physical distancing, regular handwashing and wearing a mask in public places.

Health Department spokesperson Marla MacInnis said in an email that people will be allowed to go directly to COVID-19 testing sites while in self-isolation, as long as they stay at least six feet away from people and do not make any stops along the way.

She said people should not take a bus or ferry to the testing site, but they can walk, bike or take a taxi. Masks are mandatory in taxis and other indoor public spaces. She also said transportation may be arranged, depending on the circumstances.

Students Nova Scotia on board with new measure

Clancy McDaniel, the executive director of Students Nova Scotia, says this new measure is an "excellent step to be taking."

While some institutions are pivoting to largely online classes, McDaniel said students are still coming back to the province for all kinds of reasons.

"Myself, I'm from rural Cape Breton. If I was forced to take classes online, I would have a difficult time because of my internet access," she said.

"So we know that students are returning, and we think that, by providing mandatory and free testing for all students, regardless of background, hopefully we will be able to catch and prevent any potential community spread of COVID-19."

McDaniel said she's especially glad the tests will be free for all students, even international students. She noted many international students are not eligible for MSI, which means they belong to private health-care plans provided by the institution itself.

But she said those can be cumbersome, and can vary in terms of what they actually cover and what paperwork needs to be done in advance.

"We were worried that [potential costs] might deter people from getting tested, and we also know that there are potential asymptomatic carriers of COVID-19 as well," she said. "And by providing testing for all, we have the ability to catch those cases as well."

While students will be allowed to leave self-isolation for testing, Clancy said providing in-residence testing would be ideal to avoid overcrowding at testing stations.

"It's definitely a big question, so we look forward to working with government to find some solutions for that." she said.

Universities and the Nova Scotia Community College are contacting their students to tell them the requirements and the process for getting tested, according to the province. Each school's reopening plan can be found on its website.

MORE TOP STORIES

Public Health warns of 2 COVID-19 exposures in Truro; active cases in N.S. reach 6

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Emergency alert issued for missing Cape Breton teen

 $\frac{https://www.cbc.ca/news/canada/nova-scotia/students-nova-scotia-university-college-testing-isolation-\\1.5693759?cmp=rss$

Canada

Manitoba government imposes tighter COVID-19 restrictions in some western areas

Source: National Post ID: 1007673657

WINNIPEG — The Manitoba government is tightening COVID-19 restrictions in Brandon, Dauphin and other communities in the western part of the province because of rising case numbers and some people who are ignoring health guidelines.

"I'm hearing of many reports of large gatherings in parks, family gatherings, as well as religious gatherings," Dr. Brent Roussin, Manitoba's chief public health officer, said Thursday.

The large gatherings, and community transmission of the novel coronavirus, are especially problematic in Brandon, Roussin said. But because people move between communities, the entire Prairie Mountain health region is being given Orange status under a new colour-based code announced by the province Wednesday. The rest of the province remains under the less-stringent Yellow.

Starting Monday, indoor and outdoor public gatherings in Prairie Mountain will be limited to 10 people, with some exceptions that include religious gatherings. The rest of the province will continue to be allowed gatherings of up to 50 people indoors and 100 outdoors.

Article content continued

Masks will also be mandatory in the region starting Monday for indoor public places and any public gatherings. In the rest of the province, masks remain a government recommendation when physical distancing is not possible, although some businesses require customers to wear them.

Brandon has seen its COVID-19 numbers spike in recent weeks. There were 100 active cases in the city of 50,000 as of Thursday, while Winnipeg, with more than ten times the population, had 74 active cases. Dozens of the cases to date have been linked to the Maple Leaf Foods pork-processing plant in Brandon, although Roussin said there is no evidence the novel coronavirus was spreading inside the facility. Many of the cases at the plant are connected to cases in the general community, Roussin has said. Health officials alerted the public Thursday to two possible public exposures within the Prairie Mountain region. One was at a soccer field in Brandon on Aug. 8. The other was at Manipogo Provincial Park, northeast of Dauphin, on the same day.

The Opposition New Democrats said the government should have acted sooner.

"We know that the situation has been getting worse there for a while," NDP Leader Wab Kinew said. "If it made sense to do it today, it made sense to put these precautions in place last week."

The restrictions in the Prairie Mountain region will be in place for at least two weeks, Roussin said, and could last longer.

Manitoba has recorded 796 COVID-19 cases to date and 12 deaths. Thirty-three new cases were reported Thursday, with more than half in the Prairie Mountain region.

This report by The Canadian Press was first published Aug. 20, 2020

https://nationalpost.com/pmn/news-pmn/canada-news-pmn/manitoba-government-imposes-tighter-covid-19-restrictions-in-some-western-areas

Canada

Coronavirus: 3M to make N95 masks in Brockville after agreement with federal, Ontario

governments Source: Global News ID: 1007673642

TORONTO — The federal and Ontario governments have secured an agreement with 3M that will see it produce N95 masks at a Brockville, Ont., facility.

A spokesman for Ontario's minister of economic development says Ottawa and the province will each contribute \$23.3 million to help increase production capacity.

Under the agreement announced today the facility is expected to produce up to 100 million N95 masks a year.

Prime Minister Justin Trudeau and Premier Doug Ford are expected to announce the deal tomorrow in Brockville, Ont.

Ford has repeatedly said the province needs to ramp up its own personal protective gear production capacity in light of the pandemic.

Story continues below advertisement

He has also been publicly critical of U.S. President Donald Trump's attempts to limit the export of N95 masks from American plants.

https://globalnews.ca/news/7289006/coronavirus-3m-n95-masks-brockville/

Canada

PPE supply in 'best shape' since start of pandemic, says Sask. Health Authority CEO

Source: CBC | Saskatchewan News

ID: 1007673602

The CEO of the Saskatchewan Health Authority CEO says the supply of personal protective equipment within the province's health system is solid, as international supply chains have opened up and orders are now coming in on a regular basis.

"In the time frame of the pandemic to date, we are in the very best shape we have been for PPE because we continue to order to support a surge capacity," Scott Livingstone said at a public board meeting on Wednesday. "So there's lots on hand."

In March, with some health-care professionals saying supplies were running low, the health authority said it would accept donations of things like unopened and sealed boxes of non-latex gloves, disposable gowns and masks.

Livingstone also sent a memo in late March alerting staff that PPE had been stolen from health-care facilities.

"We have confirmed there are public, staff, physicians and/or volunteers removing these supplies from SHA facilities for personal use/gain," he wrote.

At the time, the SHA placed a \$4.1-million order for masks and other equipment. It also asked for 3D printing of medical equipment "and any other viable measure."

Livingstone said at Wednesday's meeting that the rush to secure PPE seems to have subsided since March.

The province is now preparing for a potential second wave of COVID-19, and has a data system in place to monitor the supply of personal protective equipment, he said.

On the topic of a potential second wave, Livingstone also said the province's two field hospitals in Regina and Saskatoon will remain ready in case they are needed.

Testing prepared for back-to-school

Livingstone said the SHA will continue to pursue its "offensive strategy" in testing, contact tracing, treatment and assessment centres.

"We are actively pursuing expanded equipment and expanded staffing. One of the things that we are doing is ensuring that our capacity meets demand."

Livingstone said while there have been cases of delays in either doing testing or issuing test results, the system was never "over-capacity."

At the request of the Ministry of Health, the health authority is aiming to increase its daily testing capacity to 4,000 by Sept. 1.

The SHA said in July it is hiring 90 staff — 45 full time and 45 part time — to address delays of up to five days for referrals and testing through its 811 HealthLine.

Livingstone said the extra staff means the SHA is prepared to meet the increased demand for testing with teachers and children heading back to school.

"I'm not imagining any significant glitches, but like anything the COVID pandemic has taught us ... things change on a weekly basis. So our plans will have to be adaptive and we'll respond as we need to." He said testing is currently available widely, as it has been since July 14, and he encouraged anyone seeking a test to call 811.

https://www.cbc.ca/news/canada/saskatchewan/sask-health-authority-ppe-covid19-1.5690886?cmp=rss

Canada

Six more domestic and international flights added to B.C. exposure list

Source: Vancouver Sun

ID: 1007673593

Six additional flights — two domestic and four international — have been added to B.C.'s COVID-19 exposure list.

The addition of those flights, announced Wednesday evening, means an individual who later tested positive for COVID-19 was on-board. In some cases, row information is also provided.

All of the flights either departed from or arrived in Vancouver.

The newly added flights include:

- Aug. 8: Philippine Airlines Flight 116, Manila to Vancouver, Rows 56-62.
- Aug. 9: Air China Flight 992. Vancouver to Hohhot. Rows 55-61.
- Aug. 10: Air Canada Flight 295, Winnipeg to Vancouver, Rows 12-15.
- Aug. 10: Air Canada Flight 296, Vancouver to Winnipeg, Rows 26-32.
- Aug. 14: Air India Flight 1143, Delhi to Vancouver, No row information.
- Aug. 16: All Nippon Airways Flight 115, Vancouver to Tokyo, Rows 35-41.

 $\underline{\text{https://vancouversun.com/news/local-news/six-more-domestic-and-international-flights-added-to-b-c-exposure-list}$

Canada

GTA company creates screening stations that can detect COVID-19 symptoms

Source: durhamradionews.com

ID: 1007673581

Much like we go through metal detectors at the airport, we could soon be going through COVID-19 screening devices before we head into a store, pharmacy, school, or restaurant.

Some companies in the GTA are creating such devices that are already in use in Canada.

Juiceworks' COVID-19 Safe Entry Solutions are powered by Predictmedix COVID-19 mass screening AI technology.

The stations use multi sectional cameras to screen people for symptoms of COVID-19 such as cough, fever exhaustion, congestion, sweat gland activation, eye, redness and headache.

Predictmedix's Dr.Rahul Kushwah says it's fast and easy.

"You approach the module, remove any hats or glasses, look at the multi sectional camera, and within a fraction of a second a red or green light will display the results" said Dr. Kushwah.

The data gathered is analyzed instantly by medial artificial intelligence and a red light indicates if the person is at a higher likelihood of having COVID-19 or influenza.

At that point the establishment will have protocol in place that could include a more rigorous secondary screening, or denial of entry to that person.

The stations are already in use at the Flow Water facility in Ontario, A Juiceworks production facility, and a 24-hour pharmacy in Montreal.

"What we've been working on is being able to deploy these in any industry," said Juiceworks Founder Jonathan Auger. "Whether it's an institutional setting like a school, long-term care facility or a hospital."

Augers says they would also work in commercial facilities such as shopping malls.

The stations have an upfront cost for the hardware, assembly and installation and ongoing costs vary based on how much traffic they encounter.

The stations can also be adjusted to detect impairment by drugs or alcohol. https://www.durhamradionews.com/archives/128698

Canada

Coronavirus: New TDSB elementary school plan mandates smaller classes, all students to wear masks

Source: Global News ID: 1007674498

The Toronto District School Board (TDSB) has a new plan for bringing elementary students back to classrooms after the Ontario government rejected a previous proposal.

In an update provided by a TDSB spokesperson Thursday evening, trustees approved a variety of motions and initiatives earlier in the day.

For neighbourhoods where there is a higher risk of contracting COVID-19, schools in those areas will see JK and SK classes capped at 15 students and students between Grades 1 and 8 will be capped at 20 students.

For all other schools, JK and SK classes will be capped at 26 students, students between Grades 1 and 3 will be capped at 20 and students between Grades 4 and 8 will be capped at 27.

For students who participate virtually, there will be caps of 29 students in JK and SK classes, 20 students between Grades 1 and 3 and 35 students between Grades 4 and 8.

Trustees approved spending more than \$30 million to hire 366 more teachers and redeploy 400 teachers to lower class sizes and to "help improve student and staff safety in our schools."

When it comes to physical space needs, if every TDSB elementary student returned in person 34 schools would not have enough space under current coronavirus-related guidelines. If 80 per cent of students returned in person, four schools would be short of space.

The City of Toronto has offered the TDSB and the Toronto Catholic District School Board access to several facilities if need be.

Meanwhile, all students and staff returning to school will be required to wear face masks or coverings. The spokesperson said the decision was made in accordance with Toronto Public Health guidelines, which require anyone over two years old to wear a face mask or covering in indoor public areas if they don't have a medical exemption.

Extra outdoor breaks will be given to students to allow a break for students.

Parents of TDSB students will be asked during the week of Aug. 24 to confirm if they're sending their children to attend school or if their children will stay home to learn online in an effort to help the TDSB plan.

The school year is set to begin on Sept. 15 and different grades will see a staggered start over the course of a few days.

https://globalnews.ca/news/7289764/coronavirus-tdsb-elementary-return-to-school-plan/

Canada

All 13 workers sent home from Red Deer meat plant test negative for COVID-19

Source: globalnews.ca ID: 1007674246

Thirteen employees who were sent home from the Olymel facility in Red Deer after a co-worker tested positive for COVID-19 last week received their test results Thursday.

Spokesperson Richard Vigneault told Global News all 13 workers tested negative.

One employee was at work on Monday, Aug. 10 when she reported having symptoms. She was immediately sent home, was tested for COVID-19 on Tuesday and got a positive test result on Thursday.

"Following the discovery of this first case, the company set in motion its detection protocol and asked 13 employees who may have been in contact with their colleague who tested positive to stay at home and take the steps to pass a virus detection test," Olymel added in a statement to Global News.

Vigneault said the 13 workers would start returning to their regular shifts Friday morning.

"The only employee who tested positive remains in isolation and Olymel wishes her a quick recovery," the company statement reads.

The one positive case confirmed on Aug. 14 was the company's first COVID-19 case at the pork plant in Red Deer, which employees more than 1,600 people.

In early March, the Olymel plant in Red Deer implemented health and safety measures to limit the spread of the novel coronavirus including temperature checks, regular disinfection of common areas, adjusting schedules to avoid staff crossing, social distancing equipment, masks, face shields and plexiglass dividers.

Olymel said Alberta public health authorities and Occupational Health and Safety visited the Red Deer site after the Aug. 14 case was confirmed. Officials toured the plant on Aug. 18 "and were satisfied with the measures put in place," the company said.

https://globalnews.ca/news/7289667/red-deer-olymel-plant-workers-covid19/

Canada

Ontario government extends COVID-19 emergency orders

Source: CTVNews.ca - Canada - Public RSS

ID: 1007674168

TORONTO -- The Ontario government has extended its emergency orders again.

In a news release issued Thursday morning, Solicitor General Sylvia Jones said Ontario still needs the tools to address the COVID-19 pandemic, even as new cases continue to go down.

"We've seen great progress in our fight against COVID-19 in recent weeks, but now is not the time to let our guard down," Jones said. "We must continue safely and gradually down the path to recovery while tackling the ongoing effects of this pandemic. We're conducting an ongoing review and assessment of all orders to determine if they are still necessary and will relax restrictions or lift orders when it is safe to do so."

The province says it will let some orders lapse, including one that allowed school boards to redeploy workers to health care facilities to respond to the pandemic.

It says there are ongoing reviews to determine which remaining emergency orders are necessary. The emergency orders can be extended for up to 30 days at a time.

https://toronto.ctvnews.ca/ontario-government-extends-covid-19-emergency-orders-1.5071877

Canada

Ontario reports dip in COVID-19 cases but data glitch underestimated numbers, officials say Source: CTVNews.ca - Canada - Public RSS

ID: 1007673869

TORONTO -- Ontario is reporting fewer than 100 new cases of COVID-19, but health officials say that total number of infections is missing cases from 11 public health units due to a glitch.

Ontario's Health Minister Christine Elliott stated on Thursday that the province is confirming 76 cases of the novel coronavirus, but says information from a number of health units is missing due to an issue with their Integrated Public Health Information System.

Elliott stated on Thursday that the incident is a reminder that all public health units need to replace the "outdated" Integrated Public Health Information System with the province's "custom-built COVID-19 system."

"We're making great progress. In fact, all 11 impacted units are transitioning to the new system today, at which point 31 of 34 PHUs will be using it," Elliott said.

More than 100 new cases have been reported for the past three days now. On Tuesday, 125 infections were confirmed and 102 infections were confirmed on Wednesday.

The province also reported on Thursday that one more person has died due to COVID-19, bringing the total number of deaths to 2,792.

The new infections bring the province's total number of lab-confirmed infections to 41,048, including 37.291 recoveries and the deaths.

Where are the new COVID-19 cases?

Elliott said the 11 public health units that were unable to submit their info on case counts on Thursday had altogether reported a total of eight cases the day before.

"While not a direct proxy for today, it's an indication of how many cases may be under-reported," Elliott said in a Tweet.

The units not included in the Thursday's case count include Algoma, Brant County, Chatham-Kent, City of Hamilton, Niagara Region, Peterborough, Simcoe Muskoka District, Southwestern, Sudbury & Districts, Timiskaming and Windsor-Essex County.

On Thursday, Peel Region reported 19 new cases, Ottawa reported 11 new cases, Toronto reported 21 new cases and Middlesex-London reported seven new cases.

All regions have now entered Stage 3 of the province's reopening plan, which included the reopening of gyms, indoor dining at bars and restaurants and many facial services.

Of the new patients, the majority were between the ages of 20 and 39. Eleven new cases were reported in people under the age of 20, while 11 were recorded in those over the age of 60.

There are currently 35 people in the hospital being treated for the disease. Fifteen of those patients are in the intensive care unit and eight are breathing with the assistance of a ventilator.

Testing for COVID-19 in Ontario

More than 2.6 million COVID-19 tests have been conducted in Ontario since the virus reached the province in late January.

In the last 24 hours, a little more than 25,000 tests were conducted.

https://toronto.ctvnews.ca/ontario-reports-dip-in-covid-19-cases-but-data-glitch-underestimated-numbers-officials-say-1.5072032

Canada

Alberta releases guidelines for how schools will respond to COVID-19 outbreaks

Source: Edmonton Journal

ID: 1007674559

Outbreak protocols will kick into gear in an Alberta school if there are two or more confirmed cases linked to each other or confirmed within a 14-day period, according to a guide released by the government Thursday afternoon.

One case will trigger "alert status," and the school will need to work with Alberta Health Services (AHS) on contact tracing and send a message to parents and guardians to let them know. If two cases are confirmed within 14 days or are "epidemiologically linked," parents will get a letter, and a decision about whether or not to go online or close the school will be made by the government, along with public health officials.

An outbreak will be publicly reported If there are five or more confirmed cases.

AHS will inform school administration when an outbreak is declared over.

Chief medical officer of health Dr. Deena Hinshaw announced the guidelines had been released online at her Thursday COVID-19 update.

The document outlines the chain of command for school administrators, school authorities, AHS and Alberta Health in addressing potential outbreaks, but says schools are responsible for their own COVID-19 plans before schools reopen.

If a child shows symptoms of COVID-19, his or her classmates, siblings and family are not required to self-isolate unless she or he tests positive. The situation would be handled differently depending on when symptoms started and whether the child attended school while symptomatic.

If a child develops symptoms at home, he or she should not come to school. If they develop symptoms at school, they should be isolated and picked up immediately, and every item they touched disinfected or isolated for 72 hours.

Likewise, if a teacher or staff member develops a case of COVID-19, AHS will work to identify close contacts and make sure they follow quarantine.

AHS receives positive reports directly from labs, and will notify the school if there is a confirmed case. School administrators or parents do not need to contact AHS to confirm, but parents and staff with general inquiries can call Health Link at 811 or can visit the Alberta Health website.

However, if there is an absence rate of 10 per cent or more in a school, regardless of COVID-19 test results, the guidance document recommends schools report it so that AHS may be alerted "to potential outbreaks of other diseases."

In the case of a student with a known pre-existing condition like allergies, he or she should be tested for COVID-19 if they develop symptoms to rule COVID-19 out before returning to the school.

"Schools should have flexibility for student and staff personal circumstances, such as flexible attendance and sick leave for students and staff who are symptomatic or who may have been identified as close contacts of a confirmed case of COVID-19," the guide says.

On top of tracking all visitors in a log, schools must also keep records of a student's known pre-existing conditions.

https://edmontonjournal.com/news/local-news/alberta-releases-guidelines-for-how-schools-will-respond-to-covid-19-outbreaks

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

United States

Air Travel Toolkit for Airline Partners

Source: CDC

CDC created this communication toolkit for our airline partners to help them reach their travelers and employees with COVID-19 prevention messaging.

This toolkit provides messages, graphics and products to:

- Support timely messaging to travelers and employees.
- Share CDC resources with airline partners.
- Help airline partners develop additional COVID-19 materials.

Airline partners can also access other CDC communication resources for specific audiences in our <u>Communication Resources page</u>, which includes <u>resources specific to travelers</u>. Sample Blogs

These blogs were written for airlines to communicate with their passengers and crew.

- For passengers: Slow the Spread of COVID-19 when You Travel word icon[DOC 76 KB]
- For airline crew: COVID-19 Tips for Airline Crew word icon[DOC 103 KB]

https://www.cdc.gov/coronavirus/2019-ncov/travelers/airline-toolkit.html

United States

Operating schools during COVID-19: CDC's Considerations

Source: CDC

Operating Schools During COVID-19 Summary of Changes to the Considerations

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

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

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

United States

FDA approves U. of I.'s 'potentially game-changing' COVID-19 saliva test

Source: Chicago Tribune Unique ID: 1007670916

A saliva-based COVID-19 test developed by the University of Illinois has received emergency authorization from the U.S. Food and Drug Administration, creating the potential for widespread use of a test experts say is faster, cheaper and simpler.

"This has potentially game-changing implications for our statewide testing complex as well as for testing on a national level, particularly for our high-risk communities and settings," Gov. J.B. Pritzker said at the news conference Wednesday where he characterized the announcement as "some of the best news that we've had since this pandemic began."

Illinois was one of many states that struggled in the spring to ramp up its testing capacity, amid a nationwide shortage of the materials needed to conduct testing. The Illinois Department of Public Health on Wednesday said the state had for the first time surpassed 50,000 tests conducted during a 24-hour period, raising the total number of tests conducted in the state to nearly 3.5 million.

Along with the increased testing came the highest daily statewide case tally since May 24: 2,295 newly-confirmed cases of coronavirus.

The state a day earlier ordered tighter restrictions on bars and restaurants in the Metro East region outside St. Louis, and Pritzker on Wednesday said "troubling trends" are being seen in the region that includes Kankakee and Will counties, as well as the southern Illinois region. In fact, most of the state's 11 regions as defined in Pritzker's reopening plan have seen increasing test positivity rates.

Increased testing is seen as one of the keys to corralling the virus, and the saliva test developed by U. of I. "produces rapid results at costs that allow and permit large-scale surveillance testing," University of Illinois System President Timothy Killeen said Wednesday.

"That combination is a key to curbing the virus, allowing isolation early enough to limit the spread of infection, and it also identifies and isolates people with asymptomatic cases who would otherwise spread the virus unknowingly," Killeen said.

U. of I. researchers developed the saliva test, which is less invasive than the nasal swabs that have been the most prevalent testing method so far, for use on its campuses by students and faculty who are returning for in-person instruction. The FDA's approval means the university will be able to "turbocharge these efforts to expand the reach" of the saliva-based testing, Killeen said.

State officials are already working on making the test available on more public university campuses, and are exploring the testing method for K-12 schools and long-term care facilities, Pritzker said.

In addition to working with the state to make the testing more widely available in Illinois, the university has created a unit "that is working to take the technology nationwide," Killeen said.

Saliva-based testing often limits the exposure of health care workers performing the test and can be easier physically on patients, Dr. Elizabeth McNally, director of the Northwestern University Feinberg School of Medicine Center for Genetic Medicine, said earlier this year.

"Nasal swabbing is an uncomfortable process for patients and can be associated with risk for the health care worker who is doing the swabbing," McNally told the Tribune in April. "Another option like saliva makes it potentially easier and safer."

Health experts also praise saliva tests for often requiring fewer testing materials — including chemical reagents, swabs and personal protective equipment — which have been in short supply amid the pandemic.

Dr. Martin Burke, an associate dean for research at the (U. of I.) Carle Illinois College of Medicine, said he was given the task in March of creating a team to "try to stand up and strategically deploy scalable COVID-19 testing."

"The standard process is too slow. It's too expensive, and it has too many supply chain bottlenecks in order to be able to do fast and frequent testing on scale," Burke said.

Scientifically, there's increasing evidence that "this is the medium that matters," Burke said of salivabased testing.

"We spread COVID-19 through saliva droplets, primarily, so you're testing the exact medium in which that infectiousness is likely to occur," Burke said. "It's also much easier to collect, it requires less PPE, doesn't necessarily require direct engagement with the health care worker and as we've shown, the process can be done very fast."

In many cases, the results are available within three to six hours, while other tests continue to have lags of days, or more than a week in some cases, before results are available.

The FDA has previously granted approval to other saliva-based tests. The green light for the U. of I. test came after a "bridging study" that found it performs at least as well as a similar test developed by Yale University. The FDA granted emergency-use authorization for Yale's test on Saturday, and the U. of I. test was placed under the same umbrella.

Yale researchers partnered with the National Basketball Association, whose players and staff have routinely taken the saliva test before and during isolation in the NBA bubble in Florida, as part of a COVID-19 testing study.

"Providing this type of flexibility for processing saliva samples to test for COVID-19 infection is ground-breaking in terms of efficiency and avoiding shortages of crucial test components like reagents," said FDA Commissioner Dr. Stephen Hahn, referencing the Yale saliva test.

The Illinois-developed test is "different enough that it has unique features that make it very well-suited for scalability," Burke said, adding that the test is cost is about \$10 apiece, "which is a substantial reduction in cost relative to currently what's being utilized."

The FDA granted emergency-use authorization to Rutgers University researchers in April for their saliva-

based test, which was the first one to receive federal approval.

Illinois daily case numbers have approached late May levels several times in recent weeks after remaining fairly consistently below 1,000 in parts of June and early July.

In late May, the state was reporting roughly half the number of tests being conducted during a 24-hour period — 25,674 tests — compared with the 50,299 tests reported Wednesday.

As of Tuesday, the seven-day statewide average positivity rate was 4.4%, up from 3.9% two weeks earlier and 2.9% on July 18.

The state Department of Public Health on Wednesday also announced 25 additional deaths of people with COVID-19, raising the statewide death toll to 7,806. There have been 211,889 known cases of COVID-19 in Illinois over the course of the pandemic.

"We need to remember that they're not just numbers. These are people," Ezike said. "These are loved ones who were so sick that they were hospitalized in the intensive care unit and unfortunately, succumbed."

https://www.chicagotribune.com/coronavirus/ct-coronavirus-illinois-pritzker-20200819-ftygysggurfuvpcz54kvzbgp3a-story.html

United States

Trump Administration Uses Defense Production Act to Aid Our Most Vulnerable

Source: HHS Latest News Releases

ID: 1007673641

Under the leadership of President Trump, the Department of Health and Human Services leveraged the Defense Production Act (DPA) to apply priority rated orders for contracts with Becton Dickinson (BD) and Quidel Corporation . These acquisitions will fulfill a large-volume purchase of diagnostic systems and assays for COVID-19 testing and will expedite shipments of these systems and assays to every nursing home certified by the Centers for Medicare & Medicaid services (CMS) with a Clinical Laboratory Improvement Amendment (CLIA) Certificate of Waiver – approximately 14,000 nursing homes – in the United States. The tests can diagnose SARS-CoV-2 infection in approximately 15 minutes. In response, Assistant Secretary for Health and COVID-19 Testing Coordinator Admiral Brett P. Giroir, M.D., issued the following statement:

"The federal efforts to supply nursing homes with rapid point-of-care antigen instruments and tests is our highest priority to save lives and the US Government will exert its full authority to complete this mission. We are invoking the priority rating of the Defense Production Act to expedite shipments of instruments and antigen tests to give nursing homes the ability to perform these rapid tests. HHS will continue to explore every possible avenue to get life-saving supplies to the frontlines of this war on the virus. I would also like to take this opportunity to publicly thank both BD and Quidel for their excellent work in responding to an urgent need for an expansion of COVID-19 testing."

https://www.hhs.gov/about/news/2020/08/20/trump-administration-uses-defense-production-act-to-aid-our-most-vulnerable.html

WHO

WHO, UNICEF urge safe school reopening in Africa

Source: WHO AFRO Unique ID: 1007671371

Brazzaville/Nairobi – The unprecedented and prolonged school closures aimed at keeping students safe from COVID-19 are harming them in other ways, World Health Organization (WHO) and UNICEF said today, urging governments in Africa to promote the safe reopening of schools while taking measures to limit the spread of the virus.

A WHO survey of 39 countries in sub-Saharan Africa found that schools are fully open in only six countries. They are closed in 14 countries and partially open (exam classes) in 19 others. Around a dozen countries are planning to resume classroom learning in September, which is the start of the academic year in some countries.

However, the impact of extended education disruption is significant. It includes among others: poor nutrition, stress, increased exposure to violence and exploitation, childhood pregnancies, and overall challenges in mental development of children due to reduced interaction related to school closures.

In Eastern and Southern Africa, UNICEF finds that violence rates against children are up, while nutrition rates are down with more than 10 million children missing school meals. For girls, especially those who are displaced or living in low-income households, the risks are even higher. For example, following school closures triggered by the 2014 West Africa Ebola outbreak, pregnancy rates among teenagers in Sierra Leone doubled and many girls were unable to continue their education when schools reopened. The long-term social and economic impact of extended school shutdown is also concerning. According to a World Bank modelling, school closures in sub-Saharan Africa could result in lifetime earning losses of US\$ 4500 per child. This may also be worsened by reduced earning of the parents who are forced to stay at home to take care of the children especially in households that cannot afford child care services. "Schools have paved the way to success for many Africans. They also provide a safe haven for many children in challenging circumstances to develop and thrive," said Dr Matshidiso Moeti, WHO Regional Director for Africa. "We must not be blind-sided by our efforts to contain COVID-19 and end up with a lost generation. Just as countries are opening businesses safely, we can reopen schools. This decision must be guided by a thorough risk analysis to ensure the safety of children, teachers and parents and with key measures like physical distancing put in place."

WHO, UNICEF and the International Federation of Red Cross have issued guidance on COVID-19 prevention and control in schools. The guidance includes recommendations for physical distancing measures such as staggering the beginning and end of the school day, cancelling school events that create crowding, spacing desks when possible, providing handwashing facilities, wearing masks, discouraging unnecessary touching and ensuring that sick students and teachers stay at home. "The long-term impact of extending the school shutdown risks ever greater harm to children, their future and their communities," said UNICEF Regional Director for Eastern & Southern Africa, Mohamed M. Malick Fall. "When we balance the harm being done to children locked out of schools, and if we follow the evidence, it leads children back into the classroom."

WHO and UNICEF also recommend a range of hygiene and disinfection measures for schools to reopen and operate safely, including regular handwashing, daily disinfection and cleaning of surfaces, basic water, sanitation and waste management facilities, and environmental cleaning and decontamination. However, millions of children attend schools that lack water, sanitation and hygiene services. In sub-Saharan Africa, only a quarter of schools have basic hygiene services, 44% of them have basic drinking water and 47% cent have basic sanitation services, according to a WHO and UNICEF report assessing progress on drinking water, sanitation and hygiene in schools between 2000 and 2019. As such, this is the moment to take an opportunity from a crisis, and for investment and innovative thinking. As we seek to get children back into school, WHO and UNICEF stress that there are quick solutions to handwashing in schools, such as a tap, bucket and soap.

https://www.afro.who.int/news/who-unicef-urge-safe-school-reopening-africa

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

WHO

COVID vaccine candidates: WHO lists 30 in clinical evaluation, six in phase 3

Source: Science Speaks: Global ID News

ID: 1007674469

Today the World Health Organization updated its DRAFT landscape of COVID-19 candidate vaccines. In a nine-page table format, WHO lists 30 candidate vaccines in clinical evaluation, and 139 candidate vaccines in preclinical evaluation. For all 169 candidate vaccines, information is provided for the name of the developer and the type of candidate vaccine.

A brief overview on the six candidate vaccines in Phase 3 follows:

University of Oxford (UK)/AstraZeneca, non-replicating vector, ChAdOx 1-5. One study ongoing in Brazil (Sao Paolo). One dose IM. Control is the licensed vaccine for meningococcal ACYW135. Second study planned for U.S. at 62 specified locations. Will use two doses IM separated by 28 days. Sinovac (China), inactivated virus vaccine, twp doses IM at day 0 and 14. One study ongoing in health care workers in Brazil at 12 specified locations. Estimated 8,870 participants. Separate analyses by age

below 60 or 60 and above. (Butantan Institute sponsor and collaborator). Placebo control. two doses IM 14 days apart. Second study is planned for Indonesia (Hasan Sadikan Hospital/Medical School,

Padjadjaran University, Bandung). Placebo controlled. In healthy adults 18-59. Two IM doses 14 days apart.

Wuhan Institute of Biological Products/Sinopharm (China). Inactivated virus vaccine. Two doses IM either days 0 and 14 or Days 0 and 21. Placebo control. Location to be in United Arab Emirates (UAE). Shaikh Khalifa Medical City, Abu Dhabi.

Beijing Institute of Biological Products/Sinopharm (China). Inactivated virus vaccine. Two doses IM either Days 0 and 14 or Days 0 and 21. Placebo control. Location Abu Dhabi, UAE. Planned number of participants 5,000.

Moderna/NIAID (U.S.). LNP-encapsulated mRNA. 2 doses IM Days 2 and 29. Began July 27 in USA. Placebo control. 30,000 participants with half receiving vaccine, half placebo. Of note, "Primary Outcome Measures" include "Number of participants with a first Occurrence of COVID-19 starting 14 days after Second Dose of mRNA-1273 [Time Frame: Day 29 (second dose) up to Day 759 (2 years after second dose)]". (The other three primary outcome measures pertain to adverse events or reactions). BioNTech/Fosun Pharma/Pfizer (Germany/China/USA). 3 LNP-mRNAs. Two doses IM 28 days apart. Began July 27 in U.S. Placebo control. Vaccine chosen for Phase 3 is "BNT-162b2". Estimated 29, 481 participants. 113 study sites, mostly in the U.S. Additional sites in Caba, Argentina and Salvador and Sao Paulo. Brazil.

In addition:

Today's WHO update lists the Russian vaccine from the Gamaleya Research Institute, using a non-replicating adenovirus, only under the Phase 1 column. On August 11, Russia approved this vaccine. The Chinese CanSino Biological Inc./Beijing Institute of Biotechnology using a non-replicating adenovirus 5 vector is listed only under Phase 1 and Phase 2, but not Phase 3. During the last week of June China approved this vaccine, but only for their military.

The pace of information about these and multiple other candidate vaccines will accelerate in the coming weeks and months of 2020. This writer will attempt to keep up with "Vaccine Watch" blogs here at the IDSA/HIVMA Science Speaks blog.

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South Korea

Mass infections at South Korea church grow to over 670 cases

Source: Kyodo News Unique ID: 1007671083

A church in South Korea's capital Seoul has become a new epicenter of coronavirus infections with a total of 676 cases traced to it as of Thursday afternoon, raising concern about the virus' spread in the greater capital region and beyond.

South Korea on the same day reported 288 new cases of the virus, 276 of them domestically acquired. Out of the 276, 135 were traced back to Seoul and 85 to the surrounding Gyeonggi Province, according to the Korea Centers for Disease Control and Prevention.

South Korea to tighten restrictions as coronavirus crisis worsens

More than 3,200 people from the church have so far been tested for the virus, and the public health agency is closely monitoring those who visited a rally in Seoul last Saturday as some church members also took part in it.

The country has seen a triple-digit rise in virus cases every day for the past week. The government has already tightened social distancing rules in the metropolitan area, while ordering karaoke parlors and clubs to shut. Church services were banned on Wednesday in the metropolitan region except for those conducted online.

The outbreak at the Sarang Jeil Church, which is headed by a conservative political activist, comes months after mass infections emerged in the southeastern city of Daegu, many of them related to worshippers at the Shincheonji Church of Jesus, a minor religious group.

https://english.kyodonews.net/news/2020/08/b132352040dd-mass-infections-at-s-korea-church-grow-to-over-670-cases.html

China

China defends Wuhan pool party after viral video prompts outrage

Source: CTV News Unique ID: 1007670945

BEIJING, CHINA -- A massive pool party attended by thousands of people at the epicentre of the coronavirus pandemic showed how well China had dealt with disease, authorities insisted Thursday, despite images from the event prompting outrage around the world.

Pictures and video of the weekend electronic music party in Wuhan -- where COVID-19 first emerged in December 2019 -- have gone viral, attracting a huge negative response in places where lockdowns are still in effect.

The headline "Life's a beach in Wuhan as world pays virus price" -- splashed across the front page of Australia's Daily Telegraph -- was typical of some mainstream news headlines, while comments on social media sites were more colourfully frank.

China's nationalist Global Times newspaper hit back against what it called "sour grapes" abroad.

AFP's video of the event has been viewed more than 16 million times since it was posted.

One Twitter user called the event "incredibly irresponsible", while another suggested there was "no way" it would not lead to more cases of coronavirus.

UNDER FIRE

But China said Thursday the pool party showed the city's "strategic victory" against the outbreak, and said the images were proof the country's approach to controlling the virus had been successful.

"I saw relevant reports by AFP, and it is said that people in Europe and America were very shocked," foreign ministry spokesman Zhao Lijian told a press briefing.

"This shows that Wuhan has won a strategic victory in its fight against the epidemic," he said.

China has come under fire from around the world since the outbreak of the virus, which has infected over 22 million people and killed nearly 800,000.

Beijing has denied U.S. accusations that China covered up the initial outbreak and handled it badly. Zhao called on the media to "report the real situation in China" so people abroad could understand the country's fight against the epidemic.

Wuhan has not reported any new virus cases in months after undergoing a draconian lockdown and strict restrictions earlier this year.

https://www.ctvnews.ca/world/china-defends-wuhan-pool-party-after-viral-video-prompts-outrage-1.5071825

Russia

Russian 'Sputnik V' COVID-19 vaccine to be tested on 40,000 people

Source: The Province Unique ID: 1007671375

MOSCOW — Mass testing of Russia's first potential COVID-19 vaccine to get domestic regulatory approval will involve more than 40,000 people and will be overseen by a foreign research body when it starts next week, backers of the project said on Thursday.

These were the first details on the shape and size of the upcoming late-stage trial of the vaccine given by its developers, who are aiming to allay concerns among some scientists about the lack of data provided by Russia so far.

The vaccine, called "Sputnik V" in homage to the world's first satellite launched by the Soviet Union, has been hailed as safe and effective by Russian authorities and scientists following two months of small-scale human trials, the results of which have not been made public yet.

But Western experts have been more skeptical, warning against its use until all internationally approved testing and regulatory steps have been seen to be taken and proved a success.

"A range of countries is running an information war against the Russian vaccine," Kirill Dmitriev, head of the Russian Direct Investment Fund (RDIF) that is backing the vaccine, told a briefing.

Story continues below

The vaccine data will be published in an academic journal later this month, he said.

Russia has received requests for up to a billion doses of the vaccine from around the world and has capacity to produce 500 million doses per year via manufacturing partnerships, he said.

A director at Moscow's Gamaleya Institute, which developed the vaccine, said 40,000 people would be involved in the mass testing at more than 45 medical centers around Russia.

The data is being provided to the World Health Organization (WHO), Dmitriev said, and to several countries that are considering participating in the late-stage trial, including the United Arab Emirates, India, Brazil, Saudi Arabia and the Philippines.

Sputnik V has already received approval from domestic regulators, leading President Vladimir Putin and other officials to name Russia the first country to license a COVID-19 vaccine.

The registration took place, however, ahead of the start of the large-scale trial, commonly known as a Phase III trial, considered by many as a necessary precursor to registration. At least four other potential COVID-19 vaccines are currently in Phase III trials globally, according to WHO records.

TWO-SHOT INOCULATION

But Russia's early registration of the vaccine will permit it to begin administering it to people in high-risk groups, such as healthcare workers, alongside the late-stage trial, from October, Dmitriev said. He said the process would be conducted on a voluntary basis and participants would have regular medical check-ups.

The trial itself will be supervised by a foreign clinical research organization, Dmitriev said, ensuring the data collection is fully in line with international standards. He did not give details of the research organization.

The Sputnik V vaccine will involve a two-shot jab, using two different vectors of the human adenovirus. As this vector had a significant track record of use in previous vaccines, it had more historic data supporting its safety than some other potential COVID-19 vaccines, Dmitriev said.

This has been echoed by researchers outside Russia. Ian Jones, a virologist at Britain's Reading University, said of the Russian vaccine: "I think there is enough general background data on recombinant adenovirus-based vaccines to assume the vaccine itself will be safe at the usual doses."

Russian researchers have said that early trials showed the vaccine eliciting a significant immune response, but how long protection would last remains unclear.

"Each person may react differently," the head specialist in infectious diseases at the Russian Health Ministry, Vladimir Chulanov, was cited as saying in an interview by Gazeta.Ru on Thursday.

"Some may develop very strong protective immunity, while others may not. In such cases, (coronavirus) infection may be possible, but the illness should, theoretically, have light symptoms. And in general the share of such people will be very small."

https://theprovince.com/news/world/russian-sputnik-v-covid-19-vaccine-to-be-tested-on-40000-people/wcm/c4f1cad8-b8e0-4602-b723-3c99a2ead125

Russia

UN: Discussions with Russia on COVID-19 vaccine under way

Source: CP24 (@CP24)

ID: 1007671584

LONDON - The World Health Organization's Europe office said it has begun discussions with Russia to try to obtain more information about the experimental COVID-19 vaccine the country recently approved.

Last week, Russia became the first country in the world to license a coronavirus vaccine when President Vladimir Putin announced its approval. But the vaccine has not yet passed the advanced trials normally required to prove it works before being licensed, a major breach of scientific protocol. Russian officials claimed the vaccine would provide lasting immunity to COVID-19 but offered no proof.

Catherine Smallwood, a senior emergency official at WHO Europe said the agency had begun "direct discussions" with Russia and that WHO officials have been sharing "the various steps and information that's going to be required for WHO to take assessments."

WHO's Europe director Dr. Hans Kluge said the agency welcomed all advances in vaccine development but that every vaccine must submit to the same clinical trials.

Russia's vaccine has so far only been tested in a few dozen people.

Kluge noted that Russia has a long history of developing and administering vaccines, including those for yellow fever and polio.

"This concern that we have around safety and efficacy is not specifically for the Russia vaccine, it's for all of the vaccines under development," said Smallwood. She acknowledged WHO was taking an "accelerated approach" to try to speed development of coronavirus vaccines but said "it's essential we don't cut corners in safety or efficacy."

"We're not going through a rushed job of trying to jump to conclusions here," Smallwood said. "We want to take our time to really understand where the vaccine's at and to get as full information as possible on the steps that have already been taken."

Scientists say advanced trials testing an experimental vaccine in tens of thousands of people is the only way to determine whether or not it works. Two other potential COVID-19 vaccine candidates have already started such studies in the U.S. and elsewhere, and will require about 30,000 people to receive the immunization and be tracked afterward.

Russian officials said doctors might start getting vaccinated with their experimental shot this month and that mass campaigns could begin in October.

https://www.cp24.com/world/un-discussions-with-russia-on-covid-19-vaccine-under-way-1.5071852

European Union

EU Commission Continues Expanding Future Coronavirus Vaccines Portfolio with New Talks

Source: Schengen Visa Info Unique ID: 1007671295

A week after the European Commission reached its first agreement with the British pharmaceutical company AstraZeneca to purchase a potential vaccine against the Coronavirus of at least 300 million doses on behalf of the EU, it has now concluded exploratory talks with CureVac to purchase anther potential vaccine against COVID-19.

The EU Commission, which has also noted that the move follows positive steps with Sanofi-GSK on July 31 and Johnson & Johnson have confirmed the talks with CureVac on August 13, aside from the agreement reached with AstraZeneca on August 14.

According to a press release of the Commission, the planned contract with CureVac would provide the Member States with the chance to buy the vaccine for their citizens and also to donate it to lower and middle-income countries.

"It is anticipated that the Commission will have a contractual framework in place for the initial purchase of 225 million doses on behalf of all EU Member States, to be supplied once a vaccine has proven to be safe and effective against COVID-19. The Commission pursues intensive discussions with other vaccine manufacturers," the press release reads.

Whereas, the European Commission President Ursula von der Leyen said that with such a step the European Commission is fulfilling its promise to secure rapid access for EU citizens and the world to a safe vaccine against the Coronavirus.

"Each round of talks that we conclude with the pharmaceutical industry brings us closer to beating this virus. We will soon have an agreement with CureVac, the innovative European firm that received earlier EU funding to produce a vaccine in Europe. And our negotiations continue with other companies to find the technology that would protect us all," she said.

Stella Kyriakides, EU commissioner for Health and Food Safety, also applauded the conclusion of talks with CureVac to grow the chances of finding an effective vaccine for COVID-19.

"We continue to work shoulder to shoulder with the Member States and with vaccine developers to fulfil the aims of our European Vaccines Strategy – a vaccine for all," she said.

The European company CureVac is a pioneering company in the development of a new class of vaccines the basic principle of which is the use of mRNA as a data carrier for information, which helps the body to produce its own active substances to fight various diseases.

Previously on July 6, the European Investment Bank and CureVac had signed a €75 million loan agreement for the development and large-scale vaccine production, including CureVac's vaccine candidate against COVID-19.

It is unknown whether once a vaccine is confirmed, the EU and its Member States will require travellers to get vaccinated before travelling to the Schengen Area or not. However, earlier in April this year a source

inside the EU Commission confirmed to SchengenVisaInfo.com, that once the COVID-19 vaccine is confirmed and available for all, visa applicants may also be required to be vaccinated in the future. The source had also said that once the EU countries reopen to third-country citizens, they will have to present a negative COVID-19 test, which is a reality now.

https://www.schengenvisainfo.com/news/eu-commission-continues-expanding-future-coronavirus-vaccines-portfolio-with-new-talks/

China

Guideline cites incubation period of virus

Source: ECNS

Unique ID: 1007671226

It can take up to 14 days before COVID-19 carriers see symptoms, document says

The incubation period for COVID-19, the time between exposure to the virus and the onset of symptoms, is about three to seven days for most people and can be up to 14 days, during which these presymptomatic patients can be contagious, according to China's latest national guideline on diagnosis and treatment of COVID-19 published on Wednesday.

The five days after symptoms occur is when the disease becomes highly transmissible, the guideline said. Respiratory droplets and close contact with infected patients and contaminated objects are the primary methods of transmission, it added.

"Since the global pandemic is still ongoing and the situation may persist for quite some time, the risk of COVID-19 spreading in our country will still exist," the guideline said. Therefore, early diagnosis, quarantine and treatment are crucial for improving cure rates and reducing mortality, it added. The guideline called for new measures including publishing the status of suspected or confirmed patients online within two hours after their discovery, as well as the administration of anti-viral medicines at the early stages of the disease, especially for severe patients.

Wang Bin, an expert at the National Health Commission's Bureau of Disease Prevention and Control, said in a news briefing on Wednesday that China is proactively preparing for the possible reoccurrence of COVID-19 in the autumn and winter with more prevention measures, more testing and more extensive screening and monitoring.

"We hope the public can stay vigilant in regards to COVID-19, maintain social distancing and hand-washing, use serving utensils (rather than personal cutlery to serve meals) and continue other hygienic practices," she said.

For treatment, the latest guideline discouraged the use of hydroxychloroquine for treating COVID-19 patients, and anti-HIV combination drug lopinavir/ritonavir could only be used in tandem with ribavirin. Chloroquine phosphate can still be used as a trial drug but only for patients aged 18 to 65, and the treatment period should not exceed seven days. Medical personnel must also keep a close eye on the side effects of these anti-viral drugs and stop administrating them immediately if serious adverse effects occur, the quideline said.

Corticosteroid, a type of steroid that consists of the promising drug candidate dexamethasone, can be used sparingly to treat severe or critical patients. But the treatment period should be around three to five days, and no more than 10 days maximum.

Doctors should be mindful that large dosages of the steroid will suppress the immune system and may prolong the time needed for the body to expel the virus, the guideline said.

In terms of the effect of the novel coronavirus on the body, the guideline said the virus can damage the lungs, spleen, bone marrow, cardiovascular system, liver, kidney, brain and digestive tracts.

The symptoms of infected children are typically mild, with nausea, diarrhea and shortness of breath being some of the more common ones, the guideline found. However, an extremely small number of children could develop Multisystem Inflammatory Syndrome, showing symptoms similar to the rare Kawasaki disease, an inflammation in the walls of arteries throughout the body that primarily affects children younger than 5.

The condition of a child with the syndrome could deteriorate quickly. Therefore, immunoglobulin therapy, corticosteroid, aspirin and other anti-inflammatory treatments should be used as soon as possible to fight the condition, the guideline said.

http://www.ecns.cn/news/2020-08-20/detail-ifzzcmwe9699839.shtml

India

Millions likely infected by coronavirus in New Delhi, survey finds - Reuters

Source: Reuters

Unique ID: <u>1007671224</u>

The novel coronavirus, according to a serological survey of 15,000 people conducted by the local government, a figure that indicates infection numbers are much higher than those recorded has infected MUMBAI (Reuters) - Almost 30% of the population in India's capital of New Delhi likely.

The survey, which tested a sample of the population for the presence of antibodies, was done in the national capital territory in the first week of August, its health minister Satyendra Jain told a news conference on Thursday.

"We found that 29.1% of the population of Delhi had antibodies, which means that they were infected and have been cured," Jain said.

Delhi has a population of 20 million and has recorded 140,767 cases of COVID-19, out of India's 2.84 million.

The findings of the survey are in line with what other cities like Mumbai and Pune have discovered, that a significant number of their people have been infected.

India reported a record daily jump of 69,652 coronavirus infections on Thursday, data from the federal health ministry showed. Deaths rose by 977 to 53,866.

India is the worst hit country in Asia and globally third only behind the United States and Brazil in number of cases.

https://www.reuters.com/article/us-health-coronavirus-india-cases/millions-likely-infected-by-coronavirus-in-new-delhi-survey-finds-idUSKCN25G0BX

India

India study suggests millions more may have caught coronavirus

Source: CTVNews.ca - Health - Public RSS

ID: 1007672402

NEW DELHI, INDIA -- More than a quarter of New Delhi's 20 million residents may have caught the novel coronavirus without showing symptoms, a study released Thursday indicated, raising fresh doubts about India's official case numbers.

Extrapolated, the antibody study on 15,000 residents means 5.8 million people in the bustling capital could have caught the virus -- more than 37 times the official tally of 156,139 infections.

India is already officially the third worst-hit country after the U.S. and Brazil, and the health ministry reported a record daily jump of 69,652 new infections on Wednesday -- taking the total to 2.84 million. On Thursday, Delhi health minister Satyendra Jain said blood tests on 15,000 residents conducted earlier this month found 29.1 per cent of them had virus antibodies.

Scientists say, however, that antibody tests should be treated with caution because they also pick up other coronaviruses, not just the latest COVID-19.

A similar survey in June-July said 23 per cent of people tested had been exposed to the virus in the city. Surveys in other Indian cities have also suggested more infections than the official numbers suggest. In the western city of Pune, 51.5 per cent of respondents in five badly affected pockets had antibodies in their blood, a recent survey showed.

Another in late July found 57 per cent of those tested in Mumbai's slums had the infection -- far more than official data suggests.

"Such studies are useful and necessary but it is important how it is interpreted," said Rajib Dasgupta, who heads the Centre of Social Medicine and Community Health at Delhi's Jawaharlal Nehru University. "It can't be applied to the whole city," he said, noting that the Pune study was done in a very densely populated area of the city.

Another survey released this week, testing sewage water in Hyderabad, estimated that some 6.6 per cent of the city of over nine million may have been infected -- also far higher than the official data suggests. https://www.ctvnews.ca/health/coronavirus/india-study-suggests-millions-more-may-have-caught-coronavirus-1.5071930

International

Airbnb bans house parties worldwide, citing coronavirus mandates

Source: CTVNews.ca - Top Stories - Public RSS

ID: 1007672382

Airbnb is banning house parties worldwide as it tries to clean up its reputation and comply with coronavirus-related limits on gatherings.

The San Francisco-based home sharing company said it will limit occupancy in its rental homes to 16 people. It may offer exceptions for boutique hotels or other event venues.

Airbnb said it may pursue legal action against guests and hosts who violate the ban. Last week, for the first time, Airbnb took legal action against a guest who held an unauthorized party in Sacramento County, California.

Airbnb has always prohibited unauthorized parties, and the company said nearly 75% of its listings explicitly ban parties.

But after a deadly shooting at a California Airbnb rental last Halloween, the company has taken multiple steps to crack down on parties. Five people were killed in the shooting, which happened during an unauthorized party.

Last November, Airbnb started manually reviewing U.S. and Canadian reservations to weed out suspicious rentals, like a guest who booked a one-night stay close to their home. It expanded that program to Australia last week.

In July, Airbnb banned U.S. and Canadian guests under age 25 with fewer than three positive reviews from booking entire homes close to where they live. It expanded that policy to the United Kingdom, Spain and France last week.

Airbnb said it also plans to expand a hotline for neighbours to report unauthorized parties.

Airbnb -- which has more than 7 million listings -- offers hundreds of homes that can accommodate 16 people. There are at least 53 in London, 277 in Beijing, 170 in New York and 116 in Los Angeles, according to the company's website.

Twelve-year-old Airbnb has been trying to shed its couch-surfing image and appeal to more types of travellers ahead of its initial public offering, which could happen later this year. Last year it announced an effort to verify all of its properties, for example.

The company also said it wants to make sure it's complying with public health mandates. Los Angeles County has a ban on gatherings of people from different households, for example.

Airbnb said the coronavirus-related closure of bars and nightclubs has led to an increase in big house parties, sometimes at its rentals.

"We do not want that type of business, and anyone engaged in or allowing that behaviour does not belong on our platform," Airbnb said in a post on its website.

https://www.ctvnews.ca/business/airbnb-bans-house-parties-worldwide-citing-coronavirus-mandates-1.5071943

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

United States (Study)

As US schools reopen, concerns grow that kids spread coronavirus

Source: Deccan Herald Unique ID: 1007670607

US students are returning to school in person and online in the middle of a pandemic, and the stakes for educators and families are rising in the face of emerging research that shows children could be a risk for spreading the new coronavirus.

Several large studies have shown that the vast majority of children who contract Covid-19, the disease caused by the virus, have a milder illness than adults. And early reports did not find strong evidence of children as major contributors to the deadly virus that has killed more than 780,000 people globally. CORONAVIRUS SPECIAL COVERAGE ONLY ON DH

But more recent studies are starting to show how contagious infected children, even those with no symptoms, might be.

"Contrary to what we believed, based on the epidemiological data, kids are not spared from this pandemic," said Dr Alessio Fasano, director of the Mucosal Immunology and Biology Research Center at

Massachusetts General Hospital and author of a new study.

Schools across the country are trying out a wide range of strategies to reopen, from all online classes to all in person. They are asking whether reopening schools with stringent mitigation measures is worth the risk to students, families and educators, given that keeping schools closed will likely harm academic progress, social and emotional development, mental health and food security.

Also read: Scientists decode immune system changes in children with rare Covid-19 related syndrome Dr Fasano and colleagues at Boston's Massachusetts General and MassGeneral Hospital for Children found that infected children have a significantly higher level of virus in their airways than adults hospitalised in intensive care units for Covid-19 treatment. The high viral levels were found in infants through young adults, although most of the participants were age 11 to 17.

The study, published on Thursday in the Journal of Pediatrics, involved 192 participants ages 0-22 who were seen at urgent care clinics for suspected Covid-19. Forty-nine of them - a quarter of the total - tested positive for the virus. Another 18 were included in the study after being diagnosed with the multisystem inflammatory syndrome, a serious Covid-related illness than can develop several weeks after infection. For latest updates and live news on coronavirus, click here

The research suggests that children can carry a high viral load, meaning they can be very contagious, regardless of their susceptibility to developing a Covid-19 illness.

"There has been some conflicting data out there about the degree to which children can be contagious," said Dr Marybeth Sexton, assistant professor of infectious diseases at Emory University School of Medicine in Atlanta, who was not involved in the study. "This is further evidence that we may see children as sources of infection."

She added more extensive research is needed.

"Nobody is spared"

A separate study published last month in JAMA Pediatrics found that older children hospitalised with Covid-19 had similar levels of the virus in their upper respiratory tract as adults, but children younger than five carried significantly greater amounts.

However, other medical groups show differing information over children's potential to spread the virus. The American Academy of Pediatrics on Wednesday updated its guidelines to reflect "that children under 10 years may be less likely to become infected and spread infection, while those 10 years and older may spread it as efficiently as adults."

A recent South Korean study found that people were most likely to contract the new coronavirus from members of their own households, with children aged nine and under least likely to be the first identified case.

Also read: Rare syndrome linked to Covid-19 found in nearly 600 US children: CDC

Since most children infected with the coronavirus have very mild symptoms, they were largely overlooked as a demographic in the earlier stages of the pandemic, Dr Fasano said.

The US Centers for Disease Control and Prevention reported a pediatric Covid-19 hospitalisation rate of eight per 100,000 for March 1 to July 25, compared with a rate of 164.5 per 100,000 for adults. Experts say the incidence of a related issue, which can develop after Covid-19 infection, multisystem inflammatory syndrome, is concerning. "The number of these patients is growing," Dr Fasano added. Concerns have also been raised about cases of type 1 diabetes among children diagnosed with Covid-19. A small UK study found that the rate of diabetes almost doubled during the peak of Britain's Covid-19 epidemic, suggesting a possible link between the two diseases that need more investigation.

"The more we understand, the more it boils down to nobody is spared in this pandemic," Dr Fasano said. https://www.deccanherald.com/international/world-news-politics/as-us-schools-reopen-concerns-grow-that-kids-spread-coronavirus-875486.html

New Study: https://www.jpeds.com/article/S0022-3476(20)31023-4/fulltext

Previous Study:

https://jamanetwork.com/journals/jamapediatrics/fullarticle/2768952?utm_source=undefined&utm_campaign=content-

<u>shareicons&utm_content=article_engagement&utm_medium=social&utm_term=073020#.XyNyImjnx-k.email</u>

Study

A New Study Shows Children Are Silent Spreaders Of Covid-19

Source: Forbes

Unique ID: 1007670766

Infected children are shown to have a significantly higher level of the coronavirus in their ... [+] airways than hospitalized adults in ICUs for Covid-19 treatment.

New research shows that children may play a larger role in the community spread of Covid-19 than previously thought.

According to the study, published in the Journal of Pediatrics, children who had Covid-19 were shown to have a significantly higher level of virus in their airways than adults who were hospitalized for Covid-19 treatment.

"I was surprised by the high levels of virus we found in children of all ages, especially in the first two days of infection," said lead author, Lael Yonker.

"I was not expecting the viral load to be so high. You think of a hospital, and of all of the precautions taken to treat severely ill adults, but the viral loads of these hospitalized patients are significantly lower than a 'healthy child' who is walking around with a high SARS-CoV-2 viral load."

The study, conducted by researchers from Massachusetts General Hospital and Mass General Hospital for Children, looked at 192 children ages 0-22, of which 49 tested positive for Covid-19, and another 18 children had late-onset Covid-19-related illness.

The study found that while younger children are less likely to become infected or seriously ill from the virus, their viral load didn't decrease.

Recommended For You

Study: 14 Face Masks, Here Are The Best, Worst For Covid-19 Coronavirus

According to the authors, this finding suggests that despite their lower number of the virus receptors, children can still carry a high viral load and are therefore more contagious.

"Kids are not immune from this infection, and their symptoms don't correlate with exposure and infection," said professor of Pediatrics at Harvard Medical School and study co-author, Alessio Fasano.

"During this Covid-19 pandemic, we have mainly screened symptomatic subjects, so we have reached the erroneous conclusion that the vast majority of people infected are adults. However, our results show that kids are not protected against this virus. We should not discount children as potential spreaders for this virus."

In fact, last month a study published in JAMA, found that kids spread Covid-19 more efficiently than adults because they have a high viral load. According to the results of that study, children aged five and younger who developed mild to moderate Covid-19 symptoms had 10 to 100 times more of the virus in the their nose and throat than older children and adults.

Findings from these studies carry important implications for the reopening of schools and daycare centers.

"This study provides much-needed facts for policymakers to make the best decisions possible for schools, daycare centers and other institutions that serve children," said Fasano.

"Kids are a possible source of spreading this virus, and this should be taken into account in the planning stages for reopening schools."

For example, the authors, along with other experts, recommend not relying on body temperature or symptom monitoring to identify Covid-19 infection in the school setting.

They explained that even when children exhibit symptoms typical of Covid-19, like fever, runny nose and cough, they often overlap with common childhood illnesses and make it harder to get an accurate diagnosis of Covid-19.

Instead, experts suggest infection control measures, like social distancing, wearing a mask, frequent hand washing and implementing a combination of remote and in-person learning.

They added that routine and continued screening of all students for Covid-19 infection with timely reporting of the results is an essential part of a safe return-to-school policy.

Fasano also warned that a rushing to reopen schools without proper planning could result in a spike of Covid-19 cases, as children can bring the virus back home.

This is a concern for some families more than others, as research continues to show that there are significant racial and socio-economic disparities.

Just this week a study that analyzed data from 12 different states found that ethnic minorities are still disproportionately hospitalized for Covid-19. The study reported that in Ohio, Black patients accounted for 31.8% of hospitalizations but only make up 13% of the population. In Virginia, Hispanic people accounted

for 36.2% of hospitalizations, compared with 9.6% of the population.

And according to latest results from the APM Research Lab, Black and Indigenous Americans are three to four times more likely to die from Covid-19 than White people.

Research from Children's National confirms that racial and socio-economic disparities are also seen in the child and young adult population. They noted that White children tested positive 7% of the time, while Black and Hispanic children tested positive at positive 30%, and 46% of the time, respectively. They also found that kids who lived in lower income households also tested positive at higher rates than wealthier children.

And in the study published today, researchers noted that more than half the children with Covid-19 came from low-income communities. In comparison, only 2% came from high-income communities.

Fasano and Yonker added that it's also a concern for multi-generational families with vulnerable older adults in the same household.

"If schools were to reopen fully without necessary precautions, it is likely that children will play a larger role in this pandemic," they concluded.

https://www.forbes.com/sites/mishagajewski/2020/08/20/a-new-study-shows-children-are-silent-spreaders-of-covid-19/

United States

Kids with COVID have more viral RNA in their airways than adults do

Source: CIDRAP ID: 1007673601

A study published yesterday in the Journal of Pediatrics found that 49 Massachusetts children and young adults 0 to 22 years with COVID-19 had significantly higher levels of virus RNA in their airways than did infected adults in intensive care units, suggesting that the novel coronavirus doesn't spare young people and that they could spread it just as easily.

In addition to the 49 subjects who tested positive for COVID-19, another 18 had the delayed, coronavirus-linked multisystem inflammatory syndrome in children (MIS-C).

Regardless of a child's age, airway viral RNA load of those with COVID-19 was highest in the first 2 days of symptoms, much higher than in severely ill adults (P = 0.002), and some had high viral loads even before symptoms appeared. But unlike subjects with COVID-19, those with MIS-C did not have high viral loads. The researchers didn't attempt to isolate live virus.

Nonspecific symptoms, ACE2 expression

Subjects 11 to 16 years made up 33% of the coronavirus-positive cohort, while 37% were younger than that and 27% were older. The average age was 13, and the authors did not specify the age of 2 of the 49 SARS-CoV-2–positive patients.

In contrast, children 1 to 4 years old accounted for 39% of the MIS-C group, which had a male predominance (78%). Youth with severe MIS-C tended to have strong immune responses to different respiratory viruses, including other coronaviruses, respiratory syncytial virus, and flu.

COVID-19 patients aged 10 and older had higher expression of angiotensin-converting enzyme 2 (ACE2), which did not correlate with viral airway load but could have made them more vulnerable to infection. Children younger than 10 years, however, tended to have lower ACE2 expression, which likely conferred some protection against infection.

Twenty-five children (51%) had fever, 23 (47%) had cough, 17 (35%) had congestion, 17 (35%) had a sore throat, 14 (29%) had a runny nose, 13 (27%) had headache, and 10 (20%) had loss of smell. These nonspecific symptoms suggest that it would be a mistake to rely on symptoms or temperature checks to detect COVID-19 infection, the authors said.

Thirteen patients (27%) were obese, and 29 (19%) had asthma. Nine (18%) of children with COVID-19 and 10 (56%) of those with MIS-C had no known infected household member. Twenty-six (53%) attended grade school.

'Healthy children' with high viral loads

High viral RNA loads may indicate greater infectiousness, the authors said. And because children tend to have mild or no symptoms when infected with SARS-CoV-2, the virus that causes COVID-19, and many symptoms overlap with common childhood diseases such as the flu and the common cold, they could spread the virus undetected—which could complicate diagnosis during the upcoming seasonal allergy and flu season.

In a Massachusetts General Hospital news release, lead author Lael Yonker, MD, said she was surprised by the study findings. "You think of a hospital, and of all of the precautions taken to treat severely ill adults, but the viral loads of these hospitalized patients are significantly lower than a 'healthy child' who is walking around with a high SARS-CoV-2 viral load," she said.

The authors said that the numbers of young people who develop MIS-C after coronavirus infection are growing. The result of an abnormal immune response to the virus, the syndrome can cause serious heart problems and shock. "Children can develop severe illness during the post-infectious stage with a hyperinflammatory antibody response," they wrote. "Potential transmission of SARS-CoV-2 between children and families should be considered when designing strategies to mitigate the COVID-19 pandemic."

Last month, a research letter in JAMA Pediatrics showed that children younger than 5 years with mild or moderate COVID-19 have much higher levels of viral RNA in their nose and throat than do older children and adults.

The findings have important implications for school reopenings, daycare centers, and other crowded settings where kids and teachers closely interact. In the news release, senior author Alessio Fasano, MD, said that children should not be discounted as potential transmitters of the virus.

"During this COVID-19 pandemic, we have mainly screened symptomatic subjects, so we have reached the erroneous conclusion that the vast majority of people infected are adults," he said. "However, our results show that kids are not protected against this virus."

This is particularly relevant for hard-hit low-income families, especially those in multigenerational households with vulnerable older adults. In the study, 51% of children infected with COVID-19 came from low-income communities, versus 2% from high-income neighborhoods.

To prevent further spread amid school reopenings this fall, the authors called for physical distancing, universal masking, strict handwashing protocols, routine screening of students, and a hybrid system of distance and in-person learning.

https://www.cidrap.umn.edu/news-perspective/2020/08/kids-covid-have-more-viral-rna-their-airways-adults-do

https://www.jpeds.com/article/S0022-3476(20)31023-4/fulltext

Study

Pregnant women may be passing coronavirus to their infants, studies say

Source: Grunt Stuff Unique ID: 1007671088

Some pregnant moms may be passing the COVID-19 an infection to their unborn infants, new studies revealed this week.

In a single research launched Thursday, Chinese language scientists adopted 33 pregnant women with COVID-19 pneumonia contracted within the metropolis of Wuhan — the primary epicenter of the lethal bug — and located that three infants, all boys, had been contaminated with the contagion at delivery.

That's a charge of 9 %, though in a very small pattern, the researchers famous.

The findings had been revealed within the Journal of the American Medical Affiliation Pediatrics.

"As a result of strict an infection management and prevention procedures had been carried out through the supply, it's doubtless that the sources of SARS-CoV-2 within the neonates' higher respiratory tracts or anuses had been maternal in origin," the researchers wrote.

All three infants — who survived the sickness — had been delivered by Cesarean part due to their moms' circumstances, the findings present.

One was delivered prematurely, at 31 weeks, due to fetal misery and wanted to be resuscitated. He suffered from pneumonia, shortness of breath and sepsis — and in the end recovered by air flow, antibiotics and caffeine remedy in intensive care. He examined adverse for the virus inside seven days. The 2 infants delivered on time skilled lethargy and fever, and one had pneumonia. Each recovered from the an infection inside six days.

Two different studies — additionally carried out in China and revealed Thursday within the Journal of the American Medical Affiliation — reported a distinct signal of potential mother-to-child transmission, also called vertical transmission, ABC Information reported.

The researchers element case studies of three infants who didn't have signs or check constructive for the lethal bug however had particular antibodies or immune proteins for the an infection referred to as IgM. Such transmission appeared unlikely on the early phases of the coronavirus outbreak, ABC reported. Knowledge was beforehand revealed on 19 infants born to moms with COVID-19, all of whom examined adverse for the virus, in accordance to the report.

However the three new studies are shedding a distinct gentle, Sonja Rasmussen, a pediatrician and professor who's an professional on infections in being pregnant, informed the well being information web site Stat.

"I do suppose all these items taken collectively would lead you in direction of saying that it appears like vertical transmission is feasible," Rasmussen stated. "[They] counsel to me that the virus can cross the placenta."

However in an editorial revealed in JAMA — together with two of the brand new studies — Drs. David Kimberlin and Sergio Stagno of the College of Alabama at Birmingham cautioned in opposition to leaping to conclusions.

"Though these 2 studies deserve cautious analysis, extra definitive proof is required earlier than the provocative findings they report can be used to counsel pregnant women that their fetuses are in danger from congenital an infection with SARS-CoV-2," the medical doctors wrote.

https://gruntstuff.com/pregnant-women-may-be-passing-coronavirus-to-their-infants-studies-say/79894/

Study

Hercules announces positive pre-clinical results of AHR inhibitor in Covid-19

Source: pharmaceutical-technology

Unique ID: 1007670956

Dutch Hercules Pharmaceuticals has published pre-clinical data demonstrating in-vivo results of its Aryl Hydrocarbon Receptor (AHR) inhibitor HP163 against viral diseases, including Zika and Covid-19. The promising pre-clinical results of HP163 in Covid-19 were published in Research Square earlier this years. It is believed that the reason why AHR inhibitors are effective against Covid-19, as well as other viral diseases, is because virus infection triggers activation of the AHR, which limits the production of type I interferons involved in antiviral immunity.

These results has led to Hercules raising funding from Pharma Connect Capital and Samenwerkingsverband Noord Nederland to further investigate the promise of AHR inhibitors in Covid-19, as well as other viral diseases. The amount of funding raised was not disclosed, but as a result of the financing, Hercules will be re-locating to Groningen from Leiden.

Hercules CEO Bart Wuurman said: "We are excited by the novel finding that the AHR acts as a host factor for viral infections to allow viral replication.

"A remedy is urgently needed to treat zika and dengue infection, but mentioned studies also suggest that AHR inhibitors might be an effective oral treatment of patients with Covid-19, the virus which is holding our daily life hostage at this moment."

https://www.pharmaceutical-technology.com/uncategorised/hercules-announces-positive-pre-clinical-results-of-ahr-inhibitor-in-covid-19/

Study: https://www.researchsquare.com/article/rs-25639/v1

Study

COVID-19 cytokine storms may prevent a durable immune response

Source: Medical Xpress Unique ID: 1007670953

Shiv Pillai, MD, Ph.D., investigator in the Ragon Institute of MGH, MIT and Harvard and professor at Harvard Medical School (HMS), recently published a paper in Cell showing that high levels of some cytokines seen in COVID-19 patients, as part of a cytokine storm, may prevent the development of long-term immunity to SARS-CoV-2, the virus that causes COVID-19.

"We've seen a lot of studies suggesting that immunity in COVID-19 may not be durable because the antibodies decline over time," says Pillai. "More telling for us was that in patients with both mild as well as severe disease, asntibodies lacked a key structural feature that is a hallmark of the 'highest quality' antibodies in a normal immune response. By using our understanding of how two different types of immune cells normally collaborate to make the best antibodies, we were able to find a mechanism that could explain this lower-quality immune response in COVID-19 patients."

Pillai's group, working with Robert Padera, MD, Ph.D., associate professor at HMS, examined the spleens and lymph nodes of deceased COVID-19 patients and found that a lack of germinal centers, an essential part of a durable immune response.

Germinal centers are structures induced within the lymph nodes and spleens during infection or vaccination. In them, B cells, the immune cells that produce antibodies, mature to become long-lived "memory" cells. This process, along with controlled mutations in antibody genes, allows the immune system to select for and immortalize B cells that make the best antibodies against a particular pathogen. This creates a life-long "memory" of a pathogen that allows the body to quickly and effectively identify and attack the pathogen in the case of re-infection. Without germinal centers, there are not enough B cells that can create a high-quality antibody response to produce long-term immunity. To form germinal centers, B cells depend on key support from another specialized type of cell called a helper T cell. Pillai's group showed that in COVID-19 patients the specialized type of helper T cell does not develop, and as a consequence B cells are not helped in the right way. The study found no germinal centers in acutely ill patients.

Previous studies with infectious disease in mice have shown that high levels of cytokines, small signaling molecules unique to the immune system, can prevent the formation of these helper T cells and therefore of germinal centers. Large amounts of a cytokine called TNF, in particular, prevented germinal center formation. Severe COVID-19 cases were found to have massive amounts of TNF in the location where germinal centers would normally form.

Lack of germinal centers has been observed in other diseases, including SARS, and does not mean there is no immune response. "There is an immune response in COVID-19," Padera says. "It's just not coming from a germinal center."

However, the lack of germinal centers could have major implications for development of herd immunity. "Without the formation of germinal centers, there is unlikely to be long-term memory to this virus developing from natural infections, meaning that while antibodies may protect people for a relatively short time, a single person who recovers from the disease could get infected again, perhaps six months later, or even multiple times with SARS-CoV-2. This suggests that developing herd immunity may be difficult," adds Pillai

This finding would likely not affect vaccine-induced immunity, as vaccines do not induce cytokine storms. A vaccine-induced immune response would likely include the development of a germinal center, and the ensuing creation and immortalization of high-quality antibodies that would provide long-lasting protecting against COVID-19.

https://medicalxpress.com/news/2020-08-covid-cytokine-storms-durable-immune.html https://www.sciencedirect.com/science/article/pii/S0092867420310679?via%3Dihub

Study

Poor ventilation may be adding to nursing homes' COVID-19 risks

Source: Medical Xpress Unique ID: 1007670901 Over 2,000 active cases of COVID-19 and 245 resident deaths as of August 19 have been linked to aged care homes in Victoria, spread across over 120 facilities. The St Basil's cluster alone now involves 191 cases. In New South Wales, 37 residents were infected at Newmarch House, leading to 17 deaths. Why are so many aged care residents and staff becoming infected with COVID-19? New research suggests poor ventilation may be one of the factors. RMIT researchers are finding levels of carbon dioxide in some nursing homes that are more than three times the recommended level, which points to poor ventilation.

An examination of the design of Newmarch in Sydney and St Basil's in Melbourne shows residents' rooms are arranged on both sides of a wide central corridor.

The corridors need to be wide enough for beds to be wheeled in and out of rooms, but this means they enclose a large volume of air. Windows in the residents' rooms only indirectly ventilate this large interior space. In addition, the wide corridors encourage socializing.

If the windows to residents' rooms are shut or nearly shut in winter, these buildings are likely to have very low levels of ventilation, which may contribute to the spread of COVID-19. If anyone in the building is infected, the risk of cross-infection may be significant even if personal protective equipment protocols are followed and surfaces are cleaned regularly.

Why does ventilation matter?

Scientists now suspect the virus that causes COVID-19 can be transmitted as an aerosol as well as by droplets. Airborne transmission means poor ventilation is likely to contribute to infections.

A recent article in the journal Nature outlines the state of research: "Converging lines of evidence indicate that SARS-CoV-2, the coronavirus responsible for the COVID-19 pandemic, can pass from person to person in tiny droplets called aerosols that waft through the air and accumulate over time. After months of debate about whether people can transmit the virus through exhaled air, there is growing concern among scientists about this transmission route."

Under the National Construction Code (NCC), a building can be either "naturally ventilated" or "mechanically ventilated."

Natural ventilation requires only that ventilation openings, usually the openable portion of windows, must achieve a set percentage of the floor area. It does not require windows to be open, or even mandate the minimum openable area, or any other measures that would ensure effective ventilation. Air quality tests are not required before or after occupation for a naturally ventilated building.

Nearly all aged care homes are designed to be naturally ventilated with openable windows to each room. In winter most windows are shut to keep residents warm and reduce drafts. This reduces heating costs, so operators have a possible incentive to keep ventilation rates down.

From inspection, many areas of typical nursing homes, including corridors and large common spaces, are not directly ventilated or are very poorly ventilated. The odor sometimes associated with nursing homes, which is a concern for residents and their visitors, is probably linked to poor ventilation.

Carbon dioxide levels sound a warning

Carbon dioxide levels in a building are a close proxy for the effectiveness of ventilation because people breathe out CO₂. The National Construction Code mandates CO₂ levels of less than 850 parts per million (ppm) in the air inside a building averaged over eight hours. A well-ventilated room will be 800ppm or less—600ppm is regarded as a best practice target. Outside air is just over 400ppm

An RMIT team led by Professor Priya Rajagopalan is researching air quality in Victorian aged care homes. He has provided preliminary data showing peaks of up to 2,000ppm in common areas of some aged care homes.

This figure indicates very poor ventilation. It's more than twice the maximum permitted by the building code and more than three times the level of best practice.

Research from Europe also indicates ventilation in aged care homes is poor.

Good ventilation has been associated with reduced transmission of pathogens. In 2019, researchers in Taiwan linked a tuberculosis outbreak at a Taipei University with internal CO₂ levels of 3,000 ppm. Improving ventilation to reduce CO₂ to 600ppm stopped the outbreak.

What can homes do to improve ventilation?

Nursing home operators can take simple steps to achieve adequate ventilation. An air quality detector that can reliably measure CO_2 levels costs about A\$200.

If levels in an area are significantly above 600ppm over five to ten minutes, there would be a strong case to improve ventilation. At levels over 1,000ppm the need to improve ventilation would be urgent.

Most nursing homes are heated by reverse-cycle split-system air conditioners or warm air heating systems. The vast majority of these units do not introduce fresh air into the spaces they serve.

The first step should be to open windows as much as possible—even though this may make maintaining a comfortable temperature more difficult.

Creating a flow of warmed and filtered fresh air from central corridor spaces into rooms and out through windows would be ideal, but would probably require investment in mechanical ventilation.

Temporary solutions could include:

industrial heating fans and flexible ventilation duct from an open window discharging into the central corridor spaces

radiant heaters in rooms, instead of recirculating heat pump air conditioners, and windows opened far enough to lower CO₂ levels consistently below 850ppm in rooms and corridors.

The same type of advice applies to any naturally ventilated buildings, including schools, restaurants, pubs, clubs and small shops. The operators of these venues should ensure ventilation is good and be aware that many air-conditioning and heating units do not introduce fresh air.

People walking into venues might want to turn around and walk out if their nose tells them ventilation is inadequate. We have a highly developed sense of smell for many reasons, and avoiding badly ventilated spaces is one of them.

Provided by The Conversation

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RMIT researchers:

https://www.rmit.edu.au/news/all-news/2019/march/indoor-air-quality-research

https://medicalxpress.com/news/2020-08-poor-ventilation-adding-nursing-homes.html

United States

COVID-19 not likely passed from moms to babies through breast milk News Scan for Aug 20, 2020

Source: CIDRAP - All News

ID: 1007673618

University of California researchers studying the breast milk of 18 women with COVID-19 found coronavirus RNA—but not live virus—in 1 of 64 samples, suggesting that babies aren't likely to be infected through that route.

The research letter, published yesterday in JAMA, described studying self-collected and mailed samples and clinical data gathered through phone interviews from Mar 27 to May 6. The mothers' babies ranged in age from newborn to 19 months, and each mother provided 1 to 12 breast milk samples.

All but one woman had COVID-19 symptoms. The one sample with coronavirus RNA tested positive only on the day of symptom onset; the ones tested 2 days before and 12 and 41 days later tested negative. The researchers were unable to culture live virus from the positive sample.

To reproduce the conditions of the Holder pasteurization method commonly used to ensure sterilization of human donor milk in banks, the investigators spiked breast milk samples from two different, uninfected donors with the coronavirus. After heating the samples to 62.5°C (144.5°F) for 30 minutes and then cooling them to 4°C (39.2°F), live virus was not found in either sample.

The authors noted that 24 case reports have described the detection of viral RNA in 10 samples from 4 women but cautioned that RNA does not equate with infectiousness; rather, it has to be able to grow and multiply to be transmissible. "These findings are reassuring given the known benefits of breastfeeding and human milk provided through milk banks," they wrote.

In the future, the researchers said they will study whether breast milk from women with COVID-19 contains antibodies that could, in theory, protect their infants from coronavirus infection. Current recommendations to prevent spread of COVID-19 during breastfeeding include handwashing and sterilization of pumping equipment after each use.

Aug 19 JAMA research letter

More teens got routine vaccines in 2019, but doctor orders dropped amid COVID

More US teens received at least one dose of two of the three vaccines recommended for their age-group in 2019 than in 2018, but vaccination orders dropped after the COVID-19 pandemic hit, according to a

study by researchers from the Centers for Disease Control and Prevention (CDC) published today in Morbidity and Mortality Weekly Report (MMWR).

The CDC's Advisory Committee on Immunization Practices recommends that 11- and 12-year-old children be vaccinated against pertussis (whooping cough); meningitis (swelling of the membranes covering the brain and spinal cord) types A, C, W, and Y (MenACWY); and human papillomavirus (HPV)-related cancers. Teens 16 years and older are urged to receive a booster dose of the meningococcal vaccine, and those 16 to 23 years old can be vaccinated against meningitis B (MenB), if appropriate. The researchers found that 71.5% of adolescents received at least one dose of HPV vaccine in 2019, up from 68.1% in 2018. Likewise, the percentage of teens up to date with the two-dose HPV series rose from 51.1% in 2018 to 54.2% in 2019. Rates of vaccination improved in both boys and girls.

The percentage of adolescents vaccinated with at least one dose of MenACWY increased from 86.6% in 2018 to 88.9% in 2019, and more teens began HPV vaccination by the recommended age of 13 years. While the percentage of 17-year-olds receiving the booster dose of MenACWY didn't change significantly over the year, the percentage receiving one or more doses of MenB rose from 17.2% in 2018 to 21.8% in 2019.

Fewer teens living at or above the poverty level outside of a city received at least one dose of HPV and MenACWY vaccines or were up to date on their HPV vaccine series than those living in a city. When the investigators reviewed Vaccines for Children provider ordering data, they found that vaccine orders for HPV; tetanus, diphtheria, and pertussis (Tdap); and MenACWY dropped in mid-March 2020, after the pandemic arrived. "The COVID-19 pandemic has the potential to offset historically high vaccination coverage with Tdap and MenACWY and to reverse gains made in HPV vaccination coverage," the authors wrote.

https://www.cidrap.umn.edu/news-perspective/2020/08/news-scan-aug-20-2020 https://jamanetwork.com/journals/jama/fullarticle/2769825

Study

UEA scientists discover how Covid-19 smell loss differs from cold or flu

Source: Eastern Daily Press Unique ID: <u>1007670124</u>

Loss of smell associated with infection with Covid-19 is "much more profound" compared to a bad cold or flu, scientists from the University of East Anglia have found.

And they say their findings could help to develop smell and taste tests as an quick, alternative way to check if people have the virus.

The main differences which the team, led by Prof Carl Philpott, from UEA's Norwich Medical School, found were that, although Covid-19 patients also lose their sense of smell, they can breathe freely, do not tend to have a runny or blocked nose, and they cannot detect bitter or sweet tastes.

The findings, yet to be peer reviewed, lend weight to the theory that Covid-19 infects the brain and central nervous system.

The study also involved the Norfolk Smell and Taste Clinic at the James Paget University Hospital in Gorleston, along with universities in Belgium, Italy, Greece and Turkey.

The research team hopes the work could help develop smell and taste tests for fast Covid-19 screening – in primary care and emergency departments.

Prof Philpott said: "The loss of smell and taste is a prominent symptom of Covid-19, however it is also a common symptom of having a bad cold.

"We wanted to find out exactly what differentiates Covid-19 smell loss with the kind of smell loss you might have with a cold and blocked-up nose."

The research team carried out smell and taste tests on 10 Covid-19 patients, 10 people with bad colds and a control group of 10 healthy people – all matched for age and sex.

Prof Philpott said: "We found that smell loss was much more profound in the Covid-19 patents. They were less able to identify smells, and they were not able to identify bitter or sweet tastes. In fact it was this loss of true taste which seemed to be present in the Covid-19 patients compared to those with a cold. This is very exciting because it means that smell and taste tests could be used to discriminate between Covid-19 patients and people with a regular cold or flu. Although such tests could not replace formal diagnostic tools such as throat swabs, they could provide an alternative when conventional tests are not available or

when rapid screening is needed – particularly at the level of primary care, in emergency departments or at airports."

https://www.uea.ac.uk/about/-/how-covid-19-smell-loss-differs-from-the-common-cold

https://www.greatyarmouthmercury.co.uk/news/uea-scientists-in-covid-19-smell-loss-breakthrough-1-6798238

Study: https://www.greatyarmouthmercury.co.uk/news/uea-scientists-in-covid-19-smell-loss-breakthrough-1-6798238

United States

1 in 5 nursing homes short on PPE and staff in virus rebound

Source: NEWS 1130 ID: 1007673594

WASHINGTON — One in five U.S. nursing homes faced severe shortages of protective gear like N95 masks this summer even as the Trump administration pledged to help, according to a study released Thursday that finds facilities in areas hard-hit by COVID 19 also struggled to keep staff. Significantly, there was no improvement from May to July in the shortages of personal protective equipment, known as PPE, or in the staffing shortfalls, according to the analysis of federal data by academic researchers. The summer has seen the coronavirus surge across the South, and much of the West and Midwest.

People living in long-term care facilities represent less than 1% of the U.S. population, but account for 43% of coronavirus deaths, according to the COVID Tracking Project. Similar glaring disparities have been seen with nursing home residents in other countries, but in the U.S. the issue has become politically sensitive for President Donald Trump, who is trying to hang on to support from older voters in his reelection bid

"A study that shows that 1 in 5 nursing homes has a severe shortage of PPE and a shortage of staff, and that it did not change from May to July, should be a massive read flag," said Terry Fulmer, president of the John A. Hartford Foundation, a non-profit that works to improve care for older adults.

"We have had no coherent federal response," added Fulmer, who was not involved in the research. Reacting to the study, the federal Centers for Medicare and Medicaid Services said in a statement that the Trump administration "has provided nursing homes the tools they need to stop the virus' spread and, ultimately, each nursing home is responsible for its residents' safety." CMS sets nursing home standards and pays for much of the care.

The study published in the journal Health Affairs looked at two periods of four weeks each earlier this summer, from mid-May to mid-June, and from the latter part of June to mid-July. Large outbreaks in nursing homes have been reported in many states since the end of February.

Researchers from the University of Rochester in New York, Harvard Medical School and the Harvard T.H. Chan School of Public Health analyzed data provided by nursing homes to the government at the behest of the Medicare and Medicaid agency, CMS.

They found that during the early part of the summer, 20.7% per cent of nursing homes reported a severe PPE shortage, with one week or less of available supply. Shortages of N95 masks — recommended for health care providers — were the most common. The situation had barely changed by midsummer, with 19.1% of nursing homes reporting severe shortages.

As far as staff shortages, 20.8% of nursing homes reported deficiencies in early summer. Commonly those involved nurses and nursing aides. By midsummer, 21.9% of nursing homes reported staff shortages.

Adequate levels of protective equipment and nursing staff are essential components in any infection control plan, experts say, and persistent shortages can feed a vicious cycle that raises risks both for residents and staff.

The study found that high rates of PPE shortages were seen in Iowa, Alabama, North Carolina and Tennessee, which have struggled to contain the virus this summer.

Nursing homes that reported PPE shortages were more likely to be for-profit, part of a chain, and to have COVID-19 cases among residents and staff.

The report found high rates of staff shortages clustered in the South and Midwest, especially Louisiana, Alabama, eastern Texas and Georgia.

Facilities that were government-owned, received higher shares of their earnings from Medicaid, and had lower quality ratings were more likely to confront staffing shortages.

"We have been slow to provide resources to nursing homes, and when we have provided them, they have been inadequate," said Harvard health policy professor David Grabowski, one of the study authors. An initial federal effort to supply PPE was widely panned by nursing homes, and Grabowski said a new push to supply N95 masks will probably come up short unless it is sustained. There are about 1 million shifts a day total in nursing homes, he said, and that means very large quantities of N95 masks are needed.

Separately, the Trump administration is trying to supply 14,000 nursing homes with fast-test machines to screen residents and staff for COVID-19. That effort is underway, but isn't scheduled to be completed until the end of September.

"The federal government should really own this issue," Grabowski said.

Addressing staffing shortages is seen as the more difficult problem, since nursing home pay is low, and with COVID-19, health risks to workers are high. Grabowski said Congress should earmark money to raise the wages of caregivers. But coronavirus legislation is stalled.

Foundation executive Fulmer said she's forecasting that the staffing shortage in nursing homes will only get worse.

"These individuals are putting themselves and their families at risk, when they can get minimum wage in other ways," Fulmer said. "People are just going to say, 'Enough is enough." https://www.citynews1130.com/2020/08/20/1-in-5-nursing-homes-short-on-ppe-and-staff-in-virus-rebound/

United Kingdom

Coronavirus may stick to young people 'like a tornado with a long tail,' WHO warns

Source: Independent Online Unique ID: 1007671091

Coronavirus may stick to young people "like a tornado with a long tail," the World Health Organisation has warned, amid growing evidence that younger generations are driving spikes in infections across Europe. Dr Hans Kluge, WHO regional director for Europe, told a press briefing he is "very concerned" that younger age groups are regularly appearing among new cases recorded on the continent.

"Young people are at the forefront of the Covid-19 response and they have a very powerful message to convey through their behaviour and their communication," he said.

"Low risk does not mean no risk, no one is invincible and if you do not die from Covid it may stick to your body like a tornado with a long tail.

"While young people are less likely to die than older people they can still be very seriously affected, this virus affects organs throughout the body."

In England, the most recent data from Public Health England shows that the 15-44 age group currently has the highest rate of infection of any other group – excluding those over 85.

A recent pre-print study from Imperial College London also found that of some 120,000 swabs taken from people in England in May, the highest levels of infection were recorded among those aged 18-24. Similar developments have been reported in Luxembourg and Croatia, where incidence in young groups is clearly rising. There have also been slight increases in the infection rate among young people in Austria, Denmark, Slovakia, Spain and Estonia.

On the basis of these trends, experts have warned that a second wave could target younger generations. The first wave of Covid-19 has predominantly affected elderly people, those with underlying health conditions and ethnic minority groups.

But scientists fear young people enjoying their summer will be hit next – as was the case with the 1918 Spanish flu pandemic.

Last month, professor Roger Kirby, president elect of the Royal Society of Medicine, told BBC Radio 4: "The winter is coming – to use a quote from Game of Thrones – and almost certainly a second wave of this virus is coming.

"What we saw in 1918 was the virus change, you know, the second wave was different from the first wave and it affected a different group of people, predominantly younger people."

Dr Kluge also told BBC Radio 4 last month: "We are receiving reports from civil and health authorities of a higher proportion of new infections among young people.

"So for me the call is loud enough to rethink how to better involve the young people in response and

engage next to them.

"They have a responsibility towards themselves, their parents, grandparents and communities and we do know how to adopt good healthy behaviours so let's take advantage of the knowledge." https://www.independent.co.uk/news/health/coronavirus-young-people-who-infections-new-cases-a9679726.html

United Kingdom

Contact tracing apps unlikely to contain COVID-19 spread

Source: Medical Xpress - latest medical and health news stories

ID: 1007673654

Contract tracing apps used to reduce the spread of COVID-19 are unlikely to be effective without proper uptake and support from concurrent control measures, finds a new study by UCL researchers. The systematic review, published in Lancet Digital Health, shows that evidence around the effectiveness of automated contact tracing systems is currently very limited, and large-scale manual contact tracing alongside other public health control measures—such as physical distancing and closure of indoor spaces such as pubs—is likely to be required in conjunction with automated approaches. The team found 15 relevant studies by reviewing more than 4,000 papers on automated and partially-automated contact tracing, and analyzed these to understand the potential impact these tools could have in controlling the COVID-19 pandemic.

Lead author Dr. Isobel Braithwaite (UCL Institute of Health Informatics) said: "Across a number of modeling studies, we found a consistent picture that although automated contact tracing could support manual contact tracing, the systems will require large-scale uptake by the population and strict adherence to quarantine advice by contacts notified to have a significant impact on reducing transmission." The authors suggest that even under optimistic assumptions—where 75-80% of UK smartphone owners are using a contact tracing app, and 90-100% of identified potential close contacts initially adhere to quarantine advice—automated contact tracing methods would still need to be used within an integrated public health response to prevent exponential growth of the epidemic.

In total, 4,033 papers published between 1 Jan 2000 and 14 April 2020 were reviewed, which allowed researchers to identify 15 papers with useful data. The seven studies that addressed automated contact tracing directly were modeling studies that all focused on COVID-19. Five studies of partially-automated contact tracing were descriptive observational studies or case studies, and three studies of automated contact detection looked at a similar disease context to COVID-19, but did not include subsequent tracing or contact notification.

Partially-automated systems may have some automated processes, for instance in determining the duration of follow-up of contacts required, but do not use proximity of smartphones as a proxy for contact with an infected person.

Analysis of automated contact tracing apps generally suggested that high population uptake of relevant apps is required alongside other control measures, while partially-automated systems often had better follow-up and slightly more timely intervention.

Dr. Braithwaite said, "Although automated contact tracing shows some promise in helping reduce transmission of COVID-19 within communities, our research highlighted the urgent need for further evaluation of these apps within public health practice, as none of the studies we found provided real-world evidence of their effectiveness, and to improve our understanding of how they could support manual contact tracing systems."

The review shows that, at present, there is insufficient evidence to justify reliance on automated contact tracing approaches without additional extensive public health control measures.

Dr. Robert Aldridge (UCL Institute of Health Informatics) added, "We currently do not have good evidence about whether a notification from a smartphone app is as effective in breaking chains of transmission by giving advice to isolate due to contact with a case of COVID-19 when compared to advice provided by a public health contact tracer. We urgently need to study this evidence gap and examine how automated approaches can be integrated with existing contact tracing and disease control strategies, and generate evidence on whether these new digital approaches are cost-effective and equitable."

If implemented effectively and quarantine advice is adhered to appropriately, automated contact tracing may offer benefits such as reducing reliance on human recall of close contacts, which could enable

identification of additional at-risk individuals, informing potentially affected people in real-time, and saving on resources.

Dr. Braithwaite added, "We should be mindful that automated approaches raise potential privacy and ethics concerns, and also rely on high smartphone ownership, so they may be of very limited value in some countries. Too much reliance on automated contact tracing apps may also increase the risk of COVID-19 for vulnerable and digitally-excluded groups such as older people and people experiencing homelessness."

If implementing automated contact tracing technology, the authors say that decision-makers should thoroughly assess available evidence around its effectiveness, privacy and equality considerations, monitoring this as the evidence base evolves.

They add that plans to properly integrate contact tracing apps within comprehensive outbreak response strategies are important, and their impacts should be evaluated rigorously. A combination of different approaches is needed to control COVID-19, and the review concludes that contact tracing apps have the potential to support that but they are not a panacea.

This study is co-authored by researchers UCL Public Health Data Science Research Group, Institute of Health Informatics, Department of Applied Health Research, and Collaborative Centre for Inclusion Health.

Study limitations

As part of this systematic review, researchers did not find any epidemiological studies comparing automated to manual contact tracing systems and their effectiveness in identifying contacts. Other limitations include the lack of eligible empirical studies of fully-automated contact tracing and a paucity of evidence related to ethical concerns or cost-effectiveness.

More information: Isobel Braithwaite et al, Automated and partly automated contact tracing: a systematic review to inform the control of COVID-19, The Lancet Digital Health (2020). DOI: 10.1016/S2589-7500(20)30184-9

https://medicalxpress.com/news/2020-08-contact-apps-covid-.html

United Kingdom

Websites selling home-based COVID-19 testing kits providing inadequate or misleading information

Source: The Medical News

ID: 1007674468

In the view of recent severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) outbreak, movement restriction (lockdown) and mass testing are considered to be the most important measures to control the viral spread. In the UK and US, many websites are selling direct to user self-sampling and testing kits to detect SARS-CoV-2. Recently, a cross-sectional observational study was carried out to check the completeness and accuracy of information provided by these websites.

The study findings have revealed that users purchasing these kits online are provided with incomplete and misleading information regarding the accuracy of tests, interpretation of results, and intended use. The study by researchers at the University of Birmingham and the University of Warwick in the UK is currently available on the medRxiv* preprint server.

According to the World Health Organization (WHO), viral testing using polymerase chain reaction (PCR)-based kits is the best possible way to identify and isolate people who are infected with SARS-CoV-2. However, because of the low sensitivity (70%) of a single PCR testing, even having negative results from two consecutive PCR tests is not sufficient to exclude possible SARS-CoV-2 infection (the WHO). Besides viral testing kits that detect active infection, there are antibody testing kits to determine previous infection. However, the WHO does not recommend antibody testing kits for personal use, because it is still uncertain whether the presence of antibody ensures adaptive immunity to protect individuals from future infection.

Study objective

Direct to user kits available on different websites should be provided with high-accuracy and thorough user instructions because these tests are performed at home without any professional supervision. In the current study, the researchers aimed at investigating the completeness and accuracy of information provided by different websites that sell home self-sampling and testing kits to detect SARS-CoV-2. They performed a website search on 23rd May 2020 using the Google search engine and screened 27

websites that sell a total of 41 kits (23 viral testing kits and 18 antibody testing kits) either in the UK or in the US. Websites that sell viral testing or antibody testing kits directly to users via direct purchase or insurance purchase were included in the study.

Study findings

For the analysis, the researchers extracted information from these websites between 23rd and 28th May 2020. The information extracted from the websites included test type and manufacturer details, timing of testing; test accuracy; advice provided regarding changing behavior considering test results; authorization; and test cost.

The researchers observed that about 78%, 24%, 29%, and 51% of testing kits were devoid of information about the manufacturer, test timing, test accuracy, and result interpretation, respectively. Regarding test accuracy, they found that about 66% of the kits are provided with specificity and sensitivity details as accuracy measures. Surprisingly, there were hardly any details about predictive values, which is defined as the probability of truly having a disease based on test results. Only 12% of the kits reported positive predictive values.

ddd

Regarding viral testing, it was mentioned in 39% of the kits that people who test positive should self-isolate, whereas, in 35% of the kits, it was mentioned that people with negative test results may still have the infection. Regarding antibody testing, 67% of the kits are provided with information that having a positive result does not ensure protection from future infection.

Regarding regulatory approval and endorsement, 41% of home-sampling antibody test kits available on the UK websites claimed to have a CE mark; However, in reality, there is currently no antibody test kit with regulatory approval for home sampling or testing. These inappropriately made claims were based on the approval for testing by experts using venous blood samples instead of finger-prick samples. Moreover, 24% and 29% of the UK websites selling viral testing kits claimed to have approvals from the regulatory bodies and policy-making bodies, respectively.

Study significance

The researchers believe that the observations made in the study will help understand the fact that inadequate or misleading information provided to users by test kit-selling websites can actually accelerate the pandemic rather than containing it through rapid home-based testing. People who perform home-based tests inappropriately or interpret test results inaccurately can be potential carriers of the virus, and thus, can increase the risk of disease transmission.

The researchers developed a guideline that mentions what should be included on the websites that sell home-based testing kits. According to them, a kit must be provided with information about the type of test, timing and procedure to perform the test, test accuracy, regulatory body approval status, test result interpretation, and implication of the test result.

*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.

https://www.news-medical.net/news/20200820/Websites-selling-home-based-COVID-19-testing-kits-providing-inadequate-or-misleading-information.aspx

https://www.medrxiv.org/content/10.1101/2020.08.18.20177360v1

Study

Secondhand Smoke from Vapes and Cigarettes Can Spread Coronavirus

Source: The Healthmania Unique ID: 1007671085

Since the beginning of the coronavirus pandemic, researchers have stated that certain groups are more likely to contract the virus and develop a severe form of infection such as older adults. Recent research has further added that the infection is more prevalent in smokers who also tend to spread the virus to others via secondhand smoke.

Generally, the practice of smoking cigarettes is essentially harmful to health and can cause in long-term and often irreversible impact on health. In comparison with conventional cigarettes, vapes or e-cigarettes are no better.

In fact, a number of studies have even concluded that they can be potentially more harmful than

cigarettes, which is the reason why there was a rise in vaping-related lung illness in the past year, leading to an eventual ban on vapes in many US states.

Additionally, health experts state that a person either smoking cigarettes or using a vape does not only harm himself but for others around people around him. This is due to the secondhand smoke that can travel and be inhaled by people sitting near a smoker.

People who are exposed to smoke like this frequently are also at a higher risk of associated health issues including the development of lung disease, breathing problems, and even lung cancer.

Now, experts are saying secondhand smoke is more dangerous than ever since the start of the coronavirus pandemic around the world. Studies have shown that people who smoke or vape are not only at a higher risk of the infection but are also more likely to spread it to other people.

Why is this so? One explanation is that people usually have to take off their masks for smoking or vaping, which increases the chance of contracting the virus as wearing a mask makes a significant difference in decreasing the risk.

The smoke that is released in the air during the process can help in coronavirus transmission as it is airborne. In fact, the smoke particles can transmit the virus at longer distances.

Therefore, an infected person who is smoking can then easily transmit the virus even if he or she practices social distancing and wears a mask normally.

The director of Biomedical Research in the College of Nursing with specialization in airborne particulate matter, Professor Loren Wold, explains that "When a vaping cloud is exhaled, it contains an enormous amount of particles,"

"What we don't know is how far the particles can go. We know that the virus can attach to particles and can travel three, four, or five times farther than they would by simply being in the air." Wold added. Since the virus can even travel through normal activities, it makes sense that it can be transmitted via secondhand smoke as well.

For instance, a case of coronavirus spread reported by the U.S. Centre for Disease Control and Prevention due to choir singing practices shows how easily the virus can spread.

Secondly, like a choir singing, vaping and smoking are also a social activity which people tend to do in groups. Therefore, the transmission of the virus through the activity and in such groups comes as no surprise.

https://thehealthmania.com/secondhand-smoke-from-vapes-and-cigarettes-can-spread-coronavirus/4538/

Domestic Events of Interest

Canada, NB

Public Health declares salmonella outbreak after 13 cases confirmed

Source: cbc.ca ID: 1007673588

New Brunswick Public Health has declared a salmonella outbreak after discovering 13 confirmed cases in the province and two that are still under investigation.

Bruce Macfarlane, a spokesperson for the Department of Health, said the cases were founded in the north and eastern regions of the province but wouldn't elaborate where in those regions.

The cases were confirmed between June 16 and July 27, the Department of Health said in a news release.

The Department of Health doesn't know what caused the outbreak.

Macfarlane said the cases were not related to the more than 300 Canadians who became ill from salmonella, which have been linked to a recall of U.S. grown onions.

Washing your cutting boards

Salmonella is commonly associated with both consuming and handling raw chicken and eggs.

"When preparing raw meats, the risk is especially high for certain kinds of food poisoning, including infection caused by the bacteria salmonella enteritidis," said Dr. Jennifer Russell, New Brunswick's chief medical officer of health in a news release.

"I strongly encourage people to take safety precautions when handling raw chicken and eggs and to ensure that these and all raw meat products are thoroughly cooked."

The bacteria can be spread by contact between cooked foods and raw poultry on unwashed cutting boards or knives.

It can also be passed in the feces of infected people and animals. It can be found in contaminated soil, food, water or on surfaces.

"The bacteria are spread by person to person contact, by animal to person contact, by eating contaminated food or by drinking contaminated water," the news release said.

What are the symptoms?

Symptoms of salmonellosis typically show up within one or two days after a person becomes infected. Most people who become ill experience diarrhea, stomach cramps, headache, nausea, vomiting and fever

Symptoms usually last less than a week. In some cases, serious illness can develop.

The Department of Health is monitoring the situation and is in contact with the Public Health Agency of Canada.

How to prevent salmonella

New Brunswick can eliminate bacteria by cooking food until it reaches the proper temperature. The safe temperatures for cooked foods are:

85° C (185° F) for whole poultry

71° C (160° F) for ground beef

74° C (165° F) for leftover food

Eggs are safer when cooked thoroughly, such as when hard boiled or scrambled, and served hot.

If you check the temperature of meat more than once, clean the thermometer before using it again.

Eat cooked food while it is still hot. Bacteria can grow when food is allowed to cool down.

Keep cold food cold. Letting food sit at unsafe temperatures puts you at risk of food-borne illnesses. Keep cleaning

New Brunswickers should wash their hands and surfaces thoroughly to avoid the spread of bacteria. All harmful bacteria can be spread just by touching an infected surface, such as a cutting board, and then touching another surface.

This means residents should wash and sanitize all plates, utensils and cutting boards that touched or held raw meat or poultry before using them again for cooked foods.

"Use a mild bleach and water solution before and after preparing food to sanitize surfaces."

New Brunswickers should also keep raw foods separate from cooked foods to avoid cross-contamination. Storing raw meats and poultry in the fridge on bottom shelves will prevent juices from dripping onto other foods.

"The simple rule is: when in doubt, throw it out."

https://www.cbc.ca/news/canada/new-brunswick/salmonella-outbreak-june-july-1.5693420

Canada, ON

Ontario hiring 200 additional OPP officers in response to concerns about understaffing, burnout and mental health

Source: CP24 (@CP24)

ID: 1007674185

The Ford government says it will hire 200 more Ontario Provincial Police officers in response to a sweeping report on mental health, stress and officer suicides in the service.

Solicitor General Sylvia Jones says it is likely many of the new hires will be added to detachments in northern Ontario.

"It is clear there are certain parts of the province, many in northern Ontario as you can imagine that have had chronic understaffing so we want to make sure we have the resources on the ground in those communities."

The hiring is in response to an independent review panel, a coroner's expert panel and internal efforts that suggested burnout and post-traumatic stress were widespread among officers.

Thirteen OPP officers took their own lives between 2013 and early 2019.

"We needed to react and respond to some of the mental health concerns that we heard from the (Ontario Provincial Police Association) and (OPP) Commissioner Carrique," Jones said.

The hiring will cost the province \$25 million.

There were 5,800 sworn officers in the OPP in 2019, making it Canada's second largest police service.

https://www.cp24.com/news/ford-government-hiring-200-more-opp-officers-in-response-to-concerns-about-burnout-mental-health-1.5072533

Canada, SK

We're very concerned': Sask. seeing record amount of drug overdose deaths

Source: Regina CTV NEWS

ID: 1007674565

REGINA -- With four months left in 2020, Saskatchewan has already seen its most overdose deaths in a decade

The Saskatchewan Coroners Service has confirmed 40 people have died from drug toxicity deaths between Jan. 1 and Aug. 6. The coroner's report also shows 139 deaths are suspected to have been due to drug toxicity.

The 179 overdose deaths are more than any of the past ten years, the previous high was in 2018 with 171. The numbers have been climbing since 2010 when 78 people died of an overdose.

"We're very concerned," Jim Reiter, Saskatchewan's Health Minister, said. "The numbers are up right across the country, we're concerned, obviously there's a lot of problems here with addiction and there's issues caused by fentanyl, it dangerous and it's causing deaths."

Fentanyl and carfentanyl have been the main cause of the confirmed deaths, responsible for 28 this year. There were record highs of 52 deaths from the opioids in 2018 and 2019, increasing each year since two were reported in 2010.

The COVID-19 pandemic caused many addiction services in the province to stop.

"We're getting normalcy back into the system, so we think that will help," Reiter said. "In the mean time, we've got a problem with fentanyl and we've got a problem with overdoses, so we need to as quickly as possible implement some of the initiatives we announced in the budget."

This year's provincial budget saw the government allocate \$435 million in spending for mental health and addiction services.

The Minister said he recognizes the benefits of the funding won't be felt immediately, but pointed to new treatment beds as a way to combat the crisis now.

"There's a number of detox beds that are going to be opening in Regina, Saskatoon and some other cities around the province," Reiter said. "We're looking at rapid access to addiction medicine clinic opening in the Battlefords, we're opening a crystal meth specialized treatment facility in Estevan, so we think some of those we can get up and running fairly quickly."

The Opposition is calling the mental health and addiction situation a crisis. NDP Health Critic Vicki Mowat called on the government to provide funding to Saskatchewan Polytechnic to restore its addictions counselling program, which was suspended earlier this year due to the COVID-19 pandemic.

"Folks aren't going to be able to get the training to help people who are in need and when they don't get that help, we see them ending up in emergency situations where in many cases they aren't able to be cared for." Mowat said.

Reiter couldn't address that specific program, but said, the province is "looking at all avenues." https://regina.ctvnews.ca/we-re-very-concerned-sask-seeing-record-amount-of-drug-overdose-deaths-1.5073155

International Events of Interest

IHR Announcement

Poliomyelitis (Circulating vaccine-derived poliovirus and Wild Poliovirus) - Global update

Announcement Displayed From:

Friday, August 21, 2020 - 12:36

Poliomyelitis (Circulating vaccine-derived poliovirus and Wild Poliovirus) - Global update

21 August 2020

Between 1 January and 19 August 2020, several countries reported cases of poliomyelitis disease. This announcement is a weekly situation update on the status of wild poliovirus type 1 (WPV1) and circulating vaccine- derived poliomyelitis type 1 and 2 (cVDPV1 and cVDPV2) reported in Acute flaccid paralysis (AFP) cases and environmental samples from affected countries.

Between 13 and 19 August 2020, WPV1 was reported in five cases with Acute Flaccid Paralysis (AFP) and three WPV1 positive environmental samples from Afghanistan and Pakistan. Moreover, during the same period, there have been 9 cVDPV2 detected among AFP cases and 11 cVDPV2 positive environmental samples reported in Afghanistan, Pakistan, Côte d'Ivoire, Nigeria, Somalia, and Sudan. Furthermore, there have been 15 cVDPV1 reported in Yemen. Below is the description of the reported cases by country:

- •Afghanistan: three WPV1 in AFP cases, one WPV1 positive environmental sample and five cVDPV2 positive environmental samples
- •Pakistan: two WPV1 in AFP cases, two WPV1 positive environmental samples and two cVDPV2 positive environmental samples
- •Cote d'Ivoire: four cVDPV2 in AFP cases
- •Nigeria: one cVDPV2 in AFP case
- •Somalia: two cVDPV2 in AFP cases and four cVDPV2 positive environmental samples
- •Sudan: two cVDPV2 in AFP cases •Yemen: 15 cVDPV1 in AFP cases

Please find below the link to the weekly global polio update published by the global polio eradication initiative (GPEI) that includes an update on polio (WPV 1 cVDPV1, and cVDPV2) case count for this week (between 13 and 19 August 2020) and cumulative case count by country since 1 January 2019.

http://polioeradication.org/polio-today/polio-now/this-week/

Public Health Response

The Global Polio Eradication Initiative (GPEI) is continuing to support countries in their response implementation, including field, virological, and epidemiological investigations, strengthening surveillance for acute flaccid paralysis and evaluating the extent of virus circulation. GPEI staff in countries are supporting on adjusting routine immunization and outbreak response to the prevailing COVID-19 situation.

In 2019 and early 2020, the Global Polio Eradication Initiative developed the Strategy for the Response to Type 2 Circulating Vaccine-derived Poliovirus 2020-2021, an addendum to the Polio Endgame Strategy 2019-2023 to more effectively address the evolving cVDPV2 epidemiology, which will drive outbreak response in 2020 and 2021. Necessary adaptations of delivery strategy and timelines are continuously being made.

Accelerating the development of novel oral polio vaccine type 2 (nOPV2) and enabling its use is an important step forward for GPEI. The new vaccine is anticipated to have a substantially lower risk of seeding new type 2 vaccine-derived polioviruses compared to mOPV2.

WHO risk assessment

The continued spread of existing outbreaks due to circulating vaccine-derived poliovirus type 2 as well as the emergence of new type 2 circulating vaccine-derived polioviruses points to gaps in routine immunization coverage as well as the insufficient quality of outbreak response with monovalent oral polio vaccine type 2. The risk of further spread of such strains, or the emergence of new strains, is magnified by an ever-increasing mucosal-immunity gap to type 2 poliovirus on the continent, following the switch from trivalent to bivalent oral polio vaccine in 2016.

The detection of cVDPV2s underscores the importance of maintaining high routine vaccination coverage everywhere to minimize the risk and consequences of any poliovirus circulation. These events also underscore the risk posed by any low-level transmission of the virus. A robust outbreak response is needed to rapidly stop circulation and ensure sufficient vaccination coverage in the affected areas to prevent similar outbreaks in the future. WHO will continue to evaluate the epidemiological situation and outbreak response measures being implemented.

The COVID-19 pandemic is continuing to affect the global polio eradication effort. Given that operationally polio vaccination campaigns are close-contact activities, they are incompatible with the current global guidance on physical distancing regarding the COVID-19 response efforts. As such, the programme has taken a very difficult decision to temporarily delay immunization campaigns. The overriding priority is to ensure the health and safety of health workers as well as communities. All GPEI recommendations are in line with those on essential immunization and are available here.

The programme has implemented a two-pronged approach to minimise the risk of an increase in polio cases, particularly in areas which are affected by the disease and possibly a spread of the virus to other areas.

- i) The programme will continue, to the extent possible, its surveillance activities to monitor the evolution of the situation.
- ii) The programme aims to return to action in full strength including with vaccination campaigns, as rapidly as is safely feasible. The timing will depend on the local situation and the programme will then need to operate in the context of the respective countries national health systems risk assessments and priorities. Comprehensive, context-specific plans to resume efforts are being developed, to be launched whenever and wherever the situation allows.

In many countries, polio assets (e.g., personnel, logistics, operations) are assisting national health systems to respond to the COVID-19 pandemic and help ensure the crisis is dealt with as rapidly and effectively as possible.

WHO advice

It is important that all countries, in particular those with frequent travels and contacts with polio-affected countries and areas, strengthen surveillance for acute flaccid paralysis (AFP) cases in order to rapidly detect any new virus importation and to facilitate a rapid response. Countries, territories and areas should also maintain uniformly high routine immunization coverage at the district level to minimize the consequences of any new virus introduction.

WHO's International Travel and Health recommends that all travellers to polio-affected areas be fully vaccinated against polio. Residents (and visitors for more than 4 weeks) from infected areas should receive an additional dose of OPV or inactivated polio vaccine (IPV) within 4 weeks to 12 months of travel

As per the advice of an Emergency Committee convened under the International Health Regulations (2005), efforts to limit the international spread of poliovirus remains a Public Health Emergency of International Concern (PHEIC). Countries affected by poliovirus transmission are subject to Temporary Recommendations. To comply with the Temporary Recommendations issued under the PHEIC, any country infected by poliovirus should declare the outbreak as a national public health emergency and consider vaccination of all international travelers.

For more information:

- •Global Polio Eradication Initiative: http://polioeradication.org/
- Polio Factsheet: https://www.who.int/topics/poliomyelitis/en/
- •WHO/UNICEF estimates of national routine immunization:

https://apps.who.int/immunization_monitoring/globalsummary/timeseries/tswucoveragedtp3.html

- •GPEI Public health emergency status: http://polioeradication.org/polio-today/polio-now/public-health-emergency-status/
- •International travel and health: https://www.who.int/ith/en/
- •Vaccine-derived polioviruses: http://polioeradication.org/polio-today/polio-prevention/the-virus/vaccine-derived-polio-viruses/
- •Use of OPV in the context of COVID-19: http://polioeradication.org/wp-content/uploads/2020/03/Use-of-OPV-and-COVID-20200421.pdf
- •Guiding principles for immunization activities during the COVID-19 pandemic: https://apps.who.int/iris/handle/10665/331590
- •WHO guidance document COVID-19: Operational guidance for maintaining essential health services during an outbreak: https://www.who.int/publications-detail/covid-19-operational-guidance-for-maintaining-essential-health-services-during-an-outbreak

United States

'Jurassic Park experiment': Florida state government to release millions of GMO mosquitos despite public backlash

Source: nationalpost.com

ID: 1007673579

The project will test if a genetically modified mosquito is a better alternative than insecticides that can control the spread of Aedes aegypti, which cause diseases such as dengue and yellow fever

Authorities in Florida have approved an experiment to release 750 million genetically engineered mosquitoes into the Florida Keys despite backlash from residents and environmental activists.

In June, Florida issued an Experimental Use Permit for the project to deploy in 2021 and 2022 after seven state agencies unanimously approved the project.

"This is an exciting development because it represents the ground-breaking work of hundreds of passionate people over more than a decade in multiple countries, all of whom want to protect communities from dengue, Zika, yellow fever, and other vector-borne diseases," Grey Frandson, CEO of Oxitec, the firm that created the mosquito, said in a statement at the time.

The project, which was approved by the Environment Protection Agency in May, will test whether a genetically modified mosquito is a better alternative than insecticides that can control the spread of Aedes aegypti, otherwise known as the yellow fever mosquito. The female mosquito is known to bite for blood in order to mature her eggs and, in turn, spreads a variety of diseases such as dengue fever, zika and chikunguya. Males, which only feed on nectar, are not a carrier for disease.

The experiment mosquito, named OX5034, has been altered to produce female offspring that will die in the larval stage, preventing them from hatching and growing large enough to bite. Male 0X5034 mosquitos have also been programmed to only kill female mosquitos, ensuring that the males will only pass along the modified genes to other male offspring.

What could possibly go wrong? We don't know

Although promotional campaigns emphasize that the new mosquitos won't bite, public backlash against the experiment has been fierce. Several media reports have quoted residents who said they refuse to be treated as "guinea pigs" for the "Robo-Frankenstein" mosquito.

"With all the urgent crises facing our nation and the State of Florida — the Covid-19 pandemic, racial injustice, climate change — the administration has used tax dollars and government resources for a Jurassic Park experiment," said Jaydee Hanson, policy director for the International Center for Technology Assessment and Center for Food Safety, in a statement released Wednesday.

"Now the Monroe County Mosquito Control District has given the final permission needed. What could possibly go wrong? We don't know, because EPA unlawfully refused to seriously analyze environmental risks, now without further review of the risks, the experiment can proceed," she added. More than 233, 000 people have also signed a change.org petition against the proposal. "Once again, Oxitec wants to treat people like human experiments." the petition reads.

Environment activists are also concerned that the release of such a massive population of mosquitos could have a detrimental effect on wildlife and potentially endanger species of birds, insects and mammals that feed on the mosquitoes.

"The release of genetically engineered mosquitoes will needlessly put Floridians, the environment and endangered species at risk in the midst of a pandemic," said

Authorities are urging caution after mosquitoes in the area of Markham, Ont., tested positive for the West Nile Virus.

Authorities urge caution after mosquitoes near Toronto test positive for West Nile One mosquito bite can cause West Nile Virus

Mosquitoes from hell: Why you shouldn't go outside unless you're prepared to get eaten alive

The mosquito is also approved to be released into Harris County, Texas, beginning in 2021, according to Oxitec. The permit requires Oxitec to notify state officials 72 hours before releasing the mosquitoes and then conduct tests for at least 10 weeks to make sure no female mosquito reaches adulthood. This will be the second time that these mosquitos will be field tested. Oxitec conducted their first tests in May 2018, releasing the mosquitos into four separate communities in the city of Indaiatuba, Brazil and monitored the population for a year, reporting high success rates for all four communities.

Prior to 0X5034, the company had developed another male mosquito, named 0X513A which was programmed to die before adulthood. The plan was to allow them to live and mate with other female mosquitos and whatever offspring was produced as a result would inherit the "kill" gene and die, limiting population growth. OX513A was tested in the Cayman Islands, Panama and Brazil and the firm reported a large success rate for each trial.

 $\frac{https://nationalpost.com/news/world/jurassic-park-experiment-florida-state-government-to-release-millions-of-gmo-mosquitos-despite-public-backlash}{}$

United States

Covid-19 Live Updates: U.S. Takes Steps to Protect Older People for Flu Season and Increase Child Vaccination Rates

Source: NYTimes.com Feed

ID: 1007673347

U.S. health agencies announce moves to confront the flu season and plummeting child vaccination rates. Two top U.S. health agencies have announced tangible steps in trying to confront health issues that are byproducts of the coronavirus pandemic — plummeting childhood vaccination rates and concern about the approaching flu season.

The Department of Health and Human Services is giving permission to pharmacists nationwide to administer all scheduled shots to children as young as three — including boosters for measles and other diseases — a step that makes immunization more convenient for parents. The flu vaccine is also an available option for children.

Protecting against the impending flu season in the United States is foremost in the minds of public health officials, who worry about the confluence of cases of flu and Covid-19 hitting hospitals this fall and winter. And the Centers for Disease Control and Prevention said on Thursday that a high-dose flu shot aimed at better protecting people 65 and older will guard against four strains of the virus this year, rather than three.

On Wednesday, Massachusetts announced that it will require all students, ranging from six-month-olds in day care centers to those under 30, to get flu shots by Dec. 31. It is the first state to institute such a sweeping requirement for the shot, which is rarely mandated in the U.S.

Usually, public health officials recommend that people get flu shots between the middle of September and the end of October. Because immunity can take up to two weeks to take effect, the goal would be to have people fully protected in time for the onset of the holiday season, when travel and indoor gatherings make the risk of infection with the flu virus exponentially more likely.

This year, because restrictions imposed by the pandemic have shuttered workplaces and school health clinics where millions get their shots, officials have loosened their timing recommendations.

Although pharmacies nationwide are ramping up their ability to administer the shots, access could still be difficult for many people. In that event, say many public health experts, just get the shot as soon as you reasonably can.

The new emergency rule allowing state-licensed pharmacists to give federally scheduled vaccines to children ages 3 through 18 is supposed to encourage widespread immunization as schools open during the pandemic and to resolve a patchwork of state laws that govern shots and age limits.

Florida becomes the fifth state to cross a grim threshold: More than 10,000 deaths related to the virus. The state of Florida reached a grim threshold on Thursday as its death toll from the coronavirus exceeded 10,000 people, according to a New York Timesdatabase.

Florida is the fifth state to report 10,000 or more deaths. The others are New York, New Jersey, California and Texas.

It was a widely expected inflection point. Florida, as of Thursday morning, had identified more than 588,000 cases, and while the number of new cases per day has declined since mid-July, the state is still identifying more than 4,700 new cases per day, on average, in the last seven-day period ending Wednesday.

Public and private-sector efforts to navigate the continuing crisis have been closely scrutinized in the United States's third most-populous state, where a quarter of the state's population of more than 21 million is older than 60.

Gov. Ron DeSantis, a Republican, was criticized for waiting until April 1 to issue a statewide stay-at-home order, after many states had done so. Disney World opened to visitors in July, but the Republican National Convention in Jacksonville was canceled. And last week, more than a dozen counties reopened their schools in accordance with a statewide order for all schools to offer in-person instruction by the end of the month.

The state's most populous county, Miami-Dade, has suffered the largest number of cases, with 1 in 18 people testing positive.

Mr. DeSantis has stressed that the state's virus crisis is largely limited to the very old. But the disease appears to be taking a relatively small but increasing toll on the young: More Floridians in the 25-44 age group died in July than had died in the previous four months of the pandemic combined, a review of Florida Department of Health data shows. Records also show the people who died from the virus in Florida among the young were disproportionately Black.

Nationwide, the pandemic has killed so many Americans that the patterns of death in nearly every state look aberrant when compared to recent history. Nationwide, 223,900 more people have died than usual from March 15 to Aug. 8, according to Centers for Disease Control and Prevention estimates.

A test that gives results in minutes gets the F.D.A.'s emergency authorization.

The Food and Drug Administration has granted emergency use authorization to a coronavirus test made by a British company that gives results in about 12 minutes.

It is an antigen test, the third one of that type that the F.D.A. has authorized.

Antigen tests work by rapidly detecting fragments of virus in a sample. They are speedy, but they tend to miss more infections than do slower tests based on a technology called polymerase chain reaction, or P.C.R.

In its authorization letter to LumiraDx, the British company, the F.D.A. noted that negative results from the antigen test do not rule out Covid-19 infection, and that a positive test should not be used as the sole basis for treatment.

The new test, which must be administered by a health care professional, is performed using a brick-sized device made by LumiraDx, and depends on swab samples collected from a patient's nasal cavity. It is intended to be used for patients who have developed symptoms of Covid-19 within the past 12 days; the authorization does not address using it to screening people without symptoms.

"Actionable diagnostic results at the point of care lead to better health outcomes," said Ron Zwanziger, chief executive of LumiraDx, in a statement. The company said it would start shipping the tests by the end of August, and produce 10 million tests by December.

A spokeswoman said that LumiraDx was also seeking F.D.A. emergency use authorization for a coronavirus-antibody test that could be performed using the same machine. Antibody tests indicate whether someone has been exposed to the virus in the past, not whether they are currently infected. 'I just don't know if I can do it alone': School nurses are a rarity in some places in the U.S. School nurses were already in short supply in the United States, with less than 40 percent of schools employing one full-time before the pandemic. Now those overburdened health care specialists are finding themselves on the front lines of a risky, high-stakes experiment in protecting public health as districts reopen their doors amid spiking caseloads in many parts of the country.

The American Association of Pediatrics recommends that every school have a nurse on site. But before the outbreak, according to the National Association of School Nurses, a quarter of American schools did not have one at all. And there has been no national effort to provide districts with new resources for hiring them, although some states have tapped federal relief funds.

Washington State is one of the places where nurses are a rarity in school hallways, with only 7 percent of schools employing one full-time, and nearly 30 percent of districts having one available for six hours or less per week. As the lone nurse for her school district in central Washington State, Janna Benzel will monitor 1,800 students for virus symptoms when classrooms open later this month, on top of her normal responsibilities like managing allergies, distributing medications and writing hundreds of immunization plans.

"I'll have to go to these schools and assess every sniffle and sneeze that could potentially be a positive case," she said. "I just don't know if I can do it alone."

In some places, administrators have been scrambling to get more nurses into schools before the academic year. New York City, the nation's largest district and one of the few big cities in the country still planning to physically reopen its schools on the first day back, went on a hiring spree after the city's powerful teachers' union said their members should not return to classrooms without a nurse in each of the city's roughly 1,300 school buildings.

Mayor Bill de Blasio said last week that the city had finally secured enough nurses to fulfill that demand, less than a month before the scheduled start of in-person instruction.

"It's weird that it takes a pandemic for people to be like, 'Oh look at that, what you do is useful," said Tara Norvez, a school nurse in Queens. Ms. Norvez said that she is looking forward to the start of the school year, as long as there is enough personal protective gear and other safety measures in place. Researchers are testing an experimental drug to halt sudden outbreaks in U.S. nursing homes. Nursing home residents make up just 1.2 percent of the U.S. population, but they account for about 40 percent of Covid-19 deaths.

But when the virus crept into Heartland Health Care Center in Moline, Ill., on the last day of July, the nursing home was not defenseless. Heartland was the first facility to participate in a large clinical trial of a drug that might protect residents from the infection in nursing homes and assisted living facilities. Drug companies and the federal government often avoid testing drugs in older people, even if they are the ones who need treatment most. The elderly may have a range of complicating conditions that make it difficult to tell if the drug is working, and nursing home and extended care facilities are governed by a raft of complex regulations regarding privacy and access.

Experts say the new research, sponsored by Eli Lilly and the National Institutes of Health, is among the first large clinical trials to involve nursing home residents. And the scientists are delighted.

"These patients are so underserved," said Dr. Rebecca Boxer, medical director of clinical trials at the Kaiser Permanente Institute for Health Research in Colorado. "They do not get access to innovative new drugs and trials."

The experimental drug is a monoclonal antibody, an artificially synthesized version of coronavirus antibodies produced by the body. In this case, the antibody was "cloned" from those found in the blood of a Seattle man, one of the first patients to survive Covid-19, the illness caused by the coronavirus. Monoclonal antibodies are one of the great hopes in the war on the coronavirus. They already serve as the basis for effective treatments for arthritis, cancer, lupus — even Ebola. They are difficult to manufacture, however, and expensive.

Still, two companies, Regeneron and Eli Lilly, have forged ahead with clinical trials. The trial in nursing homes is pivotal to Eli Lilly's effort to determine whether its version can stop the coronavirus. 1.1 million U.S. workers filed new claims for state unemployment benefits last week.

About 1.1 million American workers filed state jobless claims last week, the Labor Department said on Thursday, an increase after two weeks of declines and a reminder that the labor market remains fragile five months into the pandemic.

"We won't see a renewal of hiring until the pandemic is under much better control," said Carl Tannenbaum, chief economist at Northern Trust in Chicago. "We have made substantial and rapid improvement in the last three months, but improvement from here will prove slower and more difficult." There were 543,000 new claims last week for Pandemic Unemployment Assistance, a separate program aimed at self-employed people, gig workers and others not covered by traditional unemployment benefits. The crosscurrents in the economy are striking. The unemployment rate remains dangerously high at 10.2 percent, and sectors like leisure and hospitality are experiencing huge losses in employment. Hotels and airports are nearly empty and many restaurants remain closed.

But home building is booming and retail sales are back to levels that preceded the pandemic. The stock market is hitting record highs.

And economists warn that conditions could easily deteriorate if Washington doesn't offer more support. Republicans and Democrats have been unable to agree on a new coronavirus relief package to augment the CARES Act, passed in March. A \$600 weekly federal supplement to state unemployment insurance expired at the end of last month, and a \$300-a-week replacement engineered by President Trump is having trouble getting off the ground, with only 11 states so far participating.

"Federal support is crucial to underpinning the virtuous cycle we've had," said Michael Gapen, chief U.S. economist at Barclays. "The longer negotiations stall, the more likely there will be a hiccup in spending." Elsewhere in the United States:

- * A survey of nearly 2,200 members of the largest federal employees' union found that more than 70 percent of those who have returned to on-site work felt their agencies were not keeping them safe. The report, which was prepared by the union and released Wednesday, comes as many federal agencies have begun directing employees who had been working remotely at the beginning of the pandemic to return to offices. Only 56.2 percent of those surveyed said their employers had provided adequate personal protective equipment.
- * Dr. Anthony S. Fauci, the government's top infectious disease expert, underwent outpatient surgery on Thursday morning to remove a polyp from his vocal cord, and is now resting at home. In a brief text exchange, Dr. Fauci said he underwent general anesthesia and is "doing fine." Dr. Fauci's voice had been showing notable strain in recent months in part, he has surmised, because he was doing so much talking but he had been putting off treatment because of his busy schedule.
- * North Dakota reported on Thursday 274 new cases, a single-day record for the state.
- * While the moving industry is fractured among numerous small-business owners, and official statistics are tough to come by, one thing is clear: From professionals who are downsizing following a job loss, to students moving back in with their parents, to families fleeing the city for the suburbs, New Yorkers are changing their addresses in droves.

The U.S. Virgin Islands halts tourism as cases surge.

The U.S. Virgin Islands is halting visits by tourists for a month, shutting nonessential businesses and restoring stay-at-home orders, while struggling with some of the highest per capita case numbers in the United States.

The territory, which includes the Caribbean islands of Saint Croix, Saint John and Saint Thomas, registered 165 cases over the last seven days as of Thursday, bringing the total number of cases to 869. Those figures position the U.S. Virgin Islands behind only Texas in the ranking of states and territories where per capita cases are climbing fastest. The territory, whose economy relies heavily on tourism, had reopened for leisure visitors on June 1.

Gov. Albert Bryan Jr. announced last week that as of Wednesday, hotels and Airbnb operators are prohibited from accepting new guests for 30 days. Mr. Bryan also ordered bars, nightclubs and cabarets to shut down until Aug. 31.

The territory, which has 103,000 residents, was already trying to bounce back after being hit in 2017 by two Category 5 storms, Irma and Maria. Tourism, which accounts for a third of the U.S. Virgin Islands economy, is the territory's largest source of employment.

Hit early and hard by the virus, Iran is in the midst of a second wave.

Iran's health ministry announced Wednesday that it had reached 20,000 deaths from the virus, but health experts inside and outside Iran — and even members of the Iranian Parliament — suggest that the number may be many times higher.

To understand what's going on, Farnaz Fassihi, who covers Iran for The Times, answered some pressing questions and painted a picture of an outbreak still out of control.

What's the situation in the country?

It's very bad. It's in the thick of a second surge worse than the first one in March. The majority of provinces, including the capital, Tehran, are "red zones." Doctors are saying hospitals and I.C.U. beds are full. At the same time, there are some restrictions for public gatherings but, generally, it's open for business

Even by the government's own numbers, cases are on the rise. What happened?

They opened too soon. When the virus first arrived in the country, they closed down for just two weeks during the New Year holiday in mid-March. They didn't meet any of the benchmarks when they reopened. There's no contact tracing. There's no quarantine.

What are Iranians feeling?

In the early months, people were very scared. They were self-isolating and staying home and not sending their kids to school, even when the schools were still open. But I think as time has passed, like a lot of places, we see that people are becoming more reckless.

There's also a nuanced dynamic here. This is a government that for 40 years has told people what to do, how to dress, how to behave — and many people's mind-set is to always defy what the government says. So now, when there's a pandemic, and the government tells them, "Stay home, wear a mask," they're like: "No. We don't trust you. And you don't tell us what to do."

And so for Iran, I think the challenge to contain a pandemic may be greater than it is for other countries because the government is dealing with 70 million people whose default mode is to defy it. New York will allow voters to cast mail-in ballots.

New York State will allow most voters to cast their ballots by mail in the November general election, joining a growing list of states that have expanded mail-in voting to address the potential spread of the virus at polling places.

Gov. Andrew M. Cuomo, a third-term Democrat, signed a bill on Thursday allowing voters to request an absentee ballot if they cannot show up at a polling location because of the risk of contracting or spreading an illness, effectively permitting the state's more than 12 million registered voters to vote by mail. But with only 10 weeks until Election Day, the challenges of administering an election predominantly by mail will be especially pronounced in New York, following the state's uneven handling of its primary just two months ago.

To ease the blow of an influx of mail-in ballots, officials are encouraging voters to cast their ballots in person at early polling sites, which open statewide on Oct. 24.

Absentee ballots will not be mailed automatically to voters in New York, as will be the case in at least nine other states. Instead, voters in New York will have to request a mail-in ballot online, over the phone, in person or by mail. Voters could immediately apply for a mail-in ballot. The deadline to apply by mail is Oct. 27, although officials are urging voters not to wait until the last minute. Ballots need to be postmarked by Election Day.

Election officials are encouraging voters to apply for a ballot online, rather than by mail, to expedite the process of mailing ballots to voters The state's Board of Elections is expected to unveil an online portal by the end of the month.

Southern India emerges as a hotbed for new infections in the country.

India's coronavirus crisis is now spreading to the hinterlands along its southern coastline.

The country recorded at least 69,000 new cases on Wednesday, its largest daily caseload of the pandemic, and nearly a thousand deaths, according to a New York Times database and the ministry of health. The South Indian states of Andhra Pradesh, Karnataka and Tamil Nadu now account for nearly a third of new cases in the country.

After nearly three months in lockdown, millions of migrant workers, who over the years had gravitated to jobs in the cities, have recently been pouring back into the countryside. Many of them have become carriers of the virus, epidemiologists say.

Officials in Andhra Pradesh state, which has a total of 316,003 cases, one of the highest in the country, said fishermen arriving from the neighboring state of Tamil Nadu also contributed to the high case numbers, the BBC reported.

Monsoon rains have forced thousands of people in villages to seek shelter in cramped spaces, often shared by several others.

India has the world's third-highest caseload after the United States and Brazil, but the actual numbers are thought to be much higher because of limited testing and contact tracing.

"The number of cases which we are reporting are only the tip of the iceberg," said Dr. Jayaprakash Muliyil, a former professor at the Christian Medical College in Vellore, and a member of the national Covid-19 task force.

Despite the surge in cases, B. S. Yediyurappa, the chief minister of the southern state of Karnataka, announced this week that his government would allow gatherings of up to 20 people for an upcoming Hindu festival because of the "religious sentiments" of its people. Mr. Yediyurappa tested positive for the virus this month.

Some public health information exceeded recommended reading levels, a study finds.

Throughout the pandemic, coronavirus-related slogans have been everywhere.

In Britain: "Stay alert. Control the virus. Save lives."

The French issued a similar plea: "Save lives. Stay prudent."

In the Netherlands, the government has urged people to act "together against Corona" and talked about an "intelligent lockdown."

They're not just catchy phrases in a time of crisis. They make a difference, and they should be readily understandable for people of all reading levels.

A study by the JAMA Network that looked at the language used in April about the pandemic on websites of international agencies as well as the governments of 15 countries found that in most cases, the language exceeded the recommended eighth-grade reading level, using complex syntax and technical terms.

All of the websites in the study — including those of the Centers for Disease Control and Prevention, the World Health Organization, and governments around the world — shared at least some information that exceeded the recommended reading level, according to the study.

Not adhering to readability standards could have a bigger influence on communities with lower health literacy, the study found, "potentially exacerbating the disparate effects of the pandemic."

As a result, the study concluded that governments and institutions should "focus on the urgent development of plain-language Covid-19 resources that conform to established guidelines for clear communication and are more accessible to all audiences."

Of those websites the JAMA Network examined, the information from the Netherlands used the most accessible language overall, while Italy used the most complex.

North Korea admits that the pandemic hurt its economic plans.

North Korea said on Thursday that the triple punches of the pandemic, international sanctions and flood damage had significantly delayed plans to improve the country's economy.

During a meeting in Pyongyang, the capital, the Central Committee of the Workers' Party attributed the delay to "severe internal and external situations and unexpected manifold challenges," and noted that people's living standards had "not been improved remarkably."

The assessment was an unusual admission by the isolated country that its economic plans had faltered. When Kim Jong-un, the North's leader, took power after the death of his father in 2011, he vowed to ensure that his people would "never have to tighten their belt again."

In 2016, when Mr. Kim adopted his economic plan, the North's economy grew 3.9 percent, the highest since a devastating famine hit the country in the late 1990s, according to estimates by South Korea's central bank, the Bank of Korea.

But as the United Nations tightened sanctions, the North's economy shrank 3.5 percent in 2017, according to the Bank of Korea. It contracted 4.1 percent the following year, with its exports to China plummeting 86 percent.

North Korea's economy recovered slightly last year, growing 0.4 percent, as Pyongyang invented ways of easing the pain of the sanctions, such as smuggling banned cargo across the Chinese border or between ships on the high seas.

But this year, the coronavirus forced the country to shut down the border with China, which had accounted for more than 90 percent of the North's external trade. North Korea's exports to China plummeted to \$27 million in the first half of this year, a 75 percent drop from a year earlier, according to the Korea Institute for National Unification in Seoul. Imports from China dropped 67 percent, to \$380 million

In other developments around the world:

- * A large virus outbreak in South Korea linked to a church is spreading through Seoul and beyond, threatening the country's success in fighting the pandemic. The Sarang Jeil Church attracts politically active conservatives who oppose the country's liberal president, Moon Jae-in. Mr. Moon has accused his most vocal critics of spreading the infectious disease and putting the entire nation in danger; conservative activists, in turn, have accused him of trying to scapegoat the church to divert attention from his weak approval ratings.
- * Health officials in China issued new guidelines on Thursday that exempt residents of Beijing, the capital, from wearing masks outdoors unless they come into close contact with strangers. The country has reported fewer than 300 infections over the past week, according to a New York Times database.
- * In a tweet, Hua Chunying, a spokeswoman for China's Foreign Ministry, weighed in on images of a recent pool party in Wuhan the city where the pandemic began that have touched a nerve in countries where many people remain under lockdown. "The city only emerges stronger," she wrote. Global Times, a popular state-run tabloid, also said that international criticism of the party amounted to "foreign sour grapes."

Democratic Republic of Congo

Ebola infects 7 more in DRC outbreak; total climbs to 96 cases, 42 deaths

Source: CIDRAP ID: 1007673608

Seven more Ebola cases have been confirmed in the Democratic Republic of the Congo (DRC) outbreak in Equateur province, raising the total to 96, the World Health Organization (WHO) African regional office said on Twitter today.

Also, 5 more deaths were reported, raising the fatality count to 42.

The outbreak has been growing at a slow but steady pace of about one or two cases a day, and it's unclear if the spurt of cases today reflects increased activity or the result of a recent 3-day strike by health workers in the region. The WHO, however, raised concerns about several aspects of the outbreak, including its wide geographic spread and that confirmed case-patients have remained in the community. The outbreak has been under way since early June and is occurring in the same area where an event in 2018 resulted in 54 cases, 33 of them fatal.

https://twitter.com/WHOAFRO/status/1296416713362354178 https://www.cidrap.umn.edu/news-perspective/2020/08/news-scan-aug-20-2020

Namibia

Namibia continues to battle with Hepatitis E cases as focus shifts to COVID-19 pandemic

Source: News Ghana ID: 1007673670

Namibia has recorded 7,853 Hepatitis E Virus (HEV) cases from September 2017 to July 2020, with the majority of cases still from informal settlements in Windhoek and Swakopmund, according to the Health Ministry statistics availed to Xinhua on Thursday.

The Health Ministry said 65 deaths have been recorded so far of which 26 are maternal deaths.

"Generally there is a downward trend in the number of HEV cases, but there is still a need to improve the water and sanitation across the country," the ministry said.

According to the ministry, to contain the outbreak, there is a necessity to embark upon a pro-active, consistent, and sustained implementation of HEV response activities.

"Even though efforts are diverted mainly to COVID-19 pandemic response, there is a beneficial spillover from the sanitation and hygiene practices of COVID-19 interventions to the hepatitis outbreak control," the ministry added.

Furthermore, the ministry said due to the COVID-19 pandemic outbreak, HEV response seems to have been scaled-down as the Health Ministry and partner organizations have repurposed their staff to focus entirely on the containment of COVID-19 and the National Health Emergency Management Committee meeting does not discuss HEV outbreak anymore.

Namibia declared an HEV outbreak on Dec. 14, 2017, in the Khomas region's Windhoek and the outbreak continued in the region and spread to other regions around April 2018, eventually involving a total of 10 regions.

https://newsghana.com.gh/namibia-continues-to-battle-with-hepatitis-e-cases-as-focus-shifts-to-covid-19-pandemic/

Researches, Policies and Guidelines

United States

CDC updates flu vaccine recommendations

Source: CIDRAP ID: 1007673629

In its latest global flu update that covers the last half of July, the WHO said flu levels are lower than expected for this time of year and noted that COVID-19 activity and response measures may be affecting the usual flu patterns.

Though the Southern Hemisphere's flu season generally runs from May through October, the season hasn't started. Sporadic detections were reported in a few parts of the world, including the Caribbean, Central America, and tropical parts of South America and Africa.

Of about 205,000 flu specimens tested in the last half of July, only 40 were positive for flu, and half were influenza A and half were influenza B. Of the subtyped influenza A viruses, 75% were H3N2. https://www.who.int/influenza/surveillance_monitoring/updates/latest_update_GIP_surveillance/en/

In a related development, the CDC today published in MMWR the latest flu vaccination recommendations for the upcoming season from its Advisory Committee on Immunization Practices (ACIP), which covers updates based on discussions at ACIP's last three meetings.

The CDC has urged all people who are recommended to receive the flu vaccine to be immunized to help reduce symptoms that might be confused with COVID-19 and to reduce the overall burden on the healthcare system over the fall and winter.

The updated recommendations cover two new flu vaccines, both targeted to seniors. One is FluZone high-dose quadrivalent (four-strain), and the other is Fluad Quadrivalent. Other updates include a discussion of using live attenuated influenza vaccine (LAIV) when patients are taking antiviral medications, which might interfere with the actions and effectiveness of the vaccine.

The recommendations note that the newer antivirals peramivir and baloxavir have longer half-lives than other antivirals and could interfere with LAIV replication if given more than 48 hours before vaccination. People who receive LAIV—the nasal spray vaccine—during certain periods may need to be revaccinated with a different type of flu vaccine.

Also, the recommendations for people with egg allergy say that additional measures for people with a history of severe reactions to egg are needed only if a vaccine other than Flucelvax or Flublok are used. https://www.cdc.gov/mmwr/volumes/69/rr/rr6908a1.htm

Japan

Human herpesvirus 6B (HHV-6B): Vaccine developed

Source: outbreaknewstoday.com

ID: 1007674028

A research group led by Professor MORI Yasuko (of the Division of Clinical Virology, Center for Infectious Diseases, Kobe University Graduate School of Medicine) has revealed that the HHV-6B glycoprotein complex gH/gL/gQ1/gQ2 is an effective vaccine candidate for human herpesvirus 6B (HHV-6B). There

are still no methods to treat nor prevent HHV-6B infection, and this study represents the first attempt in the world at developing a vaccine.

The results were published online in the American scientific journal PLOS Pathogens on July 23.

Main Points

Human herpesvirus 6B (HHV-6B) is a pathogen that infects the vast majority of people when they are infants. It not only causes exanthem subitum, with symptoms of a fever followed by a skin rash (roseola) but can also trigger severe complications with lasting after-effects such as febrile convulsions, encephalitis (brain inflammation) and encephalopathy.

Methods to effectively prevent or treat HHV-6B infection have yet to be established. The infection rate is extremely high and great risks are posed by HHV-6B. It is hoped that the realization of a vaccine would enable infants to be inoculated against HHV-6B, resulting in widespread prevention of this virus. This research group previously discovered a HHV-6B glycoprotein complex that is an essential factor in HHV-6B infection. In this study, they utilized this complex as a vaccine antigen and analyzed its effectiveness.

The research group inoculated mice with the purified virus antigen combined with immunostimulants known as adjuvants, demonstrating that this induced effective immunity against HHV-6B. Furthermore, the combination with the adjuvants was also shown to induce cellular immunity.

These successful results are a big step towards the realization of a safe and effective vaccine for HHV-6B. It is hoped that this research can proceed to clinical trials.

Research Background

Human herpesvirus 6B (HHV-6B) is passed on to infants via the saliva of family members etc., causing exanthem subitum which has symptoms of a fever over 38°C followed by a rash all over the body (roseola). The overwhelming majority of people are infected with HHV-6B. The infection period is between 6 months and 2 years of age; this coincides with the diminishment of antibodies received from the mother.

In most cases, infants recover without experiencing any serious symptoms, however severe complications can occur. For example, it has been reported that in Japan, around 150 infants a year suffer encephalitis or encephalopathy, resulting in lasting aftereffects in around half of this number. Therefore, it is essential to develop a vaccine to protect infants from HHV-6B infection, as there is currently no established treatment nor preventative measures against the virus.

Previously, Professor Mori's research group discovered the glycoprotein complex gH/gL/gQ1/gQ2, which is expressed on the HHV-6B virus's surface. They also revealed that the interaction between this complex and CD314 (OX40), which is expressed on stimulated T-cells, is the key to infection (Figure 1). An antibody that targets the gH/gL/gQ1/gQ2 complex would be able to prevent HHV-6B infection. Therefore, the group is also conducting research into generating antibodies that can be used on humans from mice antibodies.

From this accumulated knowledge and experience came the following idea: an efficient immune response against HHV-6B infection could be achieved if inoculation with the gH/gl/gQ1/gQ2 complex induced immunity against the complex.

Research Findings

The researchers developed a vaccine based on the HHV-6B gH/gL/gQ1/gQ2 complex. (A Patent Application for the vaccine has been filed by the BIKEN Foundation and Kobe University (Patent Application No. 2017-509816)). They generated the gH/gL/gQ1/gQ2 complex via genetic modification techniques. This complex was utilized as the vaccine antigen and mice were inoculated with this in combination with an adjuvant, and immunity induction was analyzed.

The HHV-6B gH/gL/gQ1/gQ2 complex is a complicated molecule constructed in a cell with four types of protein. A method was developed to grow this complex in a cultivated cell in which all the proteins are

expressed at the same time. It was confirmed that the HHV-6B gH/gL/gQ1/gQ2 complexes generated using this method still retained their function of binding to their target receptor molecule, CD134 (OX40).

The complex was combined with the adjuvant aluminum hydroxide (abbreviated to Alum), which is widely used in current vaccines, and administered to mice in several doses. The immune response was analyzed; the results confirmed there were vaccine induced antibodies against the gH/gL/gQ1/gQ2 complex in the serum of the mice, and their serum had actually prevented HHV-6B from infecting the cells. Furthermore, it was shown that the glycoprotein complex itself had activated dendritic cells, inducing innate immunity.

Furthermore, a vaccine with a combination of oligonucleotide D35 (which can induce cellular immunity) and its transporter, the DOTAP lipid, as adjuvants in addition to Alum was developed. This vaccine was demonstrated to induce an even stronger antibody response. Spleen cells were extracted from mice after the immunity experiments and the immune cell responses to the gH/gL/gQ1/gQ2 complex were investigated. The results showed a stronger response to the antigen in the group inoculated with the Alum/D35/DOTAP combination and confirmed that cellular immunity was induced. Additional analysis results revealed that CD4 T-cells were the main responders to the antigen.

The researchers also investigated whether or not the induction of serum antibodies via inoculation with the gH/gL/gQ1/gQ2 complex actually prevented HHV-6B infection in animals (Figure 3). This experiment utilized immune cell-humanized mice (*5) to develop an animal model of HHV-6B infection. As a negative control, humanized mice were administered with serum from mice that had been given a vaccine containing only the adjuvant. The humanized mice were then injected with HHV-6B. The virus proliferated internally and many virus antigens were detected in the spleens of the negative control group.

On the other hand, the virus did not proliferate in humanized mice that received prior administration of serum from mice who were inoculated with the vaccine containing the gH/gL/gQ1/gQ2 complex. Also, there were hardly any virus antigens in the spleens of these humanized mice. This demonstrates that the induced immunity from the vaccine is efficient against HHV-6B infection in mice.

Further Developments

Effective treatment and preventative methods for HHV-6B infection have yet to be established despite the latent risks that it poses to the health of all infants. The results of this research represent a huge step towards the efficient prevention of HHV-6B infection with a vaccine. It was demonstrated that this vaccine, which used the gH/gL/gQ1/gQ2 complex as an antigen, efficiently induced an immune system response. Also, the vaccine is promising from a safety aspect as it is a subunit vaccine (*6) that does not contain other virus-derived molecules, aside from the complex. Currently, many infants are given a combined inoculation against four diseases called the DPT-IPV vaccine (D: Diphtheria, P: pertussis, T: tetanus and IPV: inactivated polio virus) at 3 months of age. It is hoped that HHV-6B inoculation could be added to this vaccine to prevent infants from contracting it.

After infection, HHV-6B remains latent inside its host for their entire life. It can be reactivated by conditions such as drug-induced hypersensitivity syndrome or a decline in immunity, and has been reported to trigger various illnesses. In particular, this as a problem when hematopoietic stem cell transplants are used to treat leukemia, leading to a high frequency of HHV-6B reactivation which can cause life-threatening encephalitis. The vaccine developed by this study, when combined with adjuvants, not only grants humoral immunity (*7) but can also induce cellular immunity. In other words, this vaccine can induce a strong immune response to HHV-6B. It is believed that it could also be used to suppress the HHV-6B infection in those undergoing hematopoietic stem cell transplants.

Next, the researchers will build upon these results, collect data on the effectiveness and safety of the vaccine and then proceed to clinical trials. They aim to bring a pioneering HHV-6B vaccine developed in Japan to the world.

http://outbreaknewstoday.com/human-herpesvirus-6b-hhv-6b-vaccine-developed-45412/