Special section on Coronavirus

Canada

Areas in Canada with cases of COVID-19 as of 05 October 2020 at 19:00 pm EDT Source: Government of Canada

Province, territory or other	Number of confirmed cases	Number of active cases	Number of deaths
Canada	168,960	17,122	9,504
Newfoundland and Labrador	277	4	4
Prince Edward Island	61	3	0
Nova Scotia	1,089	3	65
New Brunswick	203	5	2
Quebec	79,650	7,586	5,884
Ontario	54,814	5,474	2,980
Manitoba	2,191	739	23
Saskatchewan	1,968	143	24
Alberta	18,935	1,783	280
British Columbia	9,739	1,382	242
Yukon	15	0	0
Northwest Territories	5	0	0
Nunavut	0	0	0
Repatriated travellers	13	0	0

A detailed <u>epidemiologic summary</u> is available.

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

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

Canada

Nunavut confirms outbreak of COVID-19 at Hope Bay mine

Source: CBC | North News

ID: 1007981501

The Nunavut government confirmed seven new positive cases of COVID-19 at the Hope Bay mine on Monday, bringing the total number of confirmed cases to nine.

In a news release Monday, the government also announced a new total of four presumptive cases at the mine.

Two cases were confirmed at Hope Bay in late September, and as of Friday the government was waiting on confirmatory testing for eight presumptive cases, with more tests expected to be processed over the weekend.

The territory's chief public health officer said in a news conference on Friday that the cases might count as Nunavut's first because transmission likely occurred in the territory, but that would be decided in conversations with the home jurisdictions of the infected people.

Whether these cases will count toward Nunavut's total is still being worked out, according to a government spokesperson.

The first two confirmed cases of COVID-19 at Hope Bay mine did not count toward Nunavut's case numbers because those infected were non-residents who were exposed in their home jurisdictions prior to travelling to the mine.

No non-critical travel to mine

TMAC Resources Inc. owns the Hope Bay mine, which is 125 kilometres southwest of Cambridge Bay. All non-critical travel to and from the mine remains on hold and 12 people are still in isolation at the mine site.

Nunavut's rapid response team was sent to perform contact tracing at Hope Bay and is expected to leave mid-week. The team will be expected to isolate in their homes upon their return.

Nunavut Health Minister George Hickes reiterated on Monday that there were no Nunavut residents working at the Hope Bay mine and that the risk to Nunavummiut is "very low."

Including these cases, there have been at least 10 confirmed cases of COVID-19 at northern mines.

A case was confirmed at Mary River mine, 176 kilometres southwest of Pond Inlet, Nunavut, on Sept. 21, and two cases were confirmed at Northwest Territories' Diavik Diamond Mine this summer.

Restrictions eased for restaurants, sports, museums

Meanwhile, the government of Nunavut also announced on Monday that it's eased restrictions on group sizes, in time for Thanksgiving.

Indoor gatherings are now capped at 15 people, in addition to the members of a household. Outdoor gatherings, previously capped at 50, are now permitted to be 100 people.

Restaurants and bars are now allowed to open to 75 per cent capacity, up from 50 per cent capacity, but still only six people are allowed per table and tables must be two metres apart.

Bars can also return to regular business hours.

Group fitness classes will now be allowed as long as they are capped to 25 people per class, or 50 per cent of the room's capacity.

Arenas and recreational sport facilities can open up as long as they don't exceed 50 people playing at a time, or 50 per cent of the facility's capacity. A total of 50 people are allowed to watch a game.

Libraries, museums and galleries are permitted to open at 50 per cent capacity.

A previous public health order allowed one to two visitors for residents at long-term care and medical boarding homes. The new order allows for two visitors. Those visitors must be from their immediate family and must wear masks or face coverings.

These new measures took effect on Monday.

https://www.cbc.ca/news/canada/north/nunavut-first-covid-19-cases-hope-bay-mine-1.5742471?cmp=rss

Canada

B.C. is flattening the curve again despite 'second wave,' according to top doctor

Source: citynews1130.com

ID: 1007981015

B.C. reported 358 new cases of COVID-19 over the past three days, as well as four more deaths

Henry said more than 60 schools have reported exposure events, including the first on Vancover Island this last weekend

Case rates remain low among school-age children, with only seven in 1,000 testing positive for COVID-19: Henry

VICTORIA (NEWS 1130) — British Columbians are again flattening the COVID-19 curve, while school exposures continue and other parts of Canada struggle with a second wave. "We are flattening our curve," Provincial Health Officer Dr. Bonnie Henry said Monday as she presented fall modelling data.

"And it's important for the health of our communities that we continue to do this, so that our businesses can stay open, our restaurants can stay open, so our all-important schools for children can stay open. And it's through our contact tracing we've seen that the majority of new cases are still connected, that we're not seeing a lot of uncontrolled transmissions."

Henry reported 358 new cases of COVID-19 over the past three days, as well as four more deaths, all in the Lower Mainland. Earlier in the day, the Fraser Health Authority announced a partial closure of Delta Hospital, where seven people have died from COVID-19 since Sept. 16 and as many as 36 patients and staff have become infected.

Henry also confirmed outbreaks at three care homes — Langley Lodge, White Rock Seniors Village, and in Chartwell Crescent Gardens — as well as one at Delta Distribution, a packaging facility where 23 employees initially tested positive for COVID-19.

The modelling data, however, shows cases in B.C. have increased since the middle of July. The majority of cases remain related to local acquisition through a known case or cluster, although Henry said some continue to be linked to international travel, as well as temporary foreign workers entering the province.

She pointed out the number of cases currently in hospital is lower than in April. "As you can see, we've gone up since our nadir in August, but we've levelled off and we have a consistent lower number of people in hospital now than we did earlier on in our first wave."

Henry also said, even with students returning to schools last month, the majority of cases continue to be in the 20-29 and 30-39 age groups.

"The population under age 10 is about 10 per cent of the population and only represents less than five per cent of our cases," she added. "And the population 10 to 19, again, is underrepresented, even though we're doing increased testing in that age group in the past month."

Henry also said few people under 19 who contract COVID-19 require hospitalization.

"We've had no young people who've required ICU care and thankfully we've had nobody died in that age group. The hospitalizations are less than one per cent."

Since September, when about 500,000 students returned to school, the province has increased testing rates, while two-thirds of those are using the new spit-and-gargle variety.

Henry said more than 60 schools have reported exposure events, including the first on Vancouver Island this last weekend, but no schools have reported outbreaks.

"So what we're not seeing is schools amplifying transmission in the community," she added, although several full classes have been asked to go home since the start of school

Henry said case rates remain low among school-age children, with only seven in 1,000 testing positive for COVID.

"And, as we know, many children are requiring a test because they have symptoms and this tells us that there are other things causing those symptoms that are circulating in our communities right now, including

some of the cold viruses and and regular things that we see this time of year that can cause coughs and colds and runny noses and and fevers and children."

While the province has seen a marginal increase in COVID-19 cases involving school-aged children since the return to school, Henry said those are also levelling off.

B.C. on track for 'explosive' COVID-19 growth, says top doctor

"At this time, most of the school exposures are also related to exposure events that happened outside of the school setting. And we know that from, especially early on, where people were unrecognized and then spent some time in the schools, and so we'll be monitoring very carefully. Now that we've moved in to pass that first incubation period and we'll continue to work with schools to identify any exposures," she said.

"What we can see, though, is that the proportion of COVID-19 cases by week in school-aged children remains low, and less than 10 per cent, and that has been consistent in the three to four weeks since schools have opened."

Testing rates have also increased in the province by 15 per cent in the past week, including an average of 10,000 a day over the weekend.

The positivity rate among tests is less than two per cent, although Henry said the increase in testing has slowed down the time results can be relayed.

Henry said the reproductive number — the number of infectious contacts each case generates — for B.C. is again below one.

"Which is where we want to be."

Henry credited measures to close nightclubs and banquet halls and limit the hours restaurants and pubs can serve alcohol for helping flatten the curve again in B.C.

"So our growth rate is decreasing, which means that we are having safe connections in our communities now," she said.

"So our number of contacts that we're having where we can potentially transmit the virus has decreased. This is incredibly important. And it's a testament to the work that everybody has been doing in B.C. It also reflects the fact that public health has been working very carefully with every single case to identify the exposure events to make sure that people who have been exposed, who might develop illness, are isolated safely and supported."

Henry said the average rate of infectious contacts currently estimated to be 45 per cent of normal.

"That's where we need to stay."

The modelling data show daily case rates surgingin Quebec, Ontario, Alberta and Manitoba, but declining in B.C. Prime Minister Justin Trudeau declared a second wave is underway in Canada's four most populous provinces late last month. Henry, however, called it a second surge.

"We are flattening our curve," she said.

Of the new cases, 130 happened from Friday to Saturday, while 108 occurred during the following 24-hour period, followed by 120 in the one ending Monday.

Outbreaks remain active at 19 health-care facilitites.

Henry said a third outbreak at Holy Family Hospital, a long-term care home in Vancouver, has been declared over.

https://www.citynews1130.com/2020/10/05/b-c-is-flattening-the-curve-again-despite-second-wave-according-to-top-doctor/

Canada

Trudeau promises federal help for COVID hot spots in Quebec, Ontario, Alberta

Source: CBC ID: 1007981001

Prime Minister Justin Trudeau today promised more support for local public health units in emerging COVID-19 hot spots — some of which are struggling with testing backlogs and a contact tracing system that can't keep up with the number of new cases being reported.

Trudeau told reporters that the government has signed agreements with Alberta, Ontario and Quebec to supply federal bureaucrats to help those provinces with their contact tracing — the process of connecting with people who may have been in close contact with a positive case of the novel coronavirus.

Contact tracers urge those who may have been exposed to self-isolate or get a test to avoid further spread — but their work can be undermined by delays in contacting those at-risk people.

Most of the federal employees tasked to provincial contract-tracing efforts are being pulled from Statistics Canada.

"Contact tracing is extremely effective in terms of tracking down cases, especially if it's done in a very timely manner," Trudeau said. "Once you start getting into backlogs, apparently, it becomes more difficult to have contact tracing be as effective."

Trudeau said 500 public servants will be on hand to support Ontario's tracing efforts, with 30 tracers specifically assigned to the city of Ottawa.

The nation's capital has emerged as a hot spot in the province. The Ottawa public health unit warned last Friday that the system is at a breaking point; dozens of new cases are being reported each day, each with a list of possible contacts to track down.

"Our health care system is in crisis. Labs are working beyond capacity, causing dangerous backlogs, which affects our contact tracing & case management. Hospitals are nearing capacity, and we're seeing more outbreaks in LTC homes. Our system can't handle much more of this," the Ottawa public health unit said in a tweet.

Toronto Public Health, which is also grappling with a sharp increase in cases in recent weeks, said it would dial back its contact tracing efforts and instead focus for now on cases tied to outbreaks in facilities such as hospitals, long-term care homes, retirement homes, homeless shelters, schools and child care centres.

Health Canada approves rapid COVID testing device as Canada braces for caseload spikes Feds announce plan to buy 7.9 million rapid COVID tests as Health Canada defends slow response Eileen de Villa, Toronto's medical officer of health, said adding a modest number of contact tracers will do little to reduce the backlog in her city.

She said the city already employs 700 case and contact managers and it still can't keep up.

"To be frank, I expect we could have another 700 people added to the ranks and still not be able to contact trace with the same reach and results as when infection rates were lower. It's an indicator of how serious the spread of infection is," she said.

Instead, she said, the province should initiate a month-long shutdown of indoor dining in bars and restaurants — places she said account for a large number of cases.

An outbreak at a Toronto-area bar, the Yonge St. Warehouse, created 1,700 possible exposures after five staff members tested positive. A similar outbreak at Regulars Bar resulted in 600 exposures, she said.

Trudeau also announced some federal laboratories will be re-purposed to help provinces ramp up testing. He said the labs will run 1,000 tests a day in Ontario, with more capacity to be brought online in the coming days.

"We're reaching out to more national laboratories to do their part as well. This is about all hands on deck at this point," Trudeau said.

Dr. Theresa Tam, the country's chief public health officer, said she's heard that many people working in public health are "feeling very tired."

She said Canadians need to limit social contacts and stay home as much as possible. "The key is to have everybody working in the same direction so public health isn't overwhelmed," she said. "What you want is people not having to get tested."

Trudeau was tested last month

Questioned by reporters in the wake of U.S. President Donald Trump being hospitalized with COVID-19, Trudeau confirmed today that he was tested for the virus in early September after he reported a "throat tickle."

He self-isolated for a few days before returning to work, based on his doctor's instructions, he said. The prime minister's test result had not been disclosed before today.

Asked if he thought provinces have spent wisely the \$19 billion in federal funds set aside through the "safe restart" agreement, Trudeau said the issue isn't the money alone — there's a shortage of people available to do the tracing and lab work.

"It's about all of us working together and keeping as many Canadians as possible safe from this virus as quickly as we can," he said.

Ontario has dramatically expanded its testing capacity since the onset of the pandemic — in April, the province peaked at 13,000 tests a day and is running as high as 40,000 daily tests now — but the demand for testing has built up a sizeable backlog.

After weeks of hours-long lineups at some centres, Ontario ordered a two-day shutdown in Ottawa, Toronto and Peel Region — with testing to resume Tuesday through an appointment-only process.

Ontario Premier Doug Ford said Monday that maintaining staffing and procuring reagents — the ingredients for any chemical-based test — have both proven difficult in recent days.

"Right now, we have an issue with getting enough diagnostic lab technicians," Ford said.

As caseloads spike in four provinces, Trudeau warns that pandemic will be worse this fall "There's also a worldwide shortage of the testing mechanism. We're working with Roche, we're working with Abbott, we're working with the federal government to see if we can get these rapid tests. It's going to be an absolute game-changer," he said.

https://www.cbc.ca/news/politics/trudeau-support-contact-tracing-testing-1.5750894

Canada

Outbreak declared again at one of Niagara's hardest hit retirement homes

Source: iheartradio.ca

ID: 1007980243

Once again a Niagara Falls retirement residence is listed as having an outbreak of COVID-19.

Lundy Manor was the scene of one of the region's worst outbreaks in the spring, with 18 residents losing their lives after contracting the coronavirus.

Public health has also declared outbreaks at Shalom Gardens in Grimsby, Meadows of Dorchester and Millennium Trail Manor in Niagara Falls along with Pioneer Elder Care in St. Catharines.

Acting Medical Officer of Health Doctor Mustafa Hirji says so far the outbreaks are small and only involve one or two people

Hirji says the fact is, when there are more cases of the virus out in the community, you are going to see more cases in long term care homes or schools.

The doctor noting 1 in 7 people in Niagara are associated with a school, either as a staff member, student or teacher so you can expect 1 in 7 of cases in the community will impact someone in a school. https://www.iheartradio.ca/610cktb/news/outbreak-declared-again-at-one-of-niagara-s-hardest-hit-retirement-homes-1.13647383

Canada

2 residents at Beeton, Ont., long-term care home die amid COVID-19 outbreak

Source: globalnews.ca Unique ID: 1007978787

The County of Simcoe has confirmed that two long-term care residents at Simcoe Manor in Beeton, Ont., have died as the nursing home experiences a COVID-19 outbreak.

According to the county, one resident who died tested positive for the coronavirus, while the other who passed away was tested on Friday and the results have not yet come in.

As of Sunday morning, there have been four staff members and four residents who have tested positive for the novel coronavirus at Simcoe Manor. Three resident care units have been impacted by COVID-19. "All long-term care residents have been tested and we continue to closely monitor for their results," county officials said, adding all staff are being tested on Monday.

"Enhanced screening measures remain in place to ensure immediate symptom identification, testing, isolation and appropriate contact tracing are completed, in collaboration with the health unit." Simcoe Manor has implemented a number of measures to help stop the spread of the novel coronavirus, some of which include temporarily cancelling all indoor and outdoor visits, enhanced cleaning measures and screening, as well as isolating residents to their rooms.

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"Though this virus has silently made its way into our home, we will fight harder than ever to stop it as quickly as we possibly can," officials said.

"Be reassured that we are all doing everything possible and we will get ahead of this."

Simcoe Manor is one of two long-term care homes that are currently experiencing a COVID-19 outbreak in the Simcoe Muskoka region, the other being at the Pines Long-Term Care Home in Bracebridge, Ont. In total, there have been 15 outbreaks at long-term care homes in the region.

https://globalnews.ca/news/7378587/2-residents-die-simcoe-manor-covid-19-outbreak-coronavirus/

Canada

Masks mandatory for high school students, organized sports prohibited in Quebec's red zones Source: cbc.ca

ID: 1007979863

High school students in Quebec's red zones will be required to wear masks in the classroom, organized sports will be prohibited and gyms closed under new restrictions aimed at containing the spread of the coronavirus.

The new rules, announced today, go into effect Oct. 8 until at least Oct. 28.

Education Minister Jean-François Roberge said students in Grade 10 and 11 will pivot to a hybrid form of schooling, where they will be physically in school only one out of every two days to reduce class sizes. Roberge said all intramural sports, competitions between schools and school outings will be prohibited in red zones.

Gym classes and in-school sports will be allowed on the condition that all students remain within the same groups as they do for their classes.

Roberge said the new restrictions are an attempt to limit exposure to two bubbles: the classroom and home.

"All the actions we are taking could and should prevent us from closing schools," he said.

Prior to the new restrictions, students Grade 4 and up were required to wear a mask when walking in indoor shared spaces, such as hallways, and while on the school bus, but the province had resisted making masks mandatory in the classroom.

Roberge said masks still won't be required in the classroom for elementary school students.

On Monday, the province recorded 1,191 new cases — the fourth day in a row that Quebec's total exceeded 1,000.

The greater Montreal area, as well as the Quebec City and the Chaudière-Appalaches regions, were designated as red zones under the province's COVID-19 alert system last week. As of midnight Monday, three towns in the Gaspé region will join them.

As of Oct. 2, there were 1,423 active COVID-19 cases in Quebec schools, across the province's network of 3,089 public and private schools.

WATCH| Public health explains why rules are different for high school, elementary pupils No more sports, for now

The new prohibitions on sports and gyms extend to organized recreational activities such as yoga and aerobics.

Isabelle Charest, the province's minister responsible for sports, said she was disappointed to make the announcement but they were necessary given the rise in cases.

"I know how important sport is to school success, for mental health, for motivation and, of course, for physical fitness," said Charest, a former Olympian short-track speedskater.

"I know how important sports are, but this ordeal we are going through, it requires sacrifice on all our parts."

Later today, the province is also expected to announce details about adopting the federal app, COVID Alert, which informs users when they have had prolonged contact with someone who tested positive for COVID-19.

 $\underline{\text{https://www.cbc.ca/news/canada/montreal/quebec-government-announcement-on-schools-sports-}} \\ \underline{1.5750335}$

Canada

Ontario closes COVID-19 testing centres for one day with some exceptions

Source: ttawamatters.com

ID: 1007979697

Those hoping to get tested for COVID-19 at an assessment centre are out of luck.

The province has paused walk-in testing at the centres so it can catch up on a backlog of 79,000 untested swabs, and when the centres reopen Tuesday, tests will be by appointment only.

They'll also be limited to those exhibiting symptoms.

At least 60 pharmacies across the province, including 13 in Ottawa, are offering evaluation for asymptomatic people, also by appointment.

Meantime, there are some exceptions to the closures in Ottawa.

While the COVID-19 testing centres at Brewer Park (adult), Moodie Drive and Heron Road are closed, the CHEO testing centre at Brewer Park and the drive-thru assessment centre on Coventry Road are open by appointment only.

Also, as it transitions to online booking, COVID-19 testing is still being offered by walk-up at the Brockville Memorial Centre. The centre says there is no need to call in advance, as they feel they will be able to tests all who arrive and register.

NOTE* While the province says all Ontario assessment centres will reopen Tuesday, the Ottawa COVID-19 Testing Taskforce says Ottawa testing centres are working to have their appointment-based testing online as soon as possible. (link) More information on when centres will be ready will be released as it becomes available.

https://www.ottawamatters.com/local-news/ontario-closes-covid-19-testing-centres-for-one-day-with-some-exceptions-2766500

Canada

A dozen more Manitoba healthcare workers test positive for COVID-19

Source: winnipeg.ctvnews.ca

ID: 1007979407

WINNIPEG -- A dozen more of Manitoba's healthcare workers tested positive for COVID-19 in the week before Winnipeg went under Code Orange restrictions.

According to the province's surveillance data from Sept. 20 to 26, a total of 109 healthcare workers have contracted the disease since the start of the pandemic, 12 more workers than the week before. Of these employees, 35 are healthcare aides, 28 are nurses, nine are physicians or physicians in training, seven are social/support workers, five are medical clerks, three are pharmacists, and 21 fall into a combined category.

The data, which is used to monitor the intensity, characteristics, transmission and geographic spread of the disease, shows that 68 healthcare workers contracted COVID-19 from close contact with a known case, 11 got it from travel, and for 28 of the workers, the source is unknown. In total, 86 of these healthcare workers have recovered.

This information was recorded during the same week the province announced the Winnipeg Metropolitan Region would have its restrictions tightened due to a spike in cases. The Code Orange restrictions were announced on Sept. 25 and went into effect on Sept. 28.

According to surveillance data, during the week of Sept. 20 to 26, there were 295 new COVID-19 cases in the province, 80 per cent of which, or about 236 cases, were reported from Winnipeg Regional Health. This is nearly double the amount of new COVID-19 cases reported in the previous week, which saw 156 new cases.

The province also reported that Southern Health - Santé Sud Regional Health Authority reported 8 per cent of the cases this week, the Interlake-Eastern Regional Health Authority reported seven per cent, and the Prairie Mountain Health Authority accounted for three per cent.

The data shows that the volume of lab tests also increased, averaging 1,946 tests per day, and the positivity rate went from two per cent the week before to 2.2 per cent.

The province said about 50 per cent of the cases announced between Sept. 20 and 26 were contracted through close contact with a known case, and two cases are considered travel-related.

Manitoba also saw its fourteenth outbreak at a long-term care facility during this week.

https://winnipeg.ctvnews.ca/a-dozen-more-manitoba-healthcare-workers-test-positive-for-covid-19-1.5133504

Canada

N.L. advises passengers on Air Canada flight to isolate and get tested for COVID-19

Source: Global News Unique ID: <u>1007978582</u>

ST. JOHN'S, N.L. – Newfoundland and Labrador is advising passengers on a recent Air **Canada** flight from Toronto to Halifax to immediately isolate and get tested for COVID-19.

Authorities said Monday passengers on AC604 on Sept. 30 seated in rows 13 through 17 should isolate for 14 days upon their arrival in the province and call 811 to arrange a test.

Public Health says while the risk of COVID-19 infection is low for the other passengers, the agency is still recommending they get tested out of an abundance of caution.

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Authorities say passengers on another Air **Canada** flight — 8876 from Halifax to Deer Lake, N.L., on Sept. 30 — who are required to self-isolate have already been contacted.

Public Health says while the risk is also low for the other passengers on that flight, the agency is

recommending they self-monitor for symptoms and call 811 to arrange for a COVID-19 test.

The province reported two new COVID-19 cases this weekend and one death – a man between 60 and 69 years old who arrived to the province from Central Africa last week and who died while isolating. This report by The Canadian Press was first published Oct. 5, 2020. https://globalnews.ca/news/7378551/n-l-covid-19-ac-flight/

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

United States

CDC says coronavirus can spread indoors in updated guidance

Source: NEWS 1130 ID: 1007980356

NEW YORK — The top U.S. public health agency said Monday that the coronavirus can spread more than 6 feet through the air, especially in poorly ventilated and enclosed spaces. But agency officials maintained that such spread is uncommon and current social distancing guidelines still make sense.

However, several experts faulted the updated Centers for Disease Control and Prevention guidance. They said the virus can spread more easily than the CDC seems to be indicating, and suggested that the public should wear masks even in prolonged outdoor gatherings when they are more than 6 feet apart.

The virus "is travelling through the air and there is no bright line. You're not safe beyond 6 feet. You can't take your mask off at 6 feet," said Dr. Donald Milton of the University of Maryland School of Public Health.

For months, the CDC has said that the virus spreads mainly through small airborne droplets when an infected person coughs or sneezes. Most CDC guidance about social distancing is built around that idea, saying that 6 feet is a safe buffer between people who are not wearing masks.

In interviews, CDC officials have also acknowledged growing evidence that the virus can sometimes spread on even smaller particles called aerosols that spread over a wider area.

In the update posted on its website, the agency again acknowledged recent research showing people with COVID-19 infected others who were more than 6 feet away or shortly after an infected person left an area. CDC officials called those "limited, uncommon circumstances."

In those cases, spread occurred in poorly ventilated and enclosed spaces where people were doing activities that caused heavier breathing, like singing or exercise, CDC officials said.

People can protect themselves by staying at least 6 feet away from others, wearing a mask, washing their hands, cleaning touched surfaces and staying home when sick

Last month, the CDC ignited controversy among experts when it quietly posted an update that seemed to suggest the agency's position had changed, and then within days took it down again.

The short-lived post said the virus can remain suspended in the air and drift more than 6 feet, and officials emphasized the importance of indoor ventilation. It also added singing and breathing to the ways the virus can go airborne.

Federal health officials later said the post was a mistake and that it had been released before full editing and clearance was completed. They said there was no major change in the agency's position, but they would finalize a post to clarify the CDC's thinking. That's what was posted Monday.

A small group of researchers — including Milton — on Monday published a letter in the journal Science that called for clearer public health guidance about how coronavirus spreads in the air.

They said health officials need to use clearer language in talking about the size of airborne particles and droplets that can spread the disease, and be more straightforward about the role that viruses in small aerosols can play in infecting people.

Masks and good ventilation are crucial indoors. But they can be important outdoors too, said Linsey Marr of Virginia Tech.

https://www.citynews1130.com/2020/10/05/cdc-says-coronavirus-can-spread-indoors-in-updated-guidance/

United States

Coronavirus (COVID-19) Update: Daily Roundup October 5, 2020

Source: FDA

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

- FDA awarded a new research contract to the Stanford University School of Medicine to perform an in-depth analysis of tissue samples to learn more about how SARS-CoV-2—the virus that causes COVID-19—affects different systems in the body, and identify immune correlates. This regulatory science project could potentially help inform development and evaluation of medical countermeasures for COVID-19.
- Testing updates:
 - As of today, 270 tests are authorized by FDA under EUAs; these include 213 molecular tests, 52 antibody tests, and 5 antigen tests.

https://www.fda.gov/news-events/press-announcements/coronavirus-covid-19-update-daily-roundup-october-5-2020

United States

How COVID-19 Spreads

Source: US CDC ID: 1007980167

COVID-19 is thought to spread mainly through close contact from person to person, including between people who are physically near each other (within about 6 feet). People who are infected but do not show symptoms can also spread the virus to others. We are still learning about how the virus spreads and the severity of illness it causes.

COVID-19 spreads very easily from person to person

How easily a virus spreads from person to person can vary. The virus that causes COVID-19 appears to spread more efficiently than influenza but not as efficiently as measles, which is among the most contagious viruses known to affect people.

COVID-19 most commonly spreads during close contact

People who are physically near (within 6 feet) a person with COVID-19 or have direct contact with that person are at greatest risk of infection.

When people with COVID-19 cough, sneeze, sing, talk, or breathe they produce respiratory droplets. These droplets can range in size from larger droplets (some of which are visible) to smaller droplets. Small droplets can also form particles when they dry very quickly in the airstream.

Infections occur mainly through exposure to respiratory droplets when a person is in close contact with someone who has COVID-19.

Respiratory droplets cause infection when they are inhaled or deposited on mucous membranes, such as those that line the inside of the nose and mouth.

As the respiratory droplets travel further from the person with COVID-19, the concentration of these droplets decreases. Larger droplets fall out of the air due to gravity. Smaller droplets and particles spread apart in the air.

With passing time, the amount of infectious virus in respiratory droplets also decreases.

COVID-19 can sometimes be spread by airborne transmission

Some infections can be spread by exposure to virus in small droplets and particles that can linger in the air for minutes to hours. These viruses may be able to infect people who are further than 6 feet away from the person who is infected or after that person has left the space.

This kind of spread is referred to as airborne transmission and is an important way that infections like tuberculosis, measles, and chicken pox are spread.

There is evidence that under certain conditions, people with COVID-19 seem to have infected others who were more than 6 feet away. These transmissions occurred within enclosed spaces that had inadequate ventilation. Sometimes the infected person was breathing heavily, for example while singing or exercising.

Under these circumstances, scientists believe that the amount of infectious smaller droplet and particles produced by the people with COVID-19 became concentrated enough to spread the virus to other people. The people who were infected were in the same space during the same time or shortly after the person with COVID-19 had left.

Available data indicate that it is much more common for the virus that causes COVID-19 to spread through close contact with a person who has COVID-19 than through airborne transmission. [1]

OVID-19 spreads less commonly through contact with contaminated surfaces

Respiratory droplets can also land on surfaces and objects. It is possible that a person could get COVID-19 by touching a surface or object that has the virus on it and then touching their own mouth, nose, or eyes.

Spread from touching surfaces is not thought to be a common way that COVID-19 spreads COVID-19 rarely spreads between people and animals

It appears that the virus that causes COVID-19 can spread from people to animals in some situations. CDC is aware of a small number of pets worldwide, including cats and dogs, reported to be infected with the virus that causes COVID-19, mostly after close contact with people with COVID-19. Learn what you should do if you have pets.

At this time, the risk of COVID-19 spreading from animals to people is considered to be low. Learn about COVID-19 and pets and other animals.

Protect yourself and others

The best way to prevent illness is to avoid being exposed to this virus. You can take steps to slow the spread.

Stay at least 6 feet away from others, whenever possible. This is very important in preventing the spread of COVID-19.

Cover your mouth and nose with a mask when around others. This helps reduce the risk of spread both by close contact and by airborne transmission.

Wash your hands often with soap and water. If soap and water are not available, use a hand sanitizer that contains at least 60% alcohol.

Avoid crowded indoor spaces and ensure indoor spaces are properly ventilated by bringing in outdoor air as much as possible. In general, being outdoors and in spaces with good ventilation reduces the risk of exposure to infectious respiratory droplets.

Stay home and isolate from others when sick.

Routinely clean and disinfect frequently touched surfaces.

Pandemics can be stressful, especially when you are staying away from others. During this time, it's important to maintain social connections and care for your mental health.

https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/how-covid-spreads.html

United States

New York mayor proposes closing schools and businesses in 9 areas with high Covid-19 test positivity rates

ID: 1007977728 Source: CNN

(CNN)New York City Mayor Bill de Blasio on Sunday proposed temporarily closing all schools and non-essential businesses in nine zip codes that have seen Covid-19 test positivity rates above 3% for at least seven consecutive days.

"It will be difficult for people who have done so much to fight back in this crisis," the mayor said in a news conference Sunday, characterizing the plan as an effort to "rewind" reopening in nine neighborhoods in Brooklyn and Queens.

"But it is necessary to stop the spread of the coronavirus in these communities and beyond," he said. "And it's necessary for the good of all of New York City."

The proposed plan -- which requires state approval -- includes the closure of all non-essential businesses, private and public schools and daycares beginning Wednesday, de Blasio said. Restaurants in the affected areas would have to stop indoor and outdoor dining but would be allowed to continue service for to-go orders.

Businesses and schools would be allowed to reopen after two weeks if the zip codes have seen seven consecutive days of positivity rates below 3%. If not, they would be closed for at least four weeks. New York was among the first US cities plunged into crisis as it experienced a massive Covid-19 outbreak when the coronavirus began spreading across the nation earlier this year. In March, it was the epicenter of the coronavirus outbreak in the US, but the city and the state have since managed to contain the spread of the virus.

"What has become clear is that there are a number of neighborhoods now that have continued to have a high level of coronavirus positivity and that requires stronger action than we've had to take for many months," de Blasio said.

The neighborhoods and zip codes that would be impacted by the mayor's proposal include: Edgemere/Far Rockaway, ZIP code 11691

- Borough Park, ZIP code 11219
- Gravesend/Homecrest, ZIP code 11223
- Midwood, ZIP code 11230
- Bensonhurst/Mapleton, ZIP code 11204,
- Flatlands/Midwood, ZIP code 11210
- Gerritsen Beach/Homecrest/Sheepshead Bay, ZIP code 11229
- Kew Gardens, ZIP code 11415
- Kew Gardens Hills/Pomonok, ZIP code 11367

Additionally, the mayor said lesser restrictions would be put in place in 11 zip codes that officials are "concerned" about.

They include parts of Williamsburg, Bedford-Stuyvesant, Manhattan Beach, Bergen Beach, Crown Heights, Rego Park, Fresh Meadows, Hillcrest and Jamaica Estates. In those areas, indoor dining, gyms and pools would close if the plan is approved by Gov. Andrew Cuomo's office.

Health officials on Saturday urged all New Yorkers to take precautions such as wearing face coverings, washing their hands, remaining socially distant and staying home if they are sick. Residents were also asked to avoid large gatherings and remain 12 feet apart if they are singing during worship.

Sunday, Cuomo again highlighted 20 hotspot areas across the state -- including many of those targeted by the mayor's proposal -- that he said accounted for 21% of the state's positive cases Saturday, though they represent less than 7% of the state's population. Not including those 20 ZIP codes, the average positivity rate across the state was less than 1%, the governor's office said.

Those 20 areas will be the subject of "targeted enforcement" by state personnel beginning Monday, Cuomo said. The governor also urged local governments to do more to enforce Covid-19 precautions and

said he wanted to see more testing in schools.

CNN's Sheena Jones and Eric Levenson contributed to this report.

https://www.cnn.com/2020/10/04/us/nvc-schools-businesses-covid-closures/index.html

United States

Thousands of minks Dead in COVID outbreak on Utah farms

ID: 1007977582 Source: bigrapidsnews

Thousands of minks at Utah fur farms have died because of the coronavirus in the past 10 days, forcing nine sites in three counties to quarantine, but the state veterinarian said people don't appear to be at risk from the outbreak.

The COVID-19 infections likely were spread from workers at the mink ranches to the animals, with no sign so far that the animals are spreading it to humans, said Dr. Dean Taylor, the state veterinarian, who is investigating the outbreak.

"We genuinely don't feel like there is much of a risk going from the mink to the people," he said Thursday. Between 7,000 and 8,000 minks have died since the disease swept through the ranches that produce the animals, valued for their luxurious pelts. So far, no animals in Utah have been euthanized because of the disease, and it doesn't appear to be necessary, Taylor said.

Fur from the dead infected animals will be processed to remove any traces of the virus and then used for coats and other garments, according to Fur Commission USA, a mink farming trade group. The U.S. produces more than 3 million mink pelts each year.

Taylor declined to name the farms or the counties where the affected minks were found.

With minks, as with humans, COVID-19 is less deadly for the young.

"It's going through the breeding colonies and wiping out the older mink and leaving the younger mink unscathed," Taylor said. Most of the deaths have been in minks between the ages of 1 and 4 years. In addition to the minks, more than 50 animals in the U.S. had tested positive for the coronavirus as of Sept. 2, according to the U.S. Department of Agriculture. The infections have been detected in pet cats and dogs, as well as lions and tigers at a New York zoo.

Minks seem particularly susceptible to COVID-19, likely because of a protein in their lungs, the ACE2 receptor, which binds to the virus and appears to predict vulnerability to the infection, according to Wageningen University & Research in the Netherlands. Humans also have this protein in their lungs. The COVID outbreak in Utah has surged since mid-August, when the first cases of the disease in the animals were confirmed by the USDA.

Minks were discovered to be susceptible to the SARS-CoV-2 virus, which causes COVID-19, in April, after outbreaks at several farms in the Netherlands, followed by outbreaks in Denmark and Spain. More than 1 million animals were culled in those countries, according to the Associated Press.

Several workers at the Utah mink farms have tested positive for COVID-19, including some who had no symptoms.

"Some of our mink ranchers have more than one facility, and that's probably how it spread," Taylor said. A study in the Netherlands found that the virus appeared to jump back and forth between people and minks, but the data so far remains limited.

After the initial U.S. cases were confirmed, mink farms across Utah and the rest of the country implemented strict measures to prevent the disease from spreading, such as restricting access, conducting health checks on workers and disinfecting surfaces. The USDA and the Centers for Disease Control and Prevention have issued guidelines for farmed minks and other mustelids, a family of animals that also includes weasels and badgers.

"Obviously, it's very concerning to have a species that is this susceptible with this high of a death rate," Taylor said.

The outbreak has led to the quarantine of a quarter of Utah's three dozen mink ranches and raised concerns across the state, said Clayton Beckstead, regional manager for the Utah Farm Bureau and a fourth-generation mink farmer.

"We're certainly worried, but I think everybody's taking pretty extreme biosecurity measures," said Beckstead, whose own farm has not been affected.

Utah is one of the nation's top mink producers. Overall, there are 245 fur farms in 22 states, part of an industry valued at \$82.6 million a year, according to Fur Commission USA.

Investigating an outbreak of a novel virus in a new species is "daunting," Taylor said.

"We're learning as quick as we can," he said. "We're scrambling to help these animals and protect this industry."

is a reporter with Kaiser Health News.

Kaiser Health News (KHN) is a national health policy news service. It is an editorially independent program of the Henry J. Kaiser Family Foundation which is not affiliated with Kaiser Permanente. https://www.bigrapidsnews.com/news/article/Thousands-of-minks-Dead-in-COVID-outbreak-on-Utah-15621372.php

WHO

Weekly Epidemiological Update Coronavirus disease 2019 (COVID-19) 5 October 2020 Source: WHO

Diagnostics: WHO issued the <u>first</u> and <u>second</u> Emergency Use Listing for a quality antigen based rapid diagnostic test. <u>WHO published guidance</u> highlights the value of these tests in areas where community transmission is widespread and where nucleic acid amplification-based diagnostic testing is either unavailable or where test results are significantly delayed. On 28 September, the Access to COVID-19 Tools (ACT) Accelerator announced 120 million high-quality, affordable <u>COVID-19 antigen rapid tests to be made available to low- and middle-income countries</u>.

- **Diagnostics**: WHO published the final version of <u>Target Product Profiles (TPP)</u> for priority diagnostics. These TPPs describe the desirable and minimal acceptable profiles for four tests: (i) point of care testsfor suspected cases and their close contacts where reference assay testing is unavailable, or turnaround times obviate clinical utility; (ii) testsfor diagnosis or confirmation of acute or subacute infection, suitable for low or high-volume needs; (iii) point of care test for prior infection; and (iv) testsfor prior infection for moderate to high volume needs.
- **COVAX**: The Director-General, in his regular <u>media briefing</u> on 2 October, highlighted 168 have joined COVAX. Through the ACT Accelerator and COVAX Facility, any vaccines that are proven to be safe and effective will be rolled out equitably across the world.
- International Day of Older Persons: On 1 October, the International Day of Older Persons, WHO launched a <u>package of tools</u>, including a digital application to help health and social workers provide better care for older people. A <u>data portal</u> was also launched that will compile data on global indicators for monitoring the health and well-being of people aged 60 and over. Globally, older persons and those receiving long term care, accounts for a majority of COVID-19 severe cases and deaths.
- **Mental Health**: Billions of people around the world have been affected by the COVID-19 pandemic, which is having an added impact on people's mental health. On 10 October, World Mental Health Day, WHO is organizing a <u>Big Event for Mental Health</u>. The advocacy event will focus on the urgent need to address the world's chronic under-investment in mental health a problem that has been thrown into the spotlight during the COVID-19 pandemic.
- Preparedness: During the United Nations General Assembly, a high-level event on 'Sustainable preparedness for health security and resilience: Adopting a whole-of-society approach and breaking the "panic-then-forget" cycle' was organized and co-hosted by Finland, France and Indonesia, along with the WHO. As the world crossed a grim milestone with over a million lives lost to COVID-19, with many more expected to have died from unprecedented disruptions to health systems. The event highlighted the need for sustainable health emergency preparedness as COVID-19 will not be the world's last health emergency.

ECDC

Infection prevention and control and preparedness for COVID-19 in healthcare settings - fifth update

Source: ECDC

Technical report 6 Oct 2020

This document aims to provide guidance to healthcare facilities and healthcare providers in the European Union/European Economic Area (EU/EEA) and the United Kingdom (UK) on preparedness and infection prevention and control (IPC) measures for the management of possible and confirmed cases of COVID-19 in healthcare settings, including long-term care facilities (LTCFs). In addition, this document addresses the management of clinical diagnostic specimens at laboratories in the EU/EEA. This is the fifth update of the ECDC guidance on 'Infection prevention and control and preparedness for COVID-19 in healthcare settings', and replaces the document dated 4 July 2020

Executive summary

Key messages

Healthcare facilities, including long-term care facilities (LTCFs), should apply several types of measures to minimise the risk of transmission of COVID-19.

The mainstays of infection prevention and control (IPC) in all healthcare facilities are administrative measures, physical distancing, hand hygiene and the appropriate use of personal protective equipment (PPE).

Administrative measures decrease the opportunities for transmission within healthcare facilities and diminish the risk of outbreaks.

In areas with community transmission of COVID-19, staff, visitors and patients should apply physical distancing, hand hygiene and respiratory hygiene, and wear face masks when physical distancing is not possible.

Healthcare facilities should ensure that PPE is available and appropriately used to safeguard those providing patient and resident care.

In areas with community transmission of COVID-19, frontline healthcare workers should wear medical face masks when caring for patients or residents during all routine activities.

Gloves and gowns are recommended when there is a risk of exposure to body fluids and in settings in which contamination is presumed to be high, such as where aerosol-generating procedures are performed. When used, gloves and gowns should always be changed after each patient contact. COVID-19 cases can be released from isolation after consideration of the time from onset of symptoms, the severity of the disease, possible deficiencies of the immune system, and SARS-CoV-2 test results.

Due to the large impact of COVID-19 in LTCFs, it is essential that national measures are prioritised in these facilities to shield residents and prevent outbreaks.

In the European Union/European Economic Area (EU/EEA), LTCFs are often the responsibility of various national and sub-national competent authorities, usually dependent on the type of facility. Therefore, this guidance recommends activities for the most central competent public health authority. This authority should provide guidance and support for all facilities that provide long-term care for the prevention, identification and management of COVD-19 outbreaks.

The competent health authorities should also, in collaboration with LTCFs, ensure continuity of care including maintained access to hospital healthcare; and address physical and mental wellbeing needs.

LTCFs should designate lead persons or teams to ensure accountability, resources and procedures to address: (1) IPC measures, supplies of PPE and training; (2) COVID-19 surveillance; (3) testing for SARS-CoV-2 for the timely identification and control of outbreaks; (4) access to medical and psychosocial care; and (5) visitors.

https://www.ecdc.europa.eu/en/publications-data/infection-prevention-and-control-and-preparedness-covid-19-healthcare-settings

https://www.ecdc.europa.eu/sites/default/files/documents/Infection-prevention-and-control-in-healthcare-settings-COVID-19 5th update.pdf

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

UK hit by new virus test failing, finds 16,000 extra cases.

Source: infosurhoy.com

ID: 1007980222

The British government has launched an investigation into how nearly 16,000 new coronavirus infections went unreported as a result of a technical glitch, a failing that could have given fresh impetus to an outbreak that critics say could easily get out of control.

Health Secretary Matt Hancock told lawmakers Monday that the problem related to the "automated transfer of files." The problem is widely thought to be connected to the file size limitations on Excel spreadsheets used in the test-and-trace program.

"This is a serious issue which is being investigated fully," Hancock said. "Now it is critical we work together to put it right and make sure it doesn't happen again."

Hancock's appearance at the House of Commons came after the weekend disclosure that 15,841 virus cases weren't tabulated from Sept. 25 to Oct. 2. Though those testing positive had been told of their status, their contacts—potentially around 50,000 people—weren't traced, a failing that could have allowed the virus to flourish.

He said 51% of those testing positive were contacted again and that their contacts were reached immediately after that.

Despite the addition of so many new cases, he said the government's chief medical officer "has not substantially changed" his opinion about the epidemic's path in the U.K., which like other countries in Europe is witnessing a second spike of the virus.

Jonathan Ashworth, Hancock's counterpart in the main opposition Labour Party, said the failing showed how "shambolic" the Conservative government's plan to fight the pandemic was and that the latest problem afflicting the country's testing regime was "putting lives at risk."

Lawmakers from all parties have criticized Prime Minister Boris Johnson's government for a shortage of testing capacity that's meant some people have been asked to travel hundreds of miles for a test, and delays in notifying people of their test results.

The latest problem appears to have been caused by an Excel file maxing out during an automated process. Though the software is a staple in consumer settings, experts say it has a number of limitations for use in much grander projects.

"If this was Excel as is being reported, the limitations of Excel, which is generally a very decent piece of software, in terms of Big Data are well known," said Jon Crowcroft, a professor of communications at the University of Cambridge.

UK hit by new virus test failing, finds 16,000 extra cases

For the test-and-trace program to work well, contacts should be notified as soon as possible, within hours preferably. So authorities' failure to inform people potentially exposed to the virus could lead to many more positive cases and the subsequent need for the government to impose further unwanted restrictions on everyday life.

Ashworth slammed the government for its latest failing "at one of the most crucial points in the pandemic," adding that the contacts of those unreported new cases may have been "blissfully unaware they've been exposed to COVID, potentially spreading this deadly virus at a time when hospital admissions are increasing and we are in the second wave."

"This isn't just a shambles—it's so much worse than this—and it gives me no comfort to say this, but it's putting lives at risk," Ashworth added.

UK hit by new virus test failing, finds 16,000 extra cases

The unreported cases were added to the government's daily new infections total over the weekend, boosting Saturday's number to 12,872 cases and Sunday's to 22,961. That compared to an average of 7,000 new cases a day the four days before. The number of new cases reported Monday fell to 12,594, but given the adjustments related to the missing cases, it was impossible to figure out a trend.

Paul Hunter, a professor in medicine at the University of East Anglia, called the glitch "very disappointing."

"For the test, track and trace system to have a real impact on reducing transmission of COVID-19, it is essential that test results are communicated rapidly," he said.

Like other countries in Europe, the U.K. has seen rising coronavirus infections over the past few weeks, which has prompted the government to announce a series of restrictions, both nationally and locally, to keep a lid on infections. The new rules limit the number of people allowed to gather together and put a curfew on pubs.

The U.K. has Europe's highest virus-related death toll at around 42,400. The government's chief scientific advisers warned two weeks ago that if more restrictions were not taken, the country could end up with 50,000 new cases a day by mid-October, leading to hundreds of daily deaths a month later.

The confusion over the daily testing numbers only adds to the uncertainty over whether the restrictions are working in suppressing the virus.

https://infosurhoy.com/news-summary/uk-hit-by-new-virus-test-failing-finds-16000-extra-cases/

Russia

Death rate for Covid-19 higher than for flu if only those who seek medical aid are counted

Source: Interfax: Russia & CIS General Newswire

ID: 1007980276

PETROPAVLOVSK-KAMCHATSKY. Oct 5 (Interfax) - The mortality rate for the novel coronavirus stands at approximately 8%, which is higher than for flu, director of the Gamaleya National Research Institute of Epidemiology and Microbiology, academician of the Russian Academy of SciencesAlexander Gintsburg said.

"As compared with the flu virus, when we count not just the overall number of cases, but count those who have sought medical aid, the mortality rate here is about 8%, which is much higher than for flu," Gintsburg said in an interview with the Pozner program on Channel One on Monday.

The World Health Organization estimates the death rate for seasonal flu at less than 1% of the total number of cases.

Venezuela

Venezuela receives shipment of Russian Sputnik-V coronavirus vaccine

Source: yahoo.com ID: 1007980247

ARACAS (Reuters) - Venezuela has received a shipment of the Russian-made Sputnik-V vaccine against the coronavirus, Venezuelan Vice President Delcy Rodriguez said on Friday.

The delivery is the first in Latin America and will allow Venezuela to participate in clinical trials of the vaccine, Rodriguez said in a televised statement from the country's main airport.

"This cooperation for the Sputnik-V vaccine was the result of the permanent contact, the meetings, the close cooperation that exists between Venezuela and Russia," Rodriguez said.

She did not say how many vaccines arrived. Health Minister Carlos Alvarado said 2,000 people will participate in a trial that begins this month in the capital of Caracas.

President Nicolas Maduro in September proposed administering Russian coronavirus vaccines to nearly 15,000 candidates in upcoming legislative elections so that they can campaign safely.

Venezuela has strengthened diplomatic ties with Russia amid an aggressive sanctions program by the United States meant to force Maduro from office.

https://news.yahoo.com/venezuela-says-receives-shipment-russian-165249822.html

Honduras

Honduras confirms first cases of Covid-19 recontagio

Source: Prensa-latina.cu Unique ID: 1007979246

Tegucigalpa, 4 Oct (Prensa Latina) Honduras today registers the first recontagios of Covid-19, confirmed Dr. Carlos Umaña, president of the Medical Association of the Honduran Institute of Social Security (IHSS) in the city of San Pedro Sula.

The specialist reported that three patients with symptomatology of the disease, caused by the SARS-CoV-2 coronavirus, were recently detected in a care center in that city and were able to document that these people tested positive for PCR four or five months ago.

At that time they had mild to moderate symptoms, received treatment and subsequently their test was negative, but very recently they were positive again and some are even in serious condition, Umaña detailed in statements contained in the journal Criteria.

The Galen noted that it is very important to know this information, because the country does not have good research and the tests it performs to detect the pathogen are lower than those recommended by the experts.

The idea is to draw attention that the virus is there and that there are people who can get it again, the doctor warned.

Umaña suggested that the population attend the Red Cross and IHSS to establish the amount of antibodies they have after infection to assess those possibilities.

What we do see possible is a reinfection, herd immunity does not work as we would like, it sentenced. He explained that we can only rest easy when there is a vaccine and we have to be honest, this is going to be from a couple of years that we can vaccinate the Honduran population.

Honduras remains the third country most affected by the pandemic in the Central American region with 78,269 positive cases and two thousand 386 deaths since March.

In the latter part of the National Risk Management System, the number of people hospitalized was 736, while 28 thousand 978 recovered in the national territory.

https://www.prensa-latina.cu/index.php?o=rn&id=401194&SEO=honduras-confirma-primeros-casos-derecontagio-de-covid-19

WHO

WHO Says Around 10% Of Global Population May Have Been Infected With COVID-19

Source: urdupoint Unique ID: 1007977490

Around 10 percent of the global population may have been infected with the coronavirus, and the vast majority of the people are still at risk, World Health Organization (WHO) Health Emergencies Programme Executive Director Michael Ryan said on Monday

MOSCOW (UrduPoint News / Sputnik - 05th October, 2020) Around 10 percent of the global population may have been infected with the coronavirus, and the vast majority of the people are still at risk, World Health Organization (WHO) Health Emergencies Programme Executive Director Michael Ryan said on Monday.

"Our current best estimates tell us that about 10 percent of the global population may have been infected by this virus, this varies depending on country, this varies from urban to rural, it varies between different

groups, but what it does mean is that the vast majority of the world remains at risk. We know the pandemic will continue to evolve, but we also know we have the tools to work to suppress transmission and save lives right now, and they are at our disposal. The future depends on the choices that we collectively make," Ryan said at the WHO Executive board Special Session. https://www.urdupoint.com/en/world/who-says-around-10-of-global-population-may-1048069.html

India

India's new paper Covid-19 test could be a 'game changer'

Source: BBC ID: 1007977038

A team of scientists in India has developed an inexpensive paper-based test for coronavirus that could give fast results similar to a pregnancy test. The BBC's Soutik Biswas and Krutika Pathi unpack how it works.

The test, named after a famous Indian fictional detective, is based on a gene-editing technology called Crispr. Scientists estimate that the kit - called Feluda - would return results in under an hour and cost 500 rupees (about \$6.75; £5.25).

Feluda will be made by a leading Indian conglomerate, Tata, and could be the world's first paper-based Covid-19 test available in the market.

"This is a simple, precise, reliable, scalable and frugal test," Professor K Vijay Raghavan, principal scientific adviser to the Indian government, told the BBC.

Researchers at the Delhi-based CSIR-Institute of Genomics and Integrative Biology (IGIB), where Feluda was developed, as well as private labs, tried out the test on samples from about 2,000 patients, including ones who had already tested positive for the coronavirus.

They found that the new test had 96% sensitivity and 98% specificity. The accuracy of a test is based on these two proportions. A test that's highly sensitive will detect almost everyone who has the disease; and a test that has high-specificity will correctly rule out almost everyone who doesn't have the disease.

The first ensures not too many false negative results; and the second not too many false positives. India's drug regulator has cleared the test for commercial use.

With more than six million confirmed infections, India has the world's second-highest Covid-19 caseload. More than 100,000 people in the country have died of the disease so far.

After a slow start, India is now testing a million samples a day in more than 1,200 laboratories across the country. It is using two tests.

image copyrightEPA

The first is the time-tested, gold standard polymerase chain reaction, or PCR swab tests, which uses chemicals to amplify the virus's genetic material in the laboratory. The second is the speedy antigen test, which works by detecting virus fragments in a sample.

The PCR test is generally reliable and costs up to 2,400 rupees. It has low false positive and low false negative rates. The antigen tests are cheaper. They are more precise in detecting positive infections, but generate more false negatives than the PCR test.

Scaling up testing in India hasn't meant easy availability yet, according to Dr Anant Bhan, a researcher in global health and health policy.

"There are still long wait times and unavailability of kits. And we are doing a lot of rapid antigen testing which have problems with false negatives," Dr Bhan told the BBC.

He believes the Feluda test could potentially replace the antigen tests because it could be comparatively cheaper - and more accurate.

"The new test has the reliability of the PCR test, is quicker and can be done in smaller laboratories which don't have sophisticated machines," Dr Anurag Agarwal, director of IGIB, told the BBC.

Sample collection for the Feluda test will be similar to the PCR test - a nasal swab inserted a few inches into the nose to check for coronavirus in the back of the nasal passage. India still doesn't allow Covid-19 tests from saliva samples.

In the traditional PCR test, the sample is sent to an accredited laboratory where it has to go through a number of "cycles" before enough virus is recovered.

The new Feluda test uses Crispr - short form for Clustered Regularly Interspaced Short Palindromic Repeats - or a gene-editing technology to detect the virus.

According to researchers, gene-editing works in a way similar to word processing - it's like using the

cursor to correct a typo by removing an incorrect letter and inserting the correct one. The technique is so precise it can remove and add a single genome letter. Gene-editing is mainly used to prevent infections and treat ailments like sickle cell disease.

When used as a diagnostic tool, like Feluda, the Crispr technology latches on to a set of letters of a gene carrying the signature of the novel coronavirus, highlights it, and gives a read-out on a piece of paper. Two blue lines indicate a positive result, while a single blue line means the test has returned negative. "Testing remains a limited resource and something that we need to do everything we can to improve its availability. So Feluda is an important step in that direction," said Dr Stephen Kissler, a research fellow at Harvard Medical School.

The Crispr-based tests are a part of a "third wave of tests" after the time consuming and labour intensive PCR and antigen tests, according to Dr Thomas Tsai of the Harvard Global Health Institute.

In the US and the UK, several companies and research labs are developing similar paper strip tests which can be cheap and mass produced. One of the most talked-about has been a paper-based strip developed by Sherlock Bioscience which has been cleared for emergency use by the US Food and Drug Administration (FDA). The test claims to detect the "unique genetic fingerprints of virtually any DNA or RNA sequence in any organism or pathogen". DNA and RNA are sister molecules responsible for the storage of all genetic information that underpins life.

"The ideal and ultimate test will be the one that is paper-based which you can do from home," said Dr Tsai. "But of course, there are some biological restrictions to the technology - we can't expect people to extract and amplify the RNA from home."

This is where the Feluda test might end up making a huge difference to the way we look at gene-editing based diagnostic tests.

Dr Debojyoti Chakraborty, a molecular scientist with CSIR-IGBMR and a lead member of the team that developed Feluda, told the BBC that they were working on a prototype of a test where "you can extract and amplify the RNA using PCR machine at home".

"We are trying for a simple, affordable, and truly point-of-care test so widespread testing is not limited by machines and manpower," Dr Chakraborty said.

"India has the opportunity to show the value of this test, because it has such a big population and it's coming right at the time when it is needed," Dr Kissler said. "If their efficacy is demonstrated, it can have benefits that ripple around the world."

A vaccine will be vital for fully recovering from the pandemic, but according to Dr Kissler, reliable, accessible testing is also key to achieve "a sense of normalcy".

"In the ideal world I envision, taking a test will be as easy as brushing your teeth or making toast," he said.

https://www.bbc.com/news/world-asia-india-54338864

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

United States

U.S. COVID deaths may be underestimated by 36%

Source: medicalxpress

ID: 1007977654

More than 200,000 people in the United States have now died from COVID-19. But the death toll of the U.S. epidemic is likely much higher, according to a new, first-of-its-kind study from researchers at the University of Pennsylvania, Boston University, and the Robert Wood Johnson Foundation. Available as a pre-print on medRxiv ahead of peer-reviewed publication, the study estimates the number of "excess deaths," those that occurred from February through September 2020 above what would be expected in a normal year. For every 100 excess deaths directly attributed to COVID-19, there were another 36 excess deaths. This means 26% of all excess deaths were not directly attributed to COVID. The research team, which included Penn demographers Samuel Preston and Irma Elo, found more of these additional deaths in counties with greater income inequality, more non-Hispanic Black residents, less homeownership, and high-population density, indicating a pattern related to socioeconomic disadvantage and structural racism.

"Excess deaths can provide a more robust measure of the total mortality effects of the pandemic compared to direct tallies of COVID deaths," says study lead author Andrew Stokes, an assistant

professor of global health at BU. "Excess deaths include COVID deaths that were ascribed to other causes, as well as the indirect consequences of the pandemic on society." These could include fear of going to the hospital for another condition or any number of issues caused or exacerbated by COVID's economic and mental health impacts.

Stokes and colleagues analyzed county-level mortality data from the National Center for Health Statistics for 1,021 counties with 10 or more COVID deaths from Feb. 1 to Sept. 23. Previous studies have estimated excess deaths at the national and state levels, but this is the first to examine the question at the county level, allowing the researchers to look at how patterns of excess deaths vary by demographic and structural factors.

The researchers used Centers for Disease Control and Prevention data from 2013 to 2018 to estimate how many deaths each county would have been expected to have during this period if not for the COVID pandemic (as death rates change from year to year).

In total, the 1,000-plus counties experienced 249,167 excess deaths, or those beyond what was expected given historical patterns. Of those, 26%, or 65,481 death certificates, did not directly assign COVID as the cause of death. The other 183,686 did. In other words, the number of deaths directly assigned to COVID should be inflated by 36% to estimate the total number of deaths for which COVID is responsible. "Counties with high levels of COVID-19 mortality also had exceptionally high levels of mortality in 2020 from other causes of death," says Preston, study senior author and a Penn professor of sociology. "This result suggests that the epidemic is responsible for many more deaths than are attributed to COVID-19 alone."

While most counties saw more deaths than would have been expected in a normal year, some saw fewer. The researchers analyzed the relationship between these excess deaths and differences in demographics and structural factors using U.S. Census data, finding that communities already known to have been most harmed by COVID-19 have lost even more lives to the pandemic than official numbers show.

"Our results focus important attention on the disparate impact of the COVID-19 pandemic on low-income and minority communities," says Elo. "These groups have historically experienced high death rates, which are now further exacerbated by the current pandemic."

More information: Andrew C Stokes et al. Assessing the Impact of the COVID-19 Pandemic on US Mortality: A County-Level Analysis, (2020). DOI: 10.1101/2020.08.31.20184036

https://www.medrxiv.org/content/10.1101/2020.08.31.20184036v3

Provided by University of Pennsylvania

https://medicalxpress.com/news/2020-10-covid-deaths-underestimated.html

United States

Sensor Rapidly Detects SARS-CoV-2, Antibodies, and Inflammatory Markers

Source: medgadget. ID: 1007978499

Researchers at Caltech have developed a low-cost multiplex test that can rapidly provide three different types of data on COVID-19. The test can detect the presence of SARS-CoV-2, antibodies against the virus (potentially indicating a level of immunity), and inflammatory markers that could indicate the severity of COVID-19. Using blood or saliva, the test can provide a result in as little as 10 minutes. The researchers hope that it could soon be used by people at home to assess their COVID-19 status. Testing is a cornerstone in the fight against COVID-19, whether the test is to determine whether the virus is present, or to see whether someone may have immunity to it. However, testing supplies have been stretched in many countries, and getting access to a timely test can be challenging. Having easy-to-use tests that provide an immediate answer at home could help with the situation.

This challenge inspired researchers at Caltech to develop a new test that could potentially be used at home. Their new device can provide three different types of data for those worried that they may have COVID-19, or for those who wish to see whether they had it in the past.

Containing a porous graphene layer with a large surface area, the team's sensor is highly sensitive to small amounts of the target molecules, meaning that a saliva or blood sample is sufficient, and it is not necessary to undergo invasive swabbing. Antibodies and proteins attached to the graphene layer can bind SARS-CoV-2, along with antibodies against SARS-CoV-2 and inflammatory markers that are present in the tested sample.

"This is the only telemedicine platform I've seen that can give information about the infection in three types of data with a single sensor," said Wei Gao, a researcher involved in the study. "In as little as a few minutes, we can simultaneously check these levels, so we get a full picture about the infection, including early infection, immunity, and severity."

So far, the device has been tested in a small number of volunteers and the early results are promising. The researchers hope to conduct larger studies soon to confirm that the test can give accurate and reliable results.

"Our ultimate aim really is home use," said Gao. "In the following year, we plan to mail them to high-risk individuals for at-home testing. And in the future, this platform could be modified for other types of infectious disease testing at home."

Study in journal Matter: SARS-CoV-2 RapidPlex: A Graphene-based Multiplexed Telemedicine Platform for Rapid and Low-Cost COVID-19 Diagnosis and Monitoring

https://www.cell.com/matter/fulltext/S2590-2385(20)30553-1

https://www.medgadget.com/2020/10/sensor-rapidly-detects-sars-cov-2-antibodies-and-inflammatory-markers.html

United States

8 in 10 COVID-19 patients suffer neurological symptoms, study finds

Source: Medical Xpress - latest medical and health news stories

ID: 1007980351

(HealthDay)—As President Donald Trump battles the coronavirus, researchers reveal concerning new findings: Neurological symptoms occur in 8 of 10 hospitalized COVID-19 patients.

These symptoms include muscle pain, headaches, dizziness, encephalopathy and "brain fog."
"Encephalopathy, which is characterized by altered mental function ranging from mild confusion to coma,

"Encephalopathy, which is characterized by altered mental function ranging from mild confusion to coma is the most severe neurologic manifestation of COVID-19," said study co-author Dr. Igor Koralnik. He oversees the Neuro COVID-19 Clinic at Northwestern Memorial Hospital in Chicago.

It's not known whether Trump is suffering from any of these neurological problems. He was admitted Friday to Walter Reed National Military Medical Center in Bethesda, Md., for treatment of COVID-19. Meanwhile, First Lady Melania Trump and a number of senior U.S. officials have also tested positive for the new coronavirus.

For this new study, the researchers analyzed the charts of more than 500 patients hospitalized for COVID-19 within the Chicago-based Northwestern Medicine health system. The investigators identified neurological symptoms in 42% of patients when their COVID-19 symptoms surfaced, 63% of patients when hospitalized, and 82% of patients at any time during the course of COVID-19.

Many patients reported muscle pain (45%) and headaches (38%). Encephalopathy and dizziness were seen in almost one-third of patients. The study also found 16% had taste disorders and 11% had smell disorders.

After discharge from the hospital, only 32% of patients with encephalopathy were able to care for their own affairs, compared to 89% of those who didn't develop encephalopathy, the findings showed. Also, the death rate in patients with encephalopathy was much higher (about 22%) than in those without encephalopathy (3%), according to the study.

"We are now looking to characterize the long-term neurologic effects of COVID-19 and the cognitive outcomes in patients with COVID-19-associated encephalopathy," Koralnik said in a hospital news release. He is chief of neuro-infectious diseases and global neurology at Northwestern Medicine. "We're studying this in patients who are discharged from the hospital, as well as in COVID-19 'long-haulers,' who have never been hospitalized but also suffer from a similar range of neurological problems, including brain fog," he added.

The report was published Oct. 5 in the Annals of Clinical and Translational Neurology. The findings will help shape long-term care for people who suffer from neurological complications of COVID-19, Koralnik said.

"Patients and clinicians need to be aware of the high frequency of neurologic manifestations of COVID-19 and the severity of altered mental function associated with this disease," he noted.

More information: The U.S. Centers for Disease Control and Prevention has more on COVID-19.
https://medicalxpress.com/news/2020-10-covid-patients-neurological-symptoms.html

United States

Adolescent with COVID-19 as the Source of an Outbreak at a 3-Week Family Gathering — Four States, June–July 2020

Source: CDC ID: 1007979285

There is increasing evidence that children and adolescents can efficiently transmit SARS-CoV-2, the virus that causes coronavirus disease 2019 (COVID-19) (1–3). During July–August 2020, four state health departments and CDC investigated a COVID-19 outbreak that occurred during a 3-week family gathering of five households in which an adolescent aged 13 years was the index and suspected primary patient; 11 subsequent cases occurred.

Both heads of each household were interviewed to assess demographic characteristics, exposures, symptoms, close contacts, and outcomes. Parents provided data for all children, adolescents, and young adults. Thirteen of the index patient's relatives sought viral testing; test results were reported by respondents, and all test results that were reported to be positive were verified in state reporting systems. For three children and adolescents who were not tested while symptomatic, a chemiluminescent immunoassay* detecting total antibody to SARS-CoV-2 was performed 28–46 days after symptom onset; results were positive for all three children and adolescents, including the index patient and her two brothers, indicating earlier infection. Likely exposure periods† and infectious periods§ were estimated from symptom onset dates. This activity was reviewed by CDC and was conducted consistent with applicable federal law and CDC policy.¶

While away from home, the index patient was exposed during a large COVID-19 outbreak in June 2020. Because of her exposure, she sought testing for SARS-CoV-2 after returning home. A rapid antigen test performed 4 days after exposure, when she was asymptomatic, was negative (Table) (Figure). She experienced nasal congestion 2 days later, her only symptom. That same day, she, her parents, and two brothers traveled to a gathering with 15 other relatives, which began the following day. Attendees belonged to five households in four states and ranged in age from 9 to 72 years. Fourteen relatives, including the index patient, stayed in a five-bedroom, two-bathroom house for 8–25 days. These relatives did not wear face masks or practice physical distancing. An additional six relatives (an aunt, an uncle, and four cousins) visited for 10 hours on day 3 and 3 hours on day 10, when six overnight attendees were potentially infectious, but maintained physical distance and remained outdoors; none wore face masks.

Among the 14 persons who stayed in the same house, 12 experienced symptoms** and were subsequently found to have COVID-19 based on Council of State and Territorial Epidemiologists definitions.†† Six cases were confirmed by reverse transcription–polymerase chain reaction (RT-PCR) testing, four persons were classified as having probable COVID-19 based on positive antigen testing or clinical and epidemiologic criteria, and two persons were classified as having suspected COVID-19 based on positive antibody testing, including the index patient (Table). The other two overnight attendees never experienced symptoms, including one who received a negative SARS-CoV-2 RT-PCR test result 4 days after the last exposure. One person with COVID-19 was hospitalized and another sought emergency department care for respiratory symptoms; both recovered. None of the six relatives who remained outdoors and maintained physical distance developed symptoms; four had negative RT-PCR test results 4 days after the last exposure, and two were not tested. Relatives with COVID-19 were advised by state investigators to self-isolate, and contacts were advised to self-quarantine.

Eight relatives reported activities outside the gathering during their exposure periods that might have increased their risks for exposure. However, only the index patient reported exposure to a person with confirmed COVID-19 or compatible symptoms outside the family. The index patient's high-risk exposure and symptom onset 3–19 days before that of any other person at the family gathering support the hypothesis that this adolescent's infection was the source of the family outbreak (Figure). The adolescent's initial antigen test result was likely a false negative because it was performed before symptom onset; the only antigen test that had Food and Drug Administration Emergency Use Authorization at the time was intended for use within the first 5 days of symptoms.§§

This outbreak highlights several important issues. First, children and adolescents can serve as the source for COVID-19 outbreaks within families, even when their symptoms are mild (2). Better understanding of transmission by children and adolescents in different settings is needed to refine public health guidance. Second, this investigation provides evidence of the benefit of physical distancing as a mitigation strategy to prevent SARS-CoV-2 transmission. None of the six family members who maintained outdoor physical distance without face masks during two visits to the family gathering developed symptoms; the four who were tested for SARS-CoV-2 had negative test results. Third, rapid antigen tests generally have lower sensitivity (84.0%–97.6%) compared with RT-PCR testing; negative results should be confirmed with RT-PCR if used for persons with high pretest probability of infection, such as those with a known exposure (4). Fourth, regardless of negative test results, persons should self-quarantine for 14 days after a known exposure (5) or after travel when mandated by state, territorial, tribal, or local authorities (6). Finally, SARS-CoV-2 can spread efficiently during gatherings, especially with prolonged, close contact. Physical distancing, face mask use, and hand hygiene reduce transmission; gatherings should be avoided when physical distancing and face mask use are not possible (7).

https://www.cdc.gov/mmwr/volumes/69/wr/mm6940e2.htm?s cid=mm6940e2 x#suggestedcitation

United States

West Virginia University; Test, isolate, communicate: Keys to controlling a COVID-19 outbreak in a long-term care facility

Source: Mental Health Weekly Digest

ID: 1007981321

2020 OCT 5 (NewsRx) -- By a News Reporter-Staff News Editor at Mental Health Weekly Digest -- Widespread COVID-19 testing may be an obvious way to control an outbreak in a long-term care facility. But communication among the facility's staff, its residents and the residents' family members is crucial, too.

A new study led by Carl Shrader, a physician and researcher in the Department of Family Medicine in the West Virginia University School of Medicine, revealed the role that communication played in quashing a COVID-19 outbreak at Sundale, a long-term care facility in Morgantown.

"Timely communication was challenging and made more difficult by a lack of evidence-based information and widely circulating misinformation," said Shrader, who directs WVU's residency program. "There is a delicate balance between rapid dissemination of accurate information with the need for personal individual discussion in an unknown situation."

Shrader is also the medical director at Sundale, which was the epicenter of West Virginia's COVID-19 pandemic. From the first diagnosis of COVID-19 in a Sundale resident--in March--he took a leading role in the facility's response to the outbreak.

Before the facility was free of COVID-19, 52 residents and 19 staff members would be diagnosed with it. For five of those residents, the virus would prove fatal. But "despite the challenges of managing a COVID-19 outbreak in the absence of information, our facility's staff, families and leadership were able to work together to ensure limited viral spread and no change in the average monthly mortality at the facility," Shrader said.

He feels that early and widespread COVID-19 testing at the facility was key to keeping the infection rate low. As soon as the first cases came to light, the staff immediately tested all of the facility's hundred residents, whether or not they had symptoms of COVID-19. People who tested positive were separated from the other residents and housed in the same unit to prevent the virus from spreading.

Follow-up testing in the weeks that followed identified more residents who had the virus and confirmed when residents had gotten over it.

Because test kits were scarce early in the pandemic, not every staff member at Sundale could be swabbed for the virus. Fifty-six of the 162 staff members--mostly certified nursing assistants and licensed practical nurses--were chosen for testing because of their frequent contact with residents. All other facility staff members were directed to local drive-up testing sites.

"Maintaining availability of adequate staff in all divisions to ensure safe operation of the facility was high priority," Shrader said. "Clear communication about testing and staffing decisions was crucial in allaying fear and frustration."

Meeting with the staff members and explaining why some of them received the rapid test while others didn't alleviate staff members' concerns, prevented resentment from building and fostered the spirit of teamwork that makes good resident care possible.

Staff members weren't the only people who benefited from communication. So did residents' family members.

At first, the facility staff tried to keep family members informed by speaking to them over the phone, but they soon discovered that they couldn't keep up with the calls. There were simply too many people--with too many questions and concerns--to speak to them all individually.

Much of the information staff members were providing applied to multiple residents. So, with the residents' and family members' permission, they began using a version of Zoom that's compliant with medical-privacy laws to talk--and listen--to many family members at once.

Not only could the staff communicate with family members this way, but the family members could share information and build relationships with each other as well.

"Families, residents and staff bonded through this unique experience, and the creative use of technology to maintain open communication aided in this," said Courtney Pilkerton, an assistant professor of family medicine and member of the research team. "Zoom meetings continue to be popular, and many family members have requested that calls continue as they have found significant value in sharing their experiences with each other."

But communicating with one category of people was particularly difficult: residents with dementia. "Living with dementia means a life revolving around a structured schedule," said Shauna Assadzandi, a medical resident at Sundale who was involved in the study. "Disruptions in that schedule can bring significant distress. If their son came every day to feed them lunch and dinner and now is not there, they may feel abandoned--not understanding why their son can no longer visit."

Staff at the facility had to pay special attention to those residents so they could spot psychosomatic symptoms--such as lack of appetite--and address them early. Just because some residents couldn't describe their feelings of loneliness, sadness or worry doesn't mean they weren't experiencing them. "Older individuals--and, more specifically, those with dementia--don't always verbalize concerns, and it becomes crucial to watch for physical signs of distress, including weight change and intake of food and fluids," Assadzandi said.

"Much of our nursing staff has worked in the facility on the same unit for many years," she said. "They know the residents well and are often the first to notice small changes in behavior. These strong connections between staff and residents allow for more rapid and individual changes to care when needed."

Keywords for this news article include: Viral, COVID-19, Dementia, Virology, Mortality, SARS-CoV-2, RNA Viruses, Mental Health, Health and Medicine, West Virginia University, Brain Diseases and Conditions, Neurodegenerative Diseases and Conditions, Central Nervous System Diseases and Conditions, Severe Acute Respiratory Syndrome Coronavirus 2.

United Kingdom

COVID-19 virus survives on skin, hand hygiene highly effective, study finds

Source: CIDRAP ID: 1007980242

SARS-CoV-2, the virus that causes COVID-19, survives on human skin for 9 hours, much longer than a strain of influenza A virus (IAV). A study in Clinical Infectious Disease indicates that the long survival time on human skin may increase the contact-transmission risk of SARS-CoV-2 compared to other viruses, but finds hand hygiene is highly effective at neutralizing the virus.

Contact transmission is considered a significant risk factor in the spread of COVID-19, highlighting the critical need for information about survival of the virus on skin. Previous studies have identified higher stability for coronaviruses compared with other enveloped viruses—those bearing a protective, fatty outer wrapping—like IAV.

The stability of viruses on human skin is not well understood because of the dangers of exposing test subjects to pathogenic viruses. The study authors developed a model for testing viral stability using human skin obtained from autopsy specimens and compared viral survival of SARS-CoV-2 to a common

strain of IAV that is transmitted through droplets and contact transmission. They recorded survival times for viral samples in human mucus and culture medium on a variety of surfaces (human skin, stainless steel, glass, and polystyrene plastic), and evaluated the effectiveness of 80% ethanol on viral survival on human skin.

The researchers found that both types of virus were inactivated faster on skin than on other surfaces, suggesting that human skin is a less hospitable environment for viruses. The study also found, however, that SARS-CoV-2 survived on skin significantly longer than IAV: 9.04 hours (95% confidence interval, 7.96 to 10.2 hours) versus 1.82 hours (1.65 to 2.00 hours), leading to the possibility of a higher risk of contact transmission for COVID-19.

Notably, the study authors also found that SARS-CoV-2 was completely inactivated within 15 seconds of exposure to 80% ethanol—the type of alcohol found in many over-the-counter alcohol-based hand sanitizers—highlighting the importance of proper hand hygiene for the prevention and spread of COVID-19. The US Centers for Disease Control and Prevention (CDC) recommends 60% to 95% alcohol in hand sanitizers for COVID-19.

https://academic.oup.com/cid/advance-article/doi/10.1093/cid/ciaa1517/5917611 https://www.cidrap.umn.edu/news-perspective/2020/10/covid-19-scan-oct-05-2020

United Kingdom

Virus threat to animals Source: The Times ID: 1007982314

Dozens of animal species could be vulnerable to the virus that causes Covid-19, researchers at University College London suggest. They investigated how the spike protein from Sars-Cov-2 could interact with the Ace2 protein it attaches to when it infects people. The study, published in Scientific Reports, found that 26 animals, including pigs, horses and rabbits, may be susceptible to infection. https://gphin.canada.ca/cepr/showarticle.jsp?docId=1007982314 https://www.nature.com/articles/s41598-020-71936-5

Domestic Events of Interest

Nil

International Events of Interest

United States

HAN Archive - 00436 | Health Alert Network (HAN)

ID: 1007979282

Source: emergency.cdc.gov

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Summary

Since 2015, the Centers for Disease Control and Prevention (CDC) and health departments across the United States have identified several HIV clusters and outbreaks occurring predominantly among people who inject drugs (PWID). Long-term declining trends in HIV incidence among people who inject drugs have stalled. The purpose of this Health Advisory is to alert public health departments and healthcare providers to the possibility of new injection-related HIV infections and outbreaks. This HAN provides guidance for preventing, identifying, and responding to HIV among people who inject drugs. It also provides considerations for delivering services in the context of the COVID-19 pandemic. Background

HIV Outbreaks Among People Who Inject Drugs

Although HIV incidence among people who inject drugs declined substantially over many years, the ongoing misuse of opioids and other frequently injected substances are threatening this HIV prevention success. HIV diagnoses among people who inject drugs increased by 11% nationally from 2016 to 2018, with more pronounced increases among adults less than 40 years of age and non-Hispanic White adults.1 The COVID-19 pandemic complicates the delivery of essential services, including services for people who inject drugs, potentially hindering further efforts to address the increase in HIV transmission. Multiple recent clusters and outbreaks have contributed to new HIV infections among people who inject drugs. Following a 2015 outbreak in Scott County, Indiana, 2 increases in HIV among people who inject drugs, including several clusters and outbreaks of various sizes, have occurred across the United States in counties that span the rural-urban spectrum.3-14* People involved in such clusters and outbreaks frequently shared common characteristics; nonsterile injections multiple times per day; use of multiple substances (often opioids with methamphetamine or cocaine); marginalizing circumstances (homelessness or unstable housing, recent incarceration, exchange of sex for money or goods); and coinfection with hepatitis B virus (HBV), hepatitis C virus (HCV) and sexually transmitted infections (STIs). CDC recently published a manuscript that synthesizes experiences and lessons learned from responses to six large HIV outbreaks among people who inject drugs.15 Although these outbreaks shared similarities, potential precipitating factors varied across outbreak settings. The outbreaks occurred in communities with varying levels of capacity to serve people who inject drugs; all offered some level of harm reduction services, including syringe services programs. Yet as part of outbreak response, health departments identified gaps in the delivery of harm reduction (e.g., limited access to syringe service programs and sterile injection equipment) and other services, highlighting the challenges of engaging a significantly marginalized population.

Syringe services programs are proven and effective community-based prevention programs that can provide a range of services, including access to sterile syringes and injection equipment, disposal of used syringes, vaccination, testing, naloxone, and linkage to medical care, including treatment for HIV and substance use disorder. Comprehensive syringe services programs and medication for opioid use disorder can independently reduce HIV and HCV transmission by half; when combined, these interventions can reduce transmission by more than two-thirds.16,17

Health departments can work with trusted community partners to effectively engage people who inject drugs with culturally competent practices. Prompt detection of and response to small numbers of HIV diagnoses may prevent larger outbreaks.

Clinical and Public Health Services to Address HIV Among People Who Inject Drugs in the Context of COVID-19

In the context of COVID-19, ongoing delivery of core clinical and public health services to address HIV and HCV among people who inject drugs is essential. Guidance for alternate means of service delivery when face-to-face services have been disrupted, and for minimizing the risk of SARS-CoV-2 transmission when services are provided in person, is provided in the recommendations. Also, service delivery models can be modified to reduce the number of face-to-face interactions. For example, syringe service programs can offer less restrictive, needs-based syringe distribution that does not limit the number of syringes a client can receive. That encourages clients to distribute sterile injection equipment to their peers who inject drugs (also known as secondary exchange). Fewer in-person visits can also help mitigate the effects of limited hours or closure of syringe service program sites that might occur because of COVID-19. Additionally, needs-based distribution models are the most effective at enabling people to use a sterile syringe with every injection.18,19

Recommendations

All Organizations Serving People Who Inject Drugs

People who inject drugs need comprehensive medical care. Providers and organizations serving people who use drugs can collaborate to ensure that people currently or previously injecting drugs, or who are at high risk of drug injection, have access to culturally competent prevention and care services, including during the context of COVID-19.

Recognize that any clinical encounter is an opportunity to provide multiple clinical and public health services for PWID, especially in the context of COVID-19.

Partner with other organizations to provide comprehensive medical care and services, including Medication for opioid use disorder ((MOUD), also known as medication-assisted treatment, such as buprenorphine, methadone, and naltrexone) or other services for substance use disorder or other mental or behavioral health needs (as appropriate)

Education about safer injection practices and never reusing or sharing needles, syringes, or drug preparation equipment (e.g., cookers, water, filters) for people not yet motivated or able to stop injecting drugs

Screening and treatment for skin and soft tissue and other infections (HIV, HCV, HBV, STIs)

Vaccination against hepatitis A and hepatitis B

Sterile syringes (e.g., prescribe or refer to a syringe services program or to nonprescription sales through retail pharmacies, where legally permissible)

Naloxone (for overdose reversal)

HIV post-exposure prophylaxis for persons potentially exposed to HIV through sex or injection within the past 72 hours

Counseling about other strategies to reduce risk of HIV transmission or acquisition, including limiting the number of sex partners and using condoms the correct way every time they have sex

Testing for HIV and HCV at least annually

HIV self-testing or use of a home specimen collection kit may be considered particularly in the context of COVID-19

If testing confirms HIV or HCV is present:

Rapidly link to care and treatment for HIV, HCV, or both infections to reduce viral load rapidly, improve patient outcomes, and prevent further transmission; and

Encourage injection partners and sex partners of people with HIV or HCV to get tested.

People who inject drugs can better access the diversity of needed services when services are provided in convenient locations, through mobile service delivery, or when services are co-located and integrated (often referred to as "one-stop shops").

Clinical Providers

When patients present with possible complications of injection drug use (e.g., skin, soft tissue, or bloodstream infections; overdose):

Provide screening for substance use disorder;

Recommend and offer HIV, HCV, and STI testing;

Vaccinate against hepatitis A and hepatitis B; and

Offer or refer for substance use disorder treatment, including MOUD.

Report cases of newly diagnosed HIV or HCV to the health department.

Remain alert to, and notify the health department of, increases in or clusters of HIV or HCV diagnoses. Monitor adherence and offer adherence support for PWID who receive medication for opioid use disorder or treatment for HIV, HCV, or both infections.

Connect patients with community resources, including harm reduction or syringe services programs, to ensure access to sterile syringes and to address other social and behavioral health needs.

If syringe services programs are not available, provide prescriptions for syringes or information about nonprescription pharmacy sales, in accordance with local laws.

Collaborate with public health officials to implement or expand routine opt-out HIV and HCV testing for PWID in settings such as correctional facilities, emergency departments, substance use disorder treatment centers, and community-based medical practices that are frequented by people who inject drugs.

Public Health Officials

Ensure contact tracing for all new HIV diagnoses.

Encourage HIV, HCV, and STI testing of all sex and injection partners and social contacts.

Consider retesting PWID, those engaging in high-risk sexual behavior, and those who have partners with HIV at least annually.

Routinely monitor your public health data to ensure timely identification of:

Recent increases in HIV diagnoses attributed to injection drug use, and

Recent increases in HCV diagnoses, particularly among people younger than 40 years of age.

Remain alert to high rates of or increases in homelessness or unstable housing, injection drug use, overdose events and deaths, admissions for drug treatment, and drug arrests.

Alert community partners to the potential for HIV outbreaks among people who inject drugs.

Work with community partners trusted by PWID to identify and strengthen policies and partnerships to enable rapid response to potential HIV outbreaks. Trusted partners may include those serving people experiencing homelessness or unstable housing, and substance use disorder treatment and recovery programs.

Work with clinical providers in settings frequented by people who inject drugs to implement or expand routine opt-out HIV and HCV testing for PWID. These settings may include correctional facilities, emergency departments, substance use disorder treatment centers, and community-based medical practices.

Implement or increase street-outreach testing or home testing or specimen collection.

Improve access to sterile syringes and injection equipment by establishing syringe services programs; amending policies to offer less restrictive, needs-based, and non-punitive syringe distribution models that promote secondary exchange; or increasing access to nonprescription syringe sales from retail pharmacies, in accordance with local laws.

Establish collaborations to improve coordination of essential services for people who inject drugs with key partners, including:

Engage with people who currently inject (or formerly injected) drugs as partners in developing recommendations for establishing or expanding essential services for PWID.

Additional Services in the Context of COVID-19

When services are provided in person, guidance is available for minimizing risk of COVID-19 transmission in clinical and field-based settings. When face-to-face services have been disrupted, monitor service delivery and consider alternate means to ensure services reach the needed population.

Consult guidance for delivering specific services in the context of COVID-19, including:

Syringe services programs (where legally permissible)

HIV medical care and antiretroviral therapy

When PWID need HIV care, discuss the risks and benefits of in-person visits versus telephone or virtual visits in the context of COVID-19. Factors to consider include the extent of local COVID-19 transmission, the health needs that will be addressed during the appointment, and the person's HIV status (e.g., CD4 cell count, HIV viral load) and other underlying medical conditions. Telephone or virtual visits for routine or non-urgent care and adherence counseling may replace face-to-face encounters.

Clinical and public health encounters with people who inject drugs present additional opportunities to address COVID-19 risks.

To protect themselves and others from COVID-19, provide PWID with access to face masks, hand sanitizer, and education about avoiding close contact and other steps to reduce risk of exposure. Screen PWID for symptoms of COVID-19. For those with suspected or confirmed COVID-19:

Provide or refer for urgent or non-urgent medical care, if necessary.

Isolate from other people to prevent spreading of infection.

Local health departments, housing authorities, homeless service systems, and healthcare facilities should plan to identify locations to isolate those with known or suspected COVID-19 until they meet the criteria to end isolation.

Consult guidance to assist people experiencing homelessness in the context of COVID-19.

For More Information

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*Clusters and outbreaks have been identified in Florida (Miami);3 **Kentucky** (Northern **Kentucky**);4 Massachusetts (Lawrence and Lowell; Boston);5,6 Minnesota (Hennepin and Ramsey Counties);7 North Carolina (western North Carolina);8 Ohio (Hamilton County);4 Oregon (Portland);9 Pennsylvania (Philadelphia);10 Washington (Seattle);11and West Virginia (Cabell County; Kanawha County).12,13 Smaller increases in HIV diagnoses among PWID have been identified elsewhere, including in Alaska.14 The Centers for Disease Control and Prevention (CDC) protects people's health and safety by preventing and controlling diseases and injuries; enhances health decisions by providing credible information on critical health issues; and promotes healthy living through strong partnerships with local, national and international organizations.

Department of Health and Human Services

Health Alert: Conveys the highest level of importance; warrants immediate action or attention. Health Advisory: Provides important information for a specific incident or situation; may not require immediate action.

Health Update: Provides updated information regarding an incident or situation; unlikely to require immediate action.

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This message was distributed to state and local health officers, state and local epidemiologists, state and local laboratory directors, public information officers, HAN coordinators, and clinician organizations.
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https://emergency.cdc.gov/han/2020/han00436.asp

Brazil

Against dengue, 'Aedes aegypti' mosquitoes with Wolbachia bacteria begin to be released in Belo Horizonte

Source: Globo

Unique ID: 1007979003

Researchers expect dengue, zika and chikungunya to decline in the city.

Aedes aegypti mosquitoes that went through a process of implantation of the bacterium Wolbachia began to be released in the Region of Sale Nova, in Belo Horizonte, from this Monday (5).

The project, carried out in other countries, is considered promising for reducing the transmission of dengue, zika and chikungunya.

According to the researcher of the Oswaldo Cruz Foundation (Fiocruz) and coordinator of the project, Luciano Moreira, each tube has approximately 150 insects with Wolbachia. He explained why the release in the mining capital began by Venda Nova:

"New Sale is a high-risk region and the release will be made for 16 weeks. Then the method becomes sustainable, they [the mosquitoes] remain in that locality," moreira says. Wolbachia

Wolbachia is an intracellular bacterium present in 60% of insects, but is not found in Aedes aegypti. By the Wolbachia Method, conducted in Brazil by Fiocruz, this microorganism is implanted in the insect's eggs, preventing viruses from mosquito-borne diseases from developing within it.

With the release of mosquitoes that contain the bacteria, the expectation is that they reproduce, thus establishing a new population of insects, all with the microorganism. The researchers claim that there is no genetic modification in the process.

The leader of the Wolbachia Method in Brazil, Luciano Moreira, said the study to control these diseases has already been implemented by researchers from the World Mosquito Program (WMP) in 12 countries. Also according to him, the tests in Belo Horizonte continue in 2021, 2022 and 2023. "Once a week, for 16 weeks, it releases mosquitoes with Wolbachia," he explained.

A study similar to that carried out in the mining capital of WMP indonesia indicated a 77% reduction in cases of dengue, virologically confirmed, in areas where Aedes aegypti was released with the bacterium. Application in Brazil

In Brazil, the Wolbachia Method is conducted by Fiocruz, in partnership with the Ministry of Health, with the support of local governments. The actions were initiated in Rio de Janeiro (RJ) and Niterói (RJ), in an area where 1.3 million inhabitants live.

In Niterói, preliminary data already indicate a reduction of 75% of chikungunya cases in the regions that received Aedes aegypti with Wolbachia, compared to others that did not.

The project is expanding to Campo Grande (MS) and Petrolina (PE).

'Evita Dengue' in BH

The Federal University of Minas Gerais joins as a partner of the initiative, through the project "Evita Dengue". After the release of these mosquitoes, researchers at the university will evaluate the impacts on reducing cases of dengue, zika and chikungunya.

According to physician and professor Mauro Teixeira of the Institute of Biological Sciences (ICB), coordinator of the research, this is a scientific collaboration between UFMG and Emory University, Yale University and the University of Florida, all in the United States.

The study is funded by the National Institute of Allergy and Infectious Diseases (NIAID/NIH) in the United States. The research also has the support of the City of Belo Horizonte (PBH), through the Departments of Education and Health, the Department of Health of Minas Gerais and the Ministry of Health.

The "Evita Dengue" will be held in the nine regions of Belo Horizonte. 60 children, 6 to 11 years old, from the 1st to 3rd grades, enrolled in 58 selected municipal public schools will be invited to participate in the research.

In the regions where 29 of them are located, the mosquito with Wolbachia will be released at first. In the regions of the other schools, the Aedes with Wolbachia will be released after the validation of the tests.

A blood sample will be collected from the children to assess whether they had contact with dengue, zika or chikungunya virus. The procedure must have the consent of themselves and the parents.

To ensure the confidentiality of identities, samples will be identified by numbers and not by names. "Parents can rest assured that it will not be possible to use these tests to harm their children under any circumstances," says researcher Fatima Brant, phD in Infectious Diseases and Tropical Medicine at UFMG and a member of the project's coordination team.

In addition to blood collection, Fatima said health education actions are planned in the municipal schools participating in the study.

The researcher also said that the study in Belo Horizonte will evaluate the effectiveness of the Wolbachia Method in the state capital and that the biofactory where the bacteria is placed in the eggs of Aedes aegypti is in the former health center of the São Francisco neighborhood, in the Pampulha Region. https://g1.globo.com/mg/minas-gerais/noticia/2020/10/05/contra-a-dengue-mosquitos-aedes-aegypti-com-bacteria-wolbachia-comecam-a-ser-soltos-em-belo-horizonte.ghtml

Researches, Policies and Guidelines

United States

Flavivirus vaccines: Researchers one step closer to development

Source: outbreaknewstoday

ID: 1007977281

The results of a recent study moved University of Arizona Health Sciences researchers one step closer to developing effective vaccinations against flaviviruses, which infect more than 400 million people a year with diseases such as dengue, yellow fever, West Nile, Zika and Japanese encephalitis.

When a person is infected with a virus, antibodies are produced to fight the virus and provide immunity against reinfection. In the case of flaviviruses, however, if a person gets a second flavivirus infection — they were originally infected with Zika and then got dengue, for instance — the presence of antibodies can result in more severe symptoms through a process called antibody-dependent enhancement of infection. "If, at some point in the past you've had Zika virus, later when you are exposed to dengue, you are at much greater risk of getting sick. Antibodies created by memory B cells as a result of the Zika infection can bind to certain parts of the dengue virus, but the dengue virus isn't affected," said Deepta Bhattacharya, PhD, an associate professor in the UArizona College of Medicine — Tucson's Department of Immunobiology. "In fact, the memory B cell-generated antibodies can work like a 'Trojan horse' and help the virus get into the cells, where it can make the disease worse."

The findings give Dr. Bhattacharya and his team a new way to think about creating flavivirus vaccines. Rather than targeting the whole virus, they propose targeting specific locations on the virus that are unique to each type and strain. Essentially, they would be removing memory B cells from the vaccination equation.

"We wanted to study how the immune system and antibody responses deal with sequential exposures to different flaviviruses," Dr. Bhattacharya said. "Antibody-dependent enhancement of infection is the main reason why it has been difficult to vaccinate against flaviviruses, dengue in particular."

Dr. Bhattacharya is the senior author on a paper, "Affinity-restricted memory B cells dominate recall responses to heterologous flavivirus challenges," published today in the journal Immunity. The study focused on two types of cells that produce antibodies: plasma cells and memory B cells. Plasma cells are the primary drivers of long-lasting immunity, as they continue to produce antibodies once an infection has been cleared or after vaccination. Memory B cells only produce antibodies if a second infection occurs.

"One of the questions we've had for a long time is, what is the purpose of those memory B cells?" said Dr. Bhattacharya, also a member of the university's BIO5 Institute. "If you already have antibodies from plasma cells, why do you need the other cells?"

Using a combination of flavivirus infections, vaccinations and genetic mouse models, Dr. Bhattacharya and his team examined how memory B cells respond to subsequent flavivirus infections.

They found that when memory B cells are activated by a new infection, they produce antibodies that are diverse and capable of targeting viruses that have changed since the first infection, through mutation or infection with a slightly different strain, for example.

"There is a huge amount of hidden diversity in memory B cells. For most viral pathogens, like influenza or SARS-CoV-2, this is a good thing. It means that memory B cells are poised to make new antibodies and deal with mutations if and when they arise," Dr. Bhattacharya said. "For flaviviruses, this is not so great. We found that memory B cells produce a lot of suboptimal antibodies that could enhance the second infection."

Although memory B cells recognize the new virus as a flavivirus and produce antibodies, those antibodies are unable to stop the new virus from infecting cells. In fact, they may actually make the second infection worse.

The same holds true when it comes to vaccinations. Vaccines are designed to stimulate an immune response and prompt plasma cells and memory B cells to produce antibodies against a virus. If a person who never had dengue is vaccinated and develops antibodies, then later becomes infected with a different flavivirus, the antibodies produced by memory B cells in response to the vaccination may increase the severity of the disease.

"For people already immune to one flavivirus, this would avoid engaging these not-so-great memory B cells," Dr. Bhattacharya said. "For people who never were exposed, it avoids generating this problematic diversity in the first place."

https://www.cell.com/immunity/fulltext/S1074-7613(20)30395-

2?_returnURL=https%3A%2F%2Flinkinghub.elsevier.com%2Fretrieve%2Fpii%2FS1074761320303952%3Fshowall%3Dtrue

http://outbreaknewstoday.com/flavivirus-vaccines-researchers-one-step-closer-to-development-41706/

United States, Mexico

Renew Alliance for Food Safety between Mexico and the United States

Source: CE NAFTA 2.0-USMCA

ID: 1007981372

The respective health agencies will identify collaborative work areas to safeguard consumer health and prevent outbreaks of foodborne diseases.

In order to strengthen the safety of food produced, marketed and consumed in Mexico and the United States, health agencies in both countries join forces in signing the Alliance for Food Safety Declaration of Intent.

Through this Declaration, the health institutions of the secretariats of Agriculture and Rural and Health Development, Mexico, and the U.S. Food and Drug Administration (FDA) will promote collaborative actions with academic, scientific, consumer groups, and the private sector, with the aim of gaining greater knowledge of the safety systems of both countries and establishing mutual trust bases in their respective systems in favor of identifying additional areas of opportunity of mutual interest.

The document replaces the Declaration of Intent, signed in 2014, which included only fresh and minimally processed agricultural products.

The chief director of the National Service for Agro-Food Health, Safety and Quality (Senasica), Francisco Javier Trujillo Arriaga, stressed that the new instrument allows immediate communication between agencies, to respond quickly to safety alerts to prevent the flow of fruit and vegetable products from Mexico to the United States.

During the virtual session, the Ministry of Agriculture official indicated that the FDA, Senasica and Cofepris hold joint meetings, virtually every week, to find the best way to work in a coordinated manner, between the three agencies, producers, academia and industry, to solve safety problems, which are of common interest to both countries.

He stressed that the technical professionals of the Government of Mexico had not interrupted field visits and packers during the health contingency of COVID-19, demonstrating their commitment beyond work, in order to protect the lives of consumers, promote trade and take care of the validity of a successful food system.

In his turn, the cofepris holder highlighted that this firm renews the Partnership between institutions to ensure food safety and the safety of consumers in both countries by preventing health risks from their consumption.

"The signing of this new Partnership will further strengthen communication between the two countries to improve the attention of outbreaks caused by the consumption of imported food, favoring the exchange of information for effective health surveillance."

He added that the Alliance would also facilitate "the exchange of knowledge and experience through training, which will provide a stronger and stronger health control system with high-impact deliverables to enable free transit of quality food for the health of consumers in both countries."

FDA Deputy Commissioner for Food Policy and Response Frank Yiannas said that "the FDA, Senasica, and Cofepris will improve their level of collaboration to strengthen food safety and leverage new approaches that further protect consumers in both the United States and Mexico."

On the Agreement, FDA Commissioner Stephen M. Hahncommented that the Alliance is important to the United States, because "U.S. consumers depend on imports from Mexico for much of the fresh fruits and vegetables they consume, as well as otherfood."

He noted that "about one-third of all food and 60% of fresh produce imported into the United States comes from Mexico."

Historically, the FDA, Senasica and Cofepris have worked in constant collaboration due to the high volume of food trade between the two nations.

Since 2014, the three agencies have signed an Alliance focused on the safety of fresh and minimally processed products, the scope of which is intended to extend to food regulated by the three agencies by signing this new Alliance on Food Safety.

The signing of this new Alliance establishes the creation of working groups, which will prevent microbiological contaminants in fresh and minimally processed agricultural products, respond quickly and efficiently to outbreaks, collaborate with laboratory tests, strengthen technical capacities through the use of modern and intelligent tools and technologies available to ensure food safety, accelerate the implementation of preventive and science-based verification measures, among others.

ECDC

Looking at newer enhanced seasonal influenza vaccines: a systematic review of efficacy, effectiveness and safety

Source: ECDC

Based on a systematic literature review, ECDC assessed the efficacy, effectiveness and safety of newer and enhanced inactivated seasonal influenza (flu) vaccines among those 18 years or older. These assessed are MF59® adjuvanted, cell-based, high-dose, and recombinant haemagglutinin influenza vaccines.

Vaccines. © Istock

In sum, the evidence-base for the efficacy (study results from conducted phase 3 trials) and effectiveness (study results from assessment of vaccine performance when vaccines are in use in the real world) of newer and enhanced influenza vaccines is currently still limited. With several studies ongoing, ECDC will update this review in the future.

Despite the currently limited evidence, it is likely that the use of these vaccines provides greater protection against seasonal influenza than not getting vaccinated. Due to a lack of available studies, a comparison between the newer vaccines was not assessed. A large body of evidence was presented for the safety of the newer influenza vaccines, with expected results regarding the safety profiles.

The report provides recommendations to enhance research conduct as well as reporting on this topic to improve available data overall for these newer enhanced seasonal influenza vaccines.

Why seasonal influenza vaccines?

Seasonal influenza is an infectious respiratory disease, typically circulating from November to April in the Northern hemisphere and from June to October in the Southern hemisphere. It is mainly transmitted between humans through droplet transmission, indirect contact and aerosols. Collectively, the World

Health Organization estimates that annual seasonal influenza epidemics result in three to five million severe cases and 290 000 to 650 000 respiratory deaths worldwide.

The most effective way to prevent seasonal influenza infection is through strain-specific vaccination. How effective the annual influenza vaccines are, depends on a number of factors including the predominantly circulating influenza strains, the obtained vaccination coverage in the (risk) populations and the mutation of the virus compared to previous influenza seasons.

For many decades, only trivalent influenza vaccines (that include two influenza A strains and one influenza B strain) have been available. In recent years, quadrivalent (two influenza A strains and two influenza B strains) have been authorised and are increasingly available. Traditional influenza vaccines have limitations in terms of immune response and the substrate used during manufacturing can reduce overall effectiveness. The newer and enhanced influenza vaccines have been developed, both in trivalent and quadrivalent forms, in an attempt to counteract these limitations.

https://www.ecdc.europa.eu/en/news-events/seasonal-influenza-vaccines-systematic-review-efficacy