## GPHIN Daily Report for 2020-10-26

## **Special section on Coronavirus**

## Canada

## Areas in Canada with cases of COVID-19 as of 25 October 2020 at 19:00 EDT

Source: Government of Canada

Province, territory or other	Number of confirmed cases	Number of active cases	Number of deaths
Canada	216,104	24,729	9,946
Newfoundland and Labrador	290	11	4
Prince Edward Island	64	1	0
Nova Scotia	1,110	6	65
New Brunswick	328	65	6
Quebec	100,114	9,143	6,143
Ontario	70,373	7,120	3,093
Manitoba	4,249	2,053	54
Saskatchewan	2,729	619	25
Alberta	24,261	3,651	300
British Columbia	12,554	2,051	256
Yukon	20	5	0
Northwest Territories	9	4	0
Nunavut	0	0	0
Repatriated travellers	13	0	0

A detailed <u>epidemiologic summary</u> is available. <u>https://www.canada.ca/en/public-health/services/diseases/2019-novel-coronavirus-</u> infection.html?topic=tilelink#a1

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

#### Canada

## Prime Minister announces funding to advance the development of Canadian COVID-19 vaccine technologies

Source: Prime Minister of Canada Cabinet Unique ID: 1008107212

As we continue to address the health, social, and economic impacts of COVID-19, the Government of Canada is actively pursuing the purchase and development of vaccines, treatments, and related supplies to protect Canadians from the virus and support our recovery from the pandemic. This includes investing in Canadian projects, and strengthening our country's biomanufacturing sector and capabilities to fight future pandemics through leading-edge vaccine technology.

The Prime Minister, Justin Trudeau, today announced an investment of up to \$173 million through the Strategic Innovation Fund (SIF) in Quebec City-based Medicago to support Canada's response to COVID-19 and future preparedness. The project, valued at a total of \$428 million, will advance Medicago's virus-like particle vaccine, developed on the company's unique plant-based production platform, through clinical trials. It will also establish a large-scale vaccine and antibody production facility to increase Canada's domestic biomanufacturing capacity.

The government has signed an agreement with Medicago to secure up to 76 million doses of their COVID-19 vaccine candidate, enough to vaccinate 38 million people. This is the first domestically developed vaccine candidate the Government of Canada has secured.

The government will also invest up to \$18.2 million in Vancouver-based biotechnology company Precision NanoSystems Incorporated (PNI) through the SIF. This investment will support a \$24.27-million project to help advance the development of a COVID-19 vaccine candidate through pre-clinical studies and clinical trials. The government is also providing up to \$23.2 million in funding through the National Research Council of Canada Industrial Research Assistance Program to advance six COVID-19 vaccine candidates in various stages of clinical trials.

The Government of Canada has now signed agreements with Medicago, AstraZeneca, Sanofi and GlaxoSmithKline, Johnson & Johnson, Novavax, Pfizer, and Moderna. Agreements signed to date will secure access to up to 358 million doses of their different COVID-19 vaccine candidates. At this time, there are three vaccine candidates currently under review and many others in clinical trials and in development. Quotes

"Today's announcement is a testament to Canada's commitment to evidence-based solutions to fight the global COVID-19 pandemic. As we continue to safely restart our economy, we will do whatever it takes to protect Canadians from COVID-19 and build a country that is healthier and safer for everyone. This is why we are supporting our biomanufacturing sector, through companies like Medicago and Precision NanoSystems, to develop a reliable, made-in-Canada vaccine."

The Rt. Hon. Justin Trudeau, Prime Minister of Canada

"Access to safe and effective vaccines is critical for Canada, and the government is doing its part to help support innovative Canadian companies in performing the research needed to demonstrate that their products meet Health Canada's high safety, efficacy and quality standards."

The Hon. Patty Hajdu, Minister of Health

"Our government is continuing to manage the impacts of the pandemic, while preparing for future waves. Today's investment is helping Canadian companies PNI and Medicago advance Made-in-Canada vaccine candidates recommended by the COVID-19 Vaccine Task Force, and supporting the researchers and companies that are helping in the fight against this pandemic. This is all part of our government's continued commitment to protect the health and safety of all Canadians."

The Hon. Navdeep Bains, Minister of Innovation, Science and Industry

"This agreement between the Government of Canada and Medicago ensures that Canadians will have access to another promising COVID-19 vaccine candidate. Medicago is working diligently right here in Canada to support the response to COVID-19 and protect the health and safety of Canadians."

https://pm.gc.ca/en/news/news-releases/2020/10/23/prime-minister-announces-funding-advancedevelopment-canadian-covid

#### Canada

#### **Remarks from the Chief Public Health Officer on COVID-19, October 23, 2020** From: Public Health Agency of Canada

## Speech

Remarks from the Chief Public Health Officer on COVID-19, October 23, 2020 There have been 209,148 cases of COVID-19 in Canada, including 9,862 deaths. Nationally, there are close to 23,500 active cases across the country. Over the past week, labs across Canada have tested an average of almost 75,000 people daily, with 3.1% testing positive. The average case count is now at 2,488 cases being reported daily over the past 7 days. The number of people experiencing severe illness continue to increase. Over the past 7 days, there were on average just over 1,000 individuals with COVID-19 being treated in Canadian hospitals, including over 200 in critical care and an average of 23 deaths were reported each day.

Last week, Dr. Njoo and I had the honour of speaking at the opening of the Canadian Public Health Association's annual conference, which was held virtually this year. It was an opportunity to reflect on what we have been through over the last ten months. But most of all, it was an opportunity to thank Canada's public health workforce for their extraordinary work and their commitment, resolve, resiliency, and ingenuity. It is truly inspiring and I just wanted to take a moment to acknowledge their efforts today, *to all Canadians*.

Canada's public health community has mobilized and collaborated like never before to stand up and sustain this response. We've all had to adapt and adjust as new information emerged, while at the same time navigating through the sea of uncertainties. And yet, the public health workforce has endured, and remains steadfast in the commitment to protect and improve the health and resilience of the populations we all feel privileged to serve.

But despite public health's efforts – no one sector can solve a pandemic alone. Pandemics are **whole of society** events. That means the impacts extend across society, not only by affecting those who become ill, but also by impacting the health, social and economic systems that affect our overall wellbeing. It also means that minimising the pandemic's impact, both today and in the future, depends on all of our actions, **now**. The longer a pandemic goes on and the less we all do to minimize the related disruptions the more its impacts will be felt.

The **public** in **public health** means, as practitioners, we serve the population but also that the collective actions of the public are a vital part of the power and success of our solutions!

We can all do our part by keeping our number of in-person close contacts low and committing to proven effective public health practises; <u>stay home/self-isolate</u> if you have any <u>symptoms</u>, maintain <u>physical</u> <u>distancing</u>, <u>wear a face mask as appropriate</u>, and keep up with <u>hand</u>, <u>cough</u> and <u>surface</u> hygiene. Go the extra mile by downloading the <u>COVID Alert</u> app to break the cycle of infection to help limit the spread of COVID-19.

Read my backgrounder for more <u>COVID-19 Information and Resources</u> to increase your COVID know how and use your knowledge to support, guide, and influence others.

https://www.canada.ca/en/public-health/news/2020/10/cpho-remarks--october-23-2020.html

Canada 55 COVID cases now reported at Calgary jail as in-facility spread confirmed ID: 1008108522 Source: CBC News

An outbreak of COVID-19 at a Calgary jail has now jumped to 55 cases, a notable increase after the outbreak was initially reported Thursday.

On Thursday, Dr. Deena Hinshaw, the province's chief medical officer of health, announced that 24 cases had been confirmed at the Calgary Correctional Centre.

## As of Friday, 50 inmates and five staff members have tested positive, Alberta Health Services spokeperson James Wood said.

Wood said the cases are linked to transmission of COVID-19 within the facility in northwest Calgary. "Isolation and monitoring of the positive cases is underway as per public health direction," Wood said in an email. "All inmates and staff are being tested for COVID-19."

The inmate population at the Calgary Correctional Centre can change on a day-to-day basis but the facility has a capacity of 427.

Wood said contract tracing for anyone potentially exposed is ongoing, and all inmate units are currently isolated.

"All movement between units has been suspended, as are transfers [and] admissions in or out of the facility," Wood said. "Infection prevention and control measures are in place including enhanced cleaning and PPE protection."

Staff within the jail are screened for COVID-19 symptoms prior to their shifts, Wood said.

All inmates are monitored and assessed twice daily, and at this time are reporting mild symptoms. <u>Speaking Thursday when 24 cases were announced</u>, Edmonton-based criminal defence lawyer Tom Engel said he was concerned the jail was entering a dangerous situation.

"They have to reduce the population immediately. Alberta was doing pretty well at the outset. But this isn't working anymore, so they have to go to the next level," he said.

There were 1,260 active COVID cases in Calgary as of Thursday, up from 1,174 reported on Wednesday. https://www.cbc.ca/news/canada/calgary/calgary-correctional-centre-tom-engel-covid-19-1.5775092?cmp=rss

## Canada

## Seven flights with COVID-19 cases passed through Alberta in 3-day span

Source: 660 NEWS ID: 1008118515

CALGARY (660 NEWS) – Seven flights passing through Alberta over a three-day span last week have had confirmed cases of COVID-19.

Four of those flights left Calgary towards other major Canadian cities.

Two were international flights coming into YYC Calgary International Airport – one from Cancun and another from Puerto Vallarta, Mexico.

Those six flights – in and out of Calgary – took place on Oct. 17.

The seventh flight with a COVID-19 case in that three-day span landed in Edmonton – from Vancouver – on Oct. 19

Passengers on these flights are advised to self-monitor for symptoms.

https://www.660citynews.com/2020/10/25/seven-flights-with-covid19-cases-passed-through-alberta/

## Canada

A Niagara-area dog first in Canada to test positive for COVID-19 Source: TORONTO STAR ID: 1008119610

Researchers have identified the first confirmed case of COVID-19 in a Canadian dog — but it doesn't mean pet owners should panic.

The dog belongs to a Niagara Region household where four out of six members tested positive for the coronavirus. The family's canine companion had no symptoms and a low viral load, suggesting that dogs remain at relatively low risk of becoming gravely ill or passing on COVID to others, experts said.

Scott Weese, a veterinary internal medicine specialist and director of the University of Guelph's Centre for Public Health and Zoonoses, is part of the team that identified the Niagara case. While the discovery is interesting from a research point of view, he said it doesn't change existing advice: If pet owners are self-isolating, they should do their best to limit their pets' contact with others, too.

"This pandemic is clearly driven almost exclusively by people," said Weese. "Ultimately, we want to keep this purely a human disease because it's easier to contain."

Understanding the relationship between animal and human health during the pandemic is part of that containment effort — even if pets are believed to have "a very minor" role in transmission, he said.

"We want to try to prove they're not a problem, as opposed to hope is not a problem," Weese said. The research comes with logistical challenges: Weese and his fellow faculty member rely on leads from social media, vets and public health workers about families that may have an exposed pet. Then, they must negotiate a tight testing timeline.

"A person has to get infected, and then they got to go to a testing centre and ask to get the results. Then they have to contact us and we have to get into the household. And if we don't do that within a week, we're probably going to get negative regardless."

That, said Weese, is why it's unsurprising that only one canine case has been confirmed, even though he's tested around 45 animals since the start of the pandemic.

"I think a lot of the times we've gone in and sampled, we probably had animals that are positive but we've missed them," he said.

In an advisory issued last week, the province's Office of the Chief Veterinarian said people with COVID symptoms should try to "exercise the same infection control precautions" with their pets as they would people, including keeping animals indoors and limiting their contact with anyone other than their main caretaker.

"What I don't want to see is someone's cat getting infected, and then their cat infecting wildlife like raccoons, and then that's just another potential source we have to think about," said Weese. Outside the pet realm, there is evidence that mink are particularly susceptible to the virus; more than a

million of the animals have been killed in the Netherlands and Spain as a precaution after outbreaks on farms.

"It's just a reminder of what we've been saying since January, which is that we need to figure out what the issues are," said Weese. "It's good that the main livestock issue is mink — we don't have a significant concern with pigs or cattle or chickens."

Despite initial concern that the virus may linger in animals' coats, Weese said that is no longer believed to be a "significant source of infection." Contact with infected animals' noses, mouths and feces is more likely to spread the illness — although animals are believed to only be infectious for a short period of time. While dogs seem quite resistant to the virus, Weese said cats seem more likely to show symptoms — although as in humans, the degree of severity varies.

While vets are encouraged to contact the provincial Office of the Chief Veterinarian if they suspect a pet has been exposed to the virus, the province doesn't recommend testing animals unless it is part of a study, or you own a mink farm.

As for the Niagara household, Weese said, both its human and canine residents are doing fine. <u>https://www.thestar.com/news/gta/2020/10/25/a-niagara-area-dog-first-in-canada-to-test-positive-for-covid-19.html</u>

## Canada

## **Too many blind spots: How we're still paying for Canada's slow response to COVID-19** Source: Ottawa Citizen

ID: 1008099961

When the virus finally hit us, it turns out we were screening for the wrong things and looking the wrong way. Worse, in the midst of a rush of new cases this autumn, too many of us continue to underestimate the SARS-CoV-2 virus — the pathogen that causes COVID-19. Because of this, our systems for testing and tracing have been overwhelmed.

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Too many blind spots: How we're still paying for Canada's slow response to COVID-19 Back to video

The result, as this special report makes clear, is that we have consistently remained one or two steps behind in our war to tame the novel coronavirus.

Federal health authorities failed early on to draw the right conclusions about how the virus spreads, despite multiple pieces of evidence in plain view. More puzzling, they delayed putting into place common sense policies, such as mandating the wearing of non-medical face masks.

This might have put a brake on the rapid early climb of COVID-19 infections, and the hospitalizations that resulted.

While we eventually got things on course, especially in the Atlantic region, the delay meant Canada's response has been middle of the pack in terms of success. We've been substantially better than the U.S. at reducing the caseload on hospitals and minimizing deaths per capita. But our record pales against that of New Zealand, Australia, South Korea, Vietnam, Taiwan and much of Scandinavia.

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Theresa Tam, Canada's chief public health officer, center, speaks during a news conference on the coronavirus in Ottawa, Ontario, Canada, on Wednesday, March 11, 2020. Photo by David Kawai /Bloomberg

Many within the latter group have the good fortune to be geographically remote. But they had something else in common that proved critical in dealing with the pandemic — government leaders who were either trusted or feared, and public health experts who convinced them they had to move swiftly to restrict movement across their borders and lock down large parts of their economies.

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Because they acted, the virus was denied free rein, allowing health authorities to hurl everything they had at tamping down the occasional fires. In sharp contrast, Canada is struggling with vast gaps in its knowledge of how the virus is spreading through the community. When outbreaks do occur, especially in central Canada's hotspots, governments have been forced into ham-fisted, region-wide lockdowns instead of targeted quarantines.

This is why so many of us are heading into winter in a dispiriting fog of uncertainty about how long we must endure this alternate reality. Had Canada acted swiftly at the start, and not squandered the health gains of that national lockdown this past spring, we would today be in a much different place.

Taiwan's Premier Su Tseng-chang left little doubt about the scope of the health crisis about to unfold.

The island nation had just the day before — Jan. 22 — confirmed its first case of COVID-19.

Following a briefing by his country's top epidemiologists, Su declared that all national efforts aimed at preventing a COVID-19 epidemic "shall be considered combat mission." Further, he urged, "all government agencies must rapidly respond."

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What he meant was more rapidly.

Practically from the moment local Chinese health officials acknowledged cases of pneumonia of unknown origin in late December, Taiwan had been doing onboard inspections of direct flights from Wuhan — the apparent epicentre of the virus outbreak. Suspicious it wasn't getting the full story, Taiwan also sent two of its most senior health experts to Wuhan on Jan. 13 for a firsthand appraisal.

In this file photo taken on March 3, 2020, children wearing face masks leave their elementary school at the end of the day in Xindian district, New Taipei City. Photo by SAM YEH /AFP via Getty Images

They concluded human to human transmission of the virus couldn't be ruled out — and held a press conference a few days later upon their return to Taiwan. While it wouldn't become clear for weeks that the virus was being spread asymptomatically, Taiwan prepared for the worst. In so doing, it happened to put into place the strategies for combatting such a scenario.

Among other measures, Taiwan distributed millions of surgical face masks to convenience stores — and set in motion a plan to quadruple mask production. A small army of health workers was trained to track and trace the spread of the infection.

Taiwan's wartime posture would make all the difference in the weeks to come — and contrasted sharply with the far more deliberate approach adopted by most other countries, including Canada and the World Health Organization, the United Nations agency with responsibility for monitoring and responding to disease outbreaks.

The day Su issued his call to arms, Canada activated a government-wide COVID-19 operations centre in a small office complex on Laurier Avenue in downtown Ottawa. Although Canada would record its first confirmed case of COVID-19 on Jan. 25, a sense of national urgency would take nearly two months to manifest.

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The numbers tell the story. By mid-October, Canada's COVID-19 case count had soared to more than 186,000 during the course of the pandemic, including nearly 9,700 deaths.

Confirmed cases over the same period in Taiwan — which has nearly two-thirds of Canada's population — totalled 529, including seven deaths.

The big puzzle, of course, is why Canada was so paralyzed by the approaching virus.

Much criticism has been levelled at the Liberals' underfunding of the Global Public Health Intelligence Network — a 23-year-old unit within the federal government's health agency that scours the globe's newspapers, blogs and government websites for signs of emerging health problems.

But in the case of COVID-19, early warning doesn't appear to have been the problem.

Hundreds of Canadian medical professionals and government health officials subscribe to FluTrackers.com and ProMED, publications that warned about the outbreak of a mysterious pneumonia in Wuhan on Dec. 31 and Dec. 30, respectively.

Dr. Kamran Khan, founder and chief executive of Toronto-based BlueDot poses during an interview at his office in Toronto, Canada on February 14, 2020. Photo by JORGE UZON /AFP via Getty Images

Toronto-based BlueDot, a private firm whose clients include the federal Foreign Affairs department and Health Canada, also picked up local media reports on Dec. 31 from China. BlueDot crunched data from mobile phones and airline passenger traffic to predict — accurately in many cases — where a potential epidemic might spread.

Company founder Dr. Kamran Khan forwarded a copy of his conclusions in early January to Chief Public Health Officer Theresa Tam who, on Jan. 6, emailed colleagues to note she was planning to run BlueDot's epidemic intelligence platform to model events in Wuhan.

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They were aware of the virus and its likely initial path. What they didn't know was what was driving it.

BlueDot noted Jan. 14 that the potential of human-to-human transmission of the virus was unclear. In the Jan. 27 edition of Journal of Travel Medicine, the company wrote that a big unknown was how efficiently the virus was spreading from human to human. Whether people without symptoms were passing the virus on to others was not directly addressed.

"While our algorithms gather epidemic intelligence and anticipate how they are likely to spread," Khan noted in an email to this newspaper, "we collect clinical information about new pathogens through the peerreviewed scientific medical literature."

The Public Health Agency of Canada — established in 2004 in the wake of the severe acute respiratory syndrome (SARS) epidemic — considered the possibility of asymptomatic and pre-symptomatic spread from the beginning but took its time evaluating the scientific evidence. In response to queries by this newspaper, the agency said it conducted "rapid reviews" into this question in February, March, April and June "to brief on the new evidence as it evolved."

PHAC said that by Feb. 26, it was aware of five publications that suggested pre-symptomatic transmission had occurred. By March 24, the agency noted there were 34 studies. "The evidence was starting to provide some parameters around how many days before infection can someone transmit SARS-CoV-2 and what proportion of infected cases never develop symptoms," PHAC said.

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A patient is wheeled out Scarborough Grace Hospital by security in 2003 during the SARS outbreak. Craig Robertson, Toronto Sun

Why so deliberate? In part, it was a question of previous experience. Key public health officials in Canada and the World Health Organization initially viewed COVID-19 through a lens shaped by recent epidemics — H1N1 and SARS — and the coronaviruses that produced them. Indeed, the coronavirus that caused SARS shares 70 per cent of the genetic sequence of SARS-CoV-2.

"Early in the pandemic there was sparse data on SARS-CoV-2 and its transmission," PHAC said. "At the time, knowledge of other viruses was being used to understand (its) possible attributes."

This approach provided some initial comfort. During the nine months ended August 2003, an estimated 8,500 people worldwide were diagnosed with SARS. Nine hundred died. Canada, the most affected country

outside of China, reported 438 probable cases and 41 deaths, most in the Toronto area. Sobering numbers, yes, but well short of what we're experiencing now.

"The models which seemed most similar to COVID-19, the original SARS and influenza, suggested that asymptomatic transmission would be unlikely," McGill University infectious disease expert Dr. Michael Libman told this newspaper, adding that China had been dealing with the COVID-19 outbreak for a month at that point and had not clearly identified symptomless spread as an issue.

"We know now that they were completely overwhelmed with the outbreak," Libman noted, "and had no resources to properly study transmission."

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Because the earlier outbreaks involving SARS and H1N1 were spread mainly by people with obvious symptoms — cough, fever, and pneumonia — medical workers found it easier to isolate the viruses. COVID-19 is different.

Canadian health officials missed two opportunities to draw a faster conclusion about the stealth qualities of this virus and its corollary, namely that physical distancing and face masks are the best way to keep it at bay until drug makers can produce a vaccine or cure.

Early clues were not just in plain sight, they were brought to the attention of senior health officials in the capital region. Canada as a consequence was left significantly more vulnerable to COVID-19 than it otherwise would have been.

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OTTAWA – MARCH 12, 2020 Empty shelves where toiletries normally are at the Independent in Manotick. Photo by Julie Oliver /Postmedia

Dr. Libman was one of the first to see it. A colleague — Dr. Camilla Rothe, who practices at Munich University Hospital — had co-authored a report published in the New England Journal of Medicine on Jan.
30. It was brief — just two pages long — but contained a stunning message.

It suggested COVID-19 could be spread by people who showed no symptoms.

"The fact that asymptomatic persons are potential sources of (coronavirus) infection," Rothe concluded, "may warrant a reassessment of transmission dynamics of current outbreak."

That was putting things mildly.

"The disease will most likely eventually spread around the world," Libman wrote Rothe in a Feb. 4 email after reading her report.

Libman's note, which he confirmed to this newspaper, had been a welcome voice of support for Rothe, who at the time was stunned by the amount of pushback she had received from researchers around the globe. Advertisement

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Rothe's paper examined Germany's first confirmed case of COVID-19 — a 33-year-old employee in an auto parts company who had been in contact with a symptomless business colleague visiting from China. The controversy swirled around whether that colleague had actually been free of symptoms or whether these had been mild enough to avoid detection.

The Feb. 3 edition of the journal Science cast some doubt on Rothe's observations, citing concerns raised by a second group of German researchers. The next day, a top official with WHO, Dr. Sylvie Briand, tweeted a link to the Science article.

Chief Public Health Officer Dr. Theresa Tam takes part in the daily briefing on the COVID-19 pandemic, in Ottawa on June 4, 2020. Photo by Sean Kilpatrick

Theresa Tam weighed in. "With regard to the New England Journal study," she testified before a House of Commons committee on Feb. 5, "there's now been a publication to say that it was incorrect and that this person was, in fact, symptomatic and had been taking some medication that suppressed his fever.

"That's a very important fact to verify and correct," Tam continued. "I'm very happy that German scientists and WHO have verified that."

But they hadn't. According to a report in The New York Times, Bavarian medical staff had been studying multiple cases of COVID-19 infection. They concluded in the second week of February that symptomless spread was the cause and forwarded their research to WHO and the European Centre for Disease Prevention and Control.

"I had the advantage of knowing Dr. Rothe personally," Libman noted, "and I knew how fastidious and careful she is.

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"Certainly no one wanted to believe in asymptomatic transmission, because that would indicate a problem that would be difficult to control," Libman added. "Unfortunately, humans can tend to be biased against accepting ideas they fervently hope to be untrue."

As late as March 28, Tam was advising Canadians "there is no need to use a mask for well people." Three days later, she changed her guidance by acknowledging that non-medical masks can help to stop the spread of COVID-19.

"WHO guidelines are one of many resources that inform Canada's guidance on non-medical masks," PHAC responded on behalf of Tam. "We also closely follow the emerging scientific literature and the experiences of other jurisdictions.

"Evidence on pre-symptomatic and asymptomatic transmission led (us) to a (federal-provincial-territorial) consensus that wearing a non-medical mask was an additional measure that could be taken," PHAC added. March 28 was the same day Dr. Robert Redfield, director of the U.S. Centers for Disease Control and Prevention, noted that one in four infected people were transmitting the virus 48 hours before showing symptoms.

World Health Organization (WHO) Director-General Tedros Adhanom Ghebreyesus during a WHO meeting in Geneva. Photo by Photo by Christopher Black / World Health Organization / AFP

WHO scientists, however, were still cautious in early summer.

"Transmission of COVID-19 is occurring from people who are pre-symptomatic or symptomatic," WHO noted in a scientific brief published July 9. "Transmission can also occur from people who are infected and remain asymptomatic, but the extent to which this occurs is not fully understood and requires further research as an urgent priority."

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But in the midst of a pandemic characterized by rapid spread, the key is equally fast containment and, when that fails, mitigation. Canada had another timely opportunity to figure this out. And, once more, it missed the signals.

On Feb. 3, an 18-storey cruise ship with 2,666 passengers on board — 251 of them Canadian — prepared to dock at Yokohama, Japan. The Diamond Princess, in service since 2004, was nearing the end of a two-week cruise that had taken in the sights of China, Hong Kong and Taiwan.

The vessel was about to be transformed into a biology experiment that would shed much light on the reproductive power of the coronavirus.

Two days earlier, the Hong Kong government had warned that one of the ship's passengers — an 80-yearold male who had disembarked Jan. 25 in the former British colony — had tested positive for the coronavirus.

Officers in protective gear enter the cruise ship Diamond Princess after the ship arrived at Daikoku Pier Cruise Terminal in Yokohama, south of Tokyo, Japan on February 7, 2020. Photo by KIM KYUNG-HOON /REUTERS

Japan, exercising caution, quarantined the ship and began testing passengers. Within 48 hours, the first 10 cases onboard were confirmed.

By Feb. 23, nearly 700 had tested positive, with roughly half of these showing no symptoms, according to a study of the Diamond Princess outbreak published by the Society for Disaster Medicine and Public Health. Epidemiologists and health officials were riveted. Dozens of U.S. government officials and independent researchers emailed each other regularly during February, their shock growing by the day.

"What happened on the cruise ship is a preview of what will happen when this virus makes its way to the U.S. healthcare system (not to mention institutionalized high-risk populations like nursing homes)," noted Dr. Carter E. Mecher, senior medical advisor for the U.S. Department of Veterans Affairs, in a very prescient Feb. 20 post. "I'm not sure that folks understand what is just over the horizon."

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Thirteen days earlier, when just 70 Diamond Princess passengers had been confirmed positive for COVID-19, Dr. Eva K. Lee, a researcher affiliated with Georgia Institute of Technology, was equally observant.

"This (outbreak) also reinforces the notion that social distancing has to begin now, not later," Lee wrote in the same email string, which was obtained through Freedom of Information Act requests to local government officials by Kaiser Health News and The New York Times. "Testing capability remains critical," Lee added. "But with limited testing ability, we better be smart in how to sample."

The timing of Lee's email — Feb. 10 — is significant. Canada had already ferried hundreds of nationals from China to the Canadian Forces base at Trenton, Ont., where they were being quarantined for two weeks. Now Canadian military aircraft were preparing to escort Diamond Princess passengers to NAVCAN's facilities in Cornwall for a similar quarantine.

Internal emails by Patrick Tanguy, assistant deputy minister at Public Safety Canada, are revealing. In a Feb. 17 update to senior officials in multiple federal departments, he noted that 355 Diamond Princess passengers had already tested positive for COVID-19. Included in his email distribution list: Public Health Agency of Canada president Tina Namiesniowski and Chief Public Health Officer Dr. Theresa Tam.

The following day, Tanguy's email blast observed that the cruise ship's list of positive tests had jumped by another 100. On Feb. 20, he wrote these had escalated further to 542, including 47 Canadians. Advertisement

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As the number of infections jumped, Canada's chief of defence staff, Jonathan Vance, wrote to his top military and civilian officials. "What is not known is the total of infected with mild or no symptoms," he wrote. "More information and analysis is needed."

Chief of the Defence Staff General Jonathan Vance speaks at a Canadian Special Operations Forces Command change of command ceremony in Ottawa on Wednesday, April 25, 2018. Photo by THE CANADIAN PRESS/Patrick Doyle

This kind of crucial detail would have to wait — Vance's department was responsible for airlifting Diamond Princess passengers back to Canada, and cabinet wanted it done. Once back home, the cruise passengers would be the responsibility of Namiesniowski's agency.

Vance's memo noted that the risk to Canadian Forces personnel responsible for screening cruise ship passengers "is assessed as medium." Vance added that, notwithstanding this assessment, if the passengers were pre-screened in Japan and showed no fever or other overt symptoms, the risk to military personnel handling them "would be reduced accordingly to low."

This was the same as the risk assigned by the Public Health Agency of Canada to Canadians generally in the face of the global pandemic.

With 2,400 employees — including 60 per cent in the capital region and nearly 25 per cent in Manitoba, home of the National Microbiology Laboratory — PHAC is a sizeable entity.

Its central mission is to watch for infectious diseases ranging from salmonella to influenza. However, its surveillance depends heavily on data from the provinces and, internationally, on WHO, the U.S. Centers for Disease Control and Prevention and the European Centre for Disease Prevention and Control. Advertisement

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PHAC's role as information coordinator makes it an agency of process, often unhelpful when it comes to rapid decision-making. This was evident in the testimony of its top officials this past spring before a House of Commons committee.

On April 22, Sally Thornton, at the time vice-president of PHAC's health security infrastructure branch, had this to say about the agency's shift in thinking about how the virus was being spread.

"Concerning ongoing learning, we are taking note," she told members of the committee. "For example, more recently, we've been moving our focus from just symptomatic people to include asymptomatic ones, as we learned that people who were asymptomatic can transmit."

This was nearly three months after Dr. Rothe first warned about her asymptomatic carrier in Germany.

A few weeks earlier, PHAC president Namiesniowski offered members of the same committee her perspective on the use of face masks, framing the issue this way:

"We always are open to what the science is telling us. We also recognize from the point of view of individuals that they make personal choices about what makes them feel comfortable," she said. "If they feel the need to wear a mask, we believe that is something which individuals have a right to do."

File photo of an air traveller being temperature tested. Photo by DANIEL LEAL-OLIVAS /AFP via Getty Images

It was an odd way of framing the issue. Rather than encourage people to wear a face mask, Namiesniowski backed into a policy. The message seemed to be if you want to wear a mask, we're not going to stop you. Advertisement

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Both Thornton and Namiesniowski left their positions in September — Thornton retired while Namiesniowski joined the privy council office as a senior official.

Of course, it wasn't just the danger of symptomless spread that the Public Health Agency of Canada downplayed. The agency also got caught looking the wrong way when the virus was preparing to invade North America.

It was a sign that something was very wrong. Quebec health authorities on Feb. 28 revealed the province's first positive test for COVID-19 — a traveller from Iran.

For weeks, the Public Health Agency of Canada had been monitoring the flow of travellers from China's Hubei province and nearby countries. Nearly 58,000 travellers from China had disembarked in airports in Vancouver, Toronto and Montreal between Jan. 22 and Feb. 18 — including more than 2,000 from Hubei province. This, according to the situation report PHAC shared with other federal government departments. On Feb. 29, the beginning of spring break, PHAC's priorities would start to shift dramatically. Tens of thousands of Quebecers were preparing to board aircraft bound for Europe, the Caribbean and the southern U.S.

We now know the consequences in some detail. The upshot: it took just a few sparks to create a conflagration. None were lit by travellers from China.

Canadians return from being stranded in Morocco due to flight restrictions imposed to help slow the spread of coronavirus disease (COVID-19), at Montreal-Trudeau International Airport in Montreal, Quebec, Canada March 23, 2020. Photo by CHRISTINNE MUSCHI /REUTERS

A study published in September by McGill University's Genome Centre and the Institut National de Santé Publique du Québec analyzed 734 genome sequences obtained from infected Quebecers up to April 1. About 45 per cent involved patients with a recent travel history.

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Epidemiologists are able to track various strains of the virus by studying its genetic mutations as it multiplies through the population.

One in three of the travellers' genomes analyzed by McGill and INSPQ originated in Europe, with nearly one in three from the Caribbean and Latin America. Twenty-four per cent of the infected travellers acquired the virus in the U.S. The virus, of course, emerged originally from Hubei province in China.

"Most of the early introductions of the virus into Quebec did not give rise to sustained transmission," said Dr. Jesse Shapiro, associate professor of McGill's Department of Microbiology and Immunology. "But a barrage of introductions just after spring break eventually gave rise to the tens of thousands of cases we have seen since."

A surprisingly large percentage of infections in B.C. and Ontario also originated in Europe and the U.S.

Dr. Bonnie Henry, B.C.'s chief health officer, noted this past June that while the first group of genomes in B.C. were from China and Washington state, by April a majority of the COVID-19 infections were caused by viruses with roots in Europe and Eastern Canada.

Likewise in Ontario, the first few genomes traced back to China, but the numbers with alternate heritage quickly overwhelmed these, according to Nextstrain, an open-source project tracking the evolution of the SARS-CoV-2 pathogen. More than half of the 100-plus genomes sampled between January and June were from Europe and more than 40 per cent originated in the U.S. and other parts of North America, the Nextstrain data suggests.

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While Quebec's spring break ended March 9 — a full week before the comparable holiday was due to begin in Ontario and B.C. — all provinces coped with an even bigger invasion of travellers beginning mid-March. That's when Minister of Foreign Affairs François-Philippe Champagne urged Canadians and landed immigrants to return to Canada before the borders closed, thus triggering one of the most remarkable migrations in the country's history.

Between March 14 and March 20, when the U.S.-Canadian border clanged shut to non-essential travel, nearly one million people travelling on Canadian passports headed home.

The Ottawa International Airport. Photo by Wayne Cuddington /Postmedia

Half a million travellers jammed airport terminals, many without face masks, convinced they were heading back to relative safety. At customs, harried border and airline officials scanned travellers while handing out pamphlets that urged self-quarantine and contained instructions about what to do if COVID-19 symptoms erupted.

The ramifications of the great return were profound. During the final two weeks of March, the number of confirmed cases in B.C. jumped to 970 from 64, and surged to 1,004 in Ontario from 79. Quebec, though, was the shocker. In that short span, the number of Quebecers with infections rocketed to nearly 4,200 from just 17.

Quebec was, and remains, the epicentre of Canada's COVID-19 spread. Shapiro said fewer than 250 infections ("introduction events") were the catalysts.

As of mid-October, Quebec's cumulative COVID-19 case count had reached 89,000 — or nearly half the national total for a province with one-quarter the country's population.

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Despite aggressive testing for the virus, Quebec never got ahead of it. Nor did the country as a whole.

Even now, during a robust second wave of infections, there is something about the nature of the SARS-CoV-2 virus that is keeping real fear at bay. Author Laura Spinney noted a similar characteristic in the virus that produced the great influenza of 1918-1920.

That cataclysmic pandemic circled the globe multiple times, infecting 600 million (one-third of the total population) and killing an estimated 50 to 60 million.

"(It) is a difficult pandemic to pigeonhole," Spinney wrote in her history of that era, Pale Rider: The Spanish Flu of 1918 and How It Changed the World. "It killed horribly, and it killed many more of its victims than any other flu pandemic we know of," she noted, "yet for around 90 per cent of those who caught it, the experience was no worse than a dose of seasonal flu.

"As a result," she observed, "people didn't know how to think about it; they still don't."

Children outside with their masks during the Spanish flu pandemic, the deadliest in Canadian history. The flu killed upwards of 50,000 Canadians between 1917 and 1919. SunMedia

Much the same can be said of COVID-19, which also punishes a disproportionate few while leaving the vast majority in relative good health. COVID-19 as of mid-October had infected 38.5 million worldwide and killed 1.1 million. This means 0.5 per cent have been infected. Fewer than three per cent of those infected have died.

In Canada, the infection rate is the same — 0.5 per cent of the population. But thanks to our egregious record in long-term care homes, fully five per cent of Canadians infected with COVID-19 have died.

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Yet even these numbers make SARS-CoV-2 seem comparatively benign, though it will not seem that way to those affected or to patients suffering long-term health issues such as extreme fatigue, mental confusion and damage to the heart and lungs.

It's this aspect of COVID-19 — the extremely long odds of a terrible outcome for individuals — that makes it so difficult to contain. Public officials talk about the paradox of success. Canada and many other countries hammered down the curve of infections this past summer at great social and financial cost. Then we let down our guard. A few house parties, wedding celebrations and other social events provided kindling for the blaze of infections.

In her account of the 1918-20 pandemic, Spinney notes a nearly identical phenomenon. "The group identity splinters and people revert to identifying as individuals," she wrote. "It may be at this point — once the worst is over, and life is returning to normal — that truly bad behaviour is most likely to emerge."

The great influenza was marked by a series of infectious waves before it finally burned out. In several important ways, it presaged the strange cultural wars that are roiling this year's pandemic.

Influenza victims crowd into an emergency hospital near Fort Riley, Kansas in this 1918 photo. Postmedia Spinney points out that health officials in 1918 disagreed about whether face masks reduced the risk of transmission. And, despite plain evidence of the disease's virulence — hospitals and cemeteries were overwhelmed — there was debate in certain quarters about whether it was real. In October 1918, Spinney noted, "there were still those among Rio de Janeiro's opinion-makers who doubted the disease was flu."

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The physical attributes of the 100-year-old virus, along with the symptoms these produced, found echoes in SARS-CoV-2. The great influenza, for instance, could be spread asymptomatically and affect people's health long after the initial flu had vanished.

One of the main lessons of 1918-20 pandemic involved the role of physical distancing. Cities that banned large gatherings and ordered the wearing of face masks cut the toll of infection and death substantially. "The timing of the measures was critical," Spinney concluded. "They had to be introduced early and kept in place until after the danger had passed.

"If they were lifted too soon," she continued, "the virus was presented with a fresh supply of immunologically naive hosts, and the city experienced a second peak of death."

That is where we are today, the major difference being that we have the realistic hope of a vaccine in the months to come. We do not, as in 1918, have to wait for the virus to exhaust the supply of human hosts.

But we do bear collective responsibility for minimizing the spread still occurring. The earlier neglect to take the full measure of this virus quickly must now be paid for in the form of physical isolation and targeted economic lockdowns.

That failure belonged to Canada's top health officials and the politicians they advised. The next failure to contain the virus will be on the rest of us.

jbagnall@postmedia.com

Women sit in a field where circles were painted to help visitors maintain social distancing to slow the spread of the coronavirus disease (COVID-19) at Trinity Bellwoods park in Toronto, Ontario, Canada May 28, 2020. Photo by CHRIS HELGREN /REUTERS

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Share this Story: Too many blind spots: How we're still paying for Canada's slow response to COVID-19 <u>https://ottawacitizen.com/health/too-many-blind-spots-how-were-still-paying-for-canadas-slow-response-to-covid-19</u>

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

## FDA express concern over emergency authorization of Covid-19 vaccines

Source: StatNews.com ID: 1008105753

Published: 2020-10-23 14:00 UTC Received: 2020-10-23 14:29 UTC (+29 minutes)

There are serious signs the Food and Drug Administration is getting cold feet over the notion of issuing emergency use authorizations to allow for the widespread early deployment of Covid-19 vaccines. Instead, it appears the agency may be exploring the idea of using expanded access — a more limiting program that is typically used for investigational drugs — in the early days of Covid vaccine rollouts. Whereas a few weeks ago the agency's concern was to protect against the possibility that unproven vaccines would be pushed out prematurely due to pressure from President Trump, now the fear is that early authorization of vaccine could squander a one-time chance to determine how well the various vaccines work and which work best in whom.

Marion Gruber, director of the FDA's office of vaccines research and review, put the issue on the table when members of the Vaccines and Related Biological Products Advisory Committee began to discuss a series of questions FDA staff posed at the end of a grueling day-long virtual meeting Thursday.

"We are concerned about the risk that use of a vaccine under an EUA would interfere with long-term assessment of safety and efficacy in ongoing trials and potentially even jeopardize product approval," Gruber said. "And not only the first vaccine, but maybe even follow-on vaccines."

The acting chair of the committee, Arnold Monto, from the University of Michigan, who has decades of experience studying the efficacy of vaccines, put it more dire terms at a point in the discussion. The maker of a Covid-19 vaccine that is given an EUA might not be able to generate enough additional data to ever successfully apply for a full license, Monto said.

The problem stems from thorny ethical questions about whether — once a vaccine has been cleared for use by the FDA — the people who were randomly assigned to receive a placebo in its clinical trial must be informed and offered vaccine. Vaccinating the people who received placebo injections — the trial's control arm — would end the ability to continue to compare the two groups after what would have been a short trial.

Pfizer and BioNTech, the collaboration expected to be first to apply for an emergency use authorization — sometime in mid-November — have indicated they plan to unblind their trial and offer people in the placebo arm vaccine. (When a trial is blinded, participants don't know if they received vaccine or a placebo injection.) Early unblinding of these trials actually runs counter to the FDA's advice. The agency is urging vaccine manufacturers to keep their trials blinded as long as possible, to collect as much data as they can.

The EUA could trigger another related problem. People in clinical trials might choose to pull out and try to get the vaccine that has been authorized for emergency use, especially if they are in a high-risk group that is likely going to be at the front of the line when vaccines begin to become available. Enrollment in the vaccine trials for other Covid vaccines might slow as people decide they don't want to risk being randomized to receive a placebo, and instead wait for their turn to get vaccine cleared under an EUA.

If they are stopped too early, the trials, which were structured to come up with quick answers as to whether Covid vaccines prevent symptomatic Covid-19 infections, might fail to answer additional, important questions needed to figure how to best use the various vaccines that have been produced, if — as expected — multiple vaccines prove to work.

For most of the vaccine trials, the "primary endpoint" is showing they prevent symptomatic Covid-19 disease in at least 50% of vaccinees. But there are also "secondary endpoints." Secondary endpoints include whether the vaccines reduce the number of severe Covid cases, and how well they work in important subsets of the population such as the elderly or people of color, who have been disproportionally hit by the pandemic. Trials that end after reaching their primary endpoint will leave gaping knowledge gaps, a number of experts warned.

"We may have limited and in some instances no information about some of the secondary endpoints," said Stephanie Schrag, an epidemiologist from the Centers for Disease Control and Prevention who made a presentation at the meeting. "This would be particularly true in the instance of an early EUA because many of these secondary endpoints require longer time than the primary to accrue events."

Jesse Goodman, a former FDA chief scientist who listened to the meeting, concurs with the agency's concerns. Answers about how well these vaccines work, how long they work, and which work best for which segment of the population will always be clearer if they are generated by randomized controlled trials — the gold standard of clinical trials.

"Let's say one of these vaccines has, you know, 60% efficacy and another one has 80%. Or one of them, the efficacy waned after four months, and the other lasts a last year. It's going to benefit people to find that out now rather than three years later from crummy observational data," Goodman told STAT.

Using expanded access rather than emergency use authorizations would be a more cumbersome process and create some challenges. People who were to be vaccinated would have to sign informed consent forms, which requires a discussion of risks and benefits during vaccine administration; safety data from vaccinees also would have to be gathered. But Goodman, who actually suggested expanded access as an option in a commentary he co-wrote in JAMA in July, said that this route might better ensure the continuation of the clinical trials.

Members of FDA's advisory committee appeared to share the concerns of the agency staff who were asking for their guidance.

Sheldon Toubman, a lawyer from New Haven, Conn., who is the consumer representative on the panel, said it would be his preference that the vaccines not be deployed under emergency use authorizations.

Toubman said the public fears politics, not science, is driving the approvals process and EUAs won't dispel those views.

A number of polls, including one published Monday by STAT and the Harris Poll, have shown that the public is cooling to the idea of Covid vaccines. The declining percentage of Americans who say they are willing to be vaccinated is thought to be linked to the politicization of the vaccine approvals process, which Trump has attempted to fast-track in the weeks leading up to the election.

Toubman's position was echoed by representatives of the HIV Medical Association and the Infectious Diseases Society of America during a public comment section of the hearing.

Emily Martin, an assistant professor of infectious diseases epidemiology from the University of Michigan who studies vaccines effectiveness, urged the committee to advise the FDA that EUAs should not allow companies to halt their clinical trials early.

"Without complete and full randomized trial data, we will lack the evidence base needed to monitor and adapt vaccination strategies as needed over the many years these vaccines will be in use," Martin said. "Ending these trials early will irrevocably hamper our ability to optimize the effective use of the vaccines going forward."

Goodman agreed that an early EUA could actually leave a manufacturer with too little data to persuade the FDA to issue a full license, though he thought that was not the likeliest of scenarios.

"I think more likely than that, but really, as concerning from a public health point of view would be if ... we don't get adequate enough information to understand how these vaccines compare with each other and perform in terms of their safety and efficacy, we don't know how to use them in a public health context," he said. "Which could end up hurting far more people at the end of the day."

https://www.statnews.com/2020/10/23/fda-shows-signs-of-cold-feet-over-emergency-authorization-ofcovid-19-vaccines/?utm\_campaign=rss

## **United States**

## AstraZeneca resuming US testing of COVID-19 vaccine

ID: 1008108367 Source: usnews.com

AstraZeneca Inc. announced Friday that regulators are letting it resume testing of its COVID-19 vaccine candidate in the U.S.

Testing of the vaccine was halted worldwide early last month because of a British study volunteer's illness. Studies have already resumed in other countries, and the British drugmaker said the Food and Drug Administration gave the company the go-ahead Friday to resume U.S. testing.

The AstraZenca vaccine, developed with Oxford University, is one of several coronavirus vaccine candidates in final-stage testing around the world.

The drugmaker said it was allowed to resume testing after the FDA "reviewed all safety data from trials globally and concluded it was safe to resume the trial."

The company said that testing has already resumed in the United Kingdom, Brazil, South Africa and Japan.

Such temporary halts of drug and vaccine testing are relatively common, because in research involving thousands of participants, some are likely to fall ill. Putting a study on hold allows researchers to investigate whether an illness is a side effect or a coincidence.

AstraZeneca's study in the U.S. involves 30,000 people, with some getting the vaccine and others a dummy shot.

Testing was stopped after one participant in the United Kingdom developed severe neurological symptoms consistent with a rare inflammation of the spinal cord called transverse myelitis. It was the second hold in AstraZeneca testing.

https://www.usnews.com/news/business/articles/2020-10-23/astrazeneca-resuming-us-testing-of-covid-19-vaccine

#### **IHR announcement**

Additional health measures in relation to the COVID-19 outbreak 23 October 2020 Announcement Displayed From: Friday, October 23, 2020 - 16:47

Official statements by States Parties to the International Health Regulations (2005) (IHR)

On 30 January 2020, the Director-General determined that the outbreak of 2019-nCoV, constitutes a Public Health Emergency of International Concern (PHEIC) and issued Temporary Recommendations[1]. On 11 March 2020 the Director-General characterized the COVID-19 situation as a pandemic[2]. Following the <u>4th IHR Emergency Committee for COVID-19 on 31 July 2020</u>, the Director-General confirmed that the COVID-19 pandemic continues to constitute a PHEIC and issued the following Temporary Recommendations for States Parties:

Share best practices, including from intra-action reviews, with WHO; apply lessons learned from countries that are successfully re-opening their societies (including businesses, schools, and other services) and mitigating resurgence of COVID-19.

Support multilateral regional and global organizations and encourage global solidarity in COVID-19 response.

Enhance and sustain political commitment and leadership for national strategies and localized response activities driven by science, data, and experience; engage all sectors in addressing the impacts of the pandemic.

Continue to enhance capacity for public health surveillance, testing, and contact tracing.

Share timely information and data with WHO on COVID-19 epidemiology and severity, response measures, and on concurrent disease outbreaks through platforms such as the Global Influenza Surveillance and Response System.

Strengthen community engagement, empower individuals, and build trust by addressing mis/disinformation and providing clear guidance, rationales, and resources for public health and social measures to be accepted and implemented.

Engage in the Access to COVID-19 Tools (ACT) Accelerator, participate in relevant trials, and prepare for safe and effective therapeutic and vaccine introduction.

Implement, regularly update, and share information with WHO on appropriate and proportionate travel measures and advice, based on risk assessments; implement necessary capacities, including at points of entry, to mitigate the potential risks of international transmission of COVID-19 and to facilitate international contact tracing.

Maintain essential health services with sufficient funding, supplies, and human resources; prepare health systems to cope with seasonal influenza, other concurrent disease outbreaks, and natural disasters.

In line with provisions of Article 43, WHO is sharing the information officially provided to WHO by States Parties and, since 12 March 2020 also information published by country government websites to reduce the gap between the information reported through the IHR mechanism and the one published by countries on official sources.

As of 23 October 2020, there has been no new State Party that reported on additional health measures that significantly interfere with international traffic since the last announcement published on 16 October 2020. A total of 194 out of 196 States Parties reported to date with Mexico and Nicaragua not reporting any measure.

Moreover, 22 countries provided updates to their previously implemented measures. The distribution by WHO Regions is as follows: AFR: 0 (0 updates), AMR: 0 (0 updates), EMR: 0 (1 update), EUR: 0 (21 updates), SRO: 0 (0 updates), WPR: 0 (0 updates). See table 1.

Regional links below provide for more details on the measures. The information is divided by region, cumulative since the beginning of the EIS updates on travel measures and by country in alphabetical order. Text highlighted in red represents updates to the previously published EIS.

Table 1. States Parties that provided WHO with official reports on additional health measures that significantly interfere with international traffic under Article 43 of the IHR (2005) as of 09 October 2020

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

## WHO

WHO Director-General's opening remarks at the media briefing on COVID-19 - 23 October 2020 23 October 2020

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We are at a critical juncture in this pandemic, particularly in the northern hemisphere. The next few months are going to be very tough and some countries are on a dangerous track. We urge leaders to take immediate action, to prevent further unnecessary deaths, essential health services from collapsing and schools shutting again.

- Oxygen is one of the most essential medicines for saving patients with COVID-19, and many other conditions. WHO is committed to working in solidarity with all governments, partners and the private sector to scale up sustainable oxygen supply.
- Tomorrow marks World Polio Day week, and partners around the world led in particular by Rotary International are organising events and raising awareness about the need to eradicate polio.
- Smallpox eradication is a remarkable achievement, not least because it was completed at the heart of the Cold War. Health did then and should now always come above politics and it is with sadness that this week we lost one of the great titans of smallpox eradication with the passing of Dr Mike Lane. We will continue to honour his legacy.
- WHO is proud to announce the second Health for All Film Festival, to cultivate visual storytelling about public health.

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Good morning, good afternoon and good evening.

We are at a critical juncture in this pandemic, particularly in the northern hemisphere.

The next few months are going to be very tough and some countries are on a dangerous track.

Too many countries are seeing an exponential increase in cases and that is now leading to hospitals and ICU running close or above capacity and we're still only in October.

We urge leaders to take immediate action, to prevent further unnecessary deaths, essential health services from collapsing and schools shutting again.

As I said it in February and I'm repeating it today: this is not a drill.

We're calling on governments to carry out five key actions today.

First, assess the current outbreak situation in your country based on the latest data you have to hand. Conduct honest analysis and consider the good, the bad and the ugly.

I have a specific message for those countries that have successfully brought COVID-19 transmission under control: now is the time to double down to keep transmission at a low level, be vigilant, be ready to identify and cases and clusters and take quick action.

Do not allow the virus to take hold again.

Second, for those countries where cases, hospitalizations and ICU rates are rising, make the necessary adjustments and course correct as quickly as possible.

Making changes when needed shows leadership and strength.

Third, it's important to be clear and honest with the public about the status of the pandemic in your country and what is needed from every citizen to get through this pandemic together.

Fourth, put systems in place to make it easier for citizens to comply with the measures that are advised. This means, if people are told to isolate or quarantine, or businesses have to close temporarily,

governments need to do everything they can to assist individuals, families and businesses.

Fifth, the next few months for many people will be difficult.

There are incredible stories of hope and resilience of people and businesses responding creatively to the outbreak and we need to share these widely.

Governments need to carry out the basic steps of speaking to people who are infected with the virus and their contacts and giving them specific instructions on what to do next.

If governments are able to hone their contact tracing systems and focus on isolating all cases and quarantining contacts, then mandatory stay at home orders for everyone can be avoided.

We've seen many times from around the world that it's never too late for leaders to act and turn the outbreak around.

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Key to a united front against the virus is sharing resources equitably.

Oxygen is one of the most essential medicines for saving patients with COVID-19, and many other conditions.

Many countries simply do not have enough oxygen available to assist sick patients as they struggle to breathe.

I'm going to talk to you about what WHO and partners are doing to fill the global oxygen gap. Estimates suggest that some of the poorest countries may have just 5 to 20 percent of the oxygen that they need for patient care.

Through the pandemic, the demand for oxygen has grown exponentially.

Back in June, when there were approximately 140 thousand new COVID-19 cases a day, the global need for oxygen was estimated to be approximately 88 thousand large cylinders each day across the world.

As daily cases rise around the world to over 400 thousand, the need for oxygen has gone up to 1.2 million cylinders each day, just in low- and middle-income alone, which is 13 times higher.

Early in the pandemic, WHO's approach was to scale up oxygen in the most vulnerable countries by procuring and distributing oxygen concentrators.

This led to over 30 thousand concentrators, 40 thousand pulse oximeters and patient monitors to reach 121 countries, including 37 that are classified as fragile.

This includes installing pressure swing adsorption plants – or PSAs – that would be able to cover the supply needed for a large hospital and district health facilities in the area.

Somalia, Chad and South Sudan had to rely exclusively on oxygen cylinders from private vendors that are often traveling long distances and come with a high price-tag.

WHO is working with the ministries of health in these three countries to design oxygen plants fit for their local needs, which will result in sustainable and self sufficient oxygen supply.

WHO is committed to working in solidarity with all governments, partners and the private sector to scale up sustainable oxygen supply.

The oxygen project, reflects WHO's commitment to end-to-end solutions and innovation to do what we do better, cheaper and reach more people.

For example, we're working with partners to harness solar power to run oxygen concentrators in remote places where electricity supply is unreliable, and to reduce costs.

One of the main barriers to medical oxygen is the high transport costs of the cylinders to the health facilities.

In Kenya, a private sector company has positioned oxygen plants near clusters of health facilities and uses a milk delivery system to deliver oxygen to more than 140 clinics.

Incentivizing the business sector to change its approach and model is key to ensuring sustainable oxygen in low- and middle-income countries.

And to be successful the health work force needs to be ready.

Not only doctors and nurses with experience in caring for severely ill patients; but also biomedical engineers, respiratory therapists, and maintenance staff.

Oxygen saves lives of patients with COVID-19 but it will also save some of the 800 thousand children under-five that die every year of pneumonia and improve the overall safety of surgery.

A better world means ensuring oxygen is available for all. Where they need it, and when they need it.

Tomorrow marks World Polio Day week, and partners around the world – led in particular by Rotary International – are organising events and raising awareness about the need to eradicate polio.

Over the summer the world collectively welcomed Africa's historic success of ridding the continent of wild poliovirus.

Thanks to hundreds of thousands of health workers reaching millions of children with safe and effective vaccines across the continent, the world celebrated one of the greatest public health achievements of all time.

However, while there is polio anywhere, the world remains at risk of resurgence.

Following suspension of polio and routine immunisation due to the pandemic, vaccination drives have now been restarted.

We applaud and encourage governments for doing catch-up campaigns so that no child is left behind and we can soon consign polio to the history books, alongside smallpox.

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Smallpox eradication is a remarkable achievement, not least because it was completed at the heart of the Cold War.

Health did then and should now always come above politics and it is with sadness that this week we lost one of the great titans of smallpox eradication with the passing of Dr Mike Lane.

Dr Mike Lane spent 13 years chasing down the last remnants of smallpox, finding cases and vaccinating communities in some of the remotest corners of the Earth, where smallpox was still endemic.

At CDC, Dr Lane was the last programme director of the Smallpox Eradication Program and received many awards, including the US Public Health Service's Commendation Medal.

For many years, Dr Lane was an advisor to WHO on smallpox.

I wish to express my deepest sympathy to Dr Lane's friends and family. We will continue to honour his legacy.

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Finally, telling stories is as old as human civilization.

It helps us understand our problems and can inspire action that changes lives.

WHO is proud to announce the second Health for All Film Festival, to cultivate visual storytelling about public health.

Submissions are open from tomorrow to 30 January 2021.

We look forward to receiving original short films from across the world.

More details are available on our website.

I thank you.

https://www.who.int/director-general/speeches/detail/who-director-general-s-opening-remarks-at-themedia-briefing-on-covid-19---23-october-2020

#### WHO

**Risk of inflight spread of COVID-19 'very low', not zero: WHO** Source: Reuters ID: 1008100074

Published: 2020-10-22 18:18 UTC

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GENEVA (Reuters) - The risk of COVID-19 spreading on flights appears "very low" but cannot be ruled out, despite studies showing only a small number of cases, the World Health Organization (WHO) said.

"In-flight transmission is possible but the risk appears to be very low, given the volume of travellers and the small number of case reports. The fact that transmission is not widely documented in the published literature does not, however, mean it does not happen," the WHO said in a statement to Reuters.

The characterisation of the risk echoes the findings of a U.S. Defense Department study that last week described the probability of catching the disease on airliners as "very low".

Some airlines have however used more robust language to describe the risk of onboard transmission.

Southwest Airlines and United Airlines have both said that recent studies had found that the risk was "virtually non-existent".

Southwest, one of a handful of airlines currently keeping middle seats free, said on Thursday that in light of the research it would lift the block on middle seats.

Global airlines body IATA said on Oct. 8 that only 44 potential cases of flight-related transmission had been identified among 1.2 billion travellers this year, or one in every 27 million passengers.

But the presentation was later challenged by one of the scientists whose research it drew upon.

Dr David Freedman, a U.S. infectious diseases specialist, said last week he declined to take part in an IATA briefing on the risks because a key assertion about the improbability of catching COVID-19 on planes was based on "bad math".

IATA responded that its calculation remained a "relevant and credible" sign of low risk.

The WHO said it knew of at least two case report studies that described in-flight transmission, on flights from London to Hanoi, and Singapore to China.

Sick passengers and people with confirmed exposure to COVID-19 should not be allowed to travel, it said. It added, however, that ventilation systems on modern jets could filter viruses and germs quickly.

https://www.reuters.com/article/idUSKBN2771ZF

#### ECDC

Rapid Risk Assessment: Increased transmission of COVID-19 in the EU/EEA and the UK – thirteenth update

Source: ECDC ID: 1008104932

Published: 2020-10-23 12:07 UTC Received: 2020-10-23 12:08 UTC (+1 minutes)

#### Current epidemiological situation across EU/EEA countries and the UK

Across the European Union/European Economic Area (EU/EEA) and the United Kingdom (UK) there has been a considerable further increase in COVID-19 infections and the current situation represents a major

threat to public health. In most countries, notification rates have increased in certain regions, with extremely high levels in some areas. Moreover, in addition to the substantial increases seen in most countries among younger age groups, notification rates have also increased in older age groups. Reported test positivity has been steadily increasing since August and has shown a marked escalation in recent weeks, pointing to a real increase in rates of viral transmission, rather than just a rise in reported cases attributable to increased testing. Vulnerability to infection remains high, as available data from seroprevalence studies indicate that the level of immunity in the population is <15% in most areas of the EU/EEA and the UK.

As the epidemiological situation has worsened across the region, the impact in terms of pressure on healthcare services and mortality has become increasingly evident. Data on hospital and intensive care unit (ICU) admissions and occupancy are incomplete for most EU/EEA countries and the UK, but available data indicate that the situation is deteriorating, with increasing trends reported in most countries. Recent estimates suggest that levels of hospital and ICU occupancy across the region are now at around a third of the peak that occurred during the spring. Options for treatment of individuals with severe infection remain largely supportive. Many countries have reported increasing death rates, and the overall death notification rate has been rising for over a month. Although case fatality rates are currently lower than they were earlier in the year, due to increased detection among young people and/or improved care for patients with severe COVID-19, there is a high likelihood that these rates will continue to rise. In fact, with high levels of community transmission, the protection of medically vulnerable individuals becomes more difficult and, it is inevitable that more individuals who are not considered medically vulnerable will develop severe disease. The current epidemiological situation in most countries is a serious concern as it poses an increasing risk of transmission, requiring immediate, targeted public health action.

## What are the risks being assessed in this update?

In this update, we assess the risk for the general population and vulnerable individuals in relation to the increase in COVID-19 notification rates in the EU/EEA and the UK. Under the current classification system, based on epidemiological indicators, the epidemiological situation in countries is classified as stable, of concern or of serious concern. The majority of countries in the region are currently classified as experiencing an epidemiological situation of serious concern due to the increasing case notification rates and/or test positivity  $\geq$  3% as well as the high notification rates in the older age groups and/or high mortality rates. EU/EEA countries and the UK have implemented various non-pharmaceutical interventions but these have not been sufficiently effective in controlling transmission due to several factors: adherence to the measures was sub-optimal; the measures were not implemented quickly enough; or the measures were insufficient to reduce exposure. As a result, the epidemiological situation is now rapidly deteriorating in most countries. Consequently, in countries where the epidemiological situation is of serious concern, there is a high risk to the general population, and for vulnerable individuals the COVID-19 epidemiological situation represents a very high risk.

In the countries where the epidemiological situation is of concern or of serious concern, the continuously increasing trend in notification rates calls for strong public health action in order to prevent the imminent risk that healthcare systems will be overwhelmed, rendering them unable to provide safe, adequate care.

There are currently only six countries in the region that are classified as experiencing a stable epidemiological situation. In these countries the probability of infection for the population is generally low but the impact of infection still varies depending on the individuals affected. The risk for the general population in these countries is low. However, for vulnerable individuals, including the elderly and people with underlying medical conditions, the risk is moderate. Nevertheless, in these six countries, there is still ongoing transmission and the situation must be closely monitored.

#### Options for response

At this stage, non-pharmaceutical interventions adapted to the local epidemiological situation, accompanied by clear, targeted communication messages to the public remain the fundamental elements of the public health approach to controlling transmission. A strong call for collective action is needed whereby the population is reminded of its key role in bringing the pandemic under control. Government and public health officials urgently need to re-motivate people to follow recommendations, by making clear that there will be a substantial impact on public health, the economy and society if the epidemiological situation continues to deteriorate.

Countries should continue to implement measures to reduce transmission in the general population, such as advocating physical distancing, including the avoidance of large gatherings, promoting hand and respiratory etiquette, encouraging the appropriate use of face masks, and implementing best practices in infection prevention and control in healthcare and residential settings. Where necessary, these measures

can be scaled up and countries may need to close public spaces and introduce stay-at-home recommendations as a last resort. These measures can be adopted at national or sub-national level, based on a comprehensive assessment of the local situation, using a transparent decision-making process that is clearly communicated to the public in a timely manner.

Public health authorities should reinforce healthcare capacity to manage potentially high numbers of COVID-19 patients and ensure that health services do not become overwhelmed. Efforts must be made to protect vulnerable individuals and healthcare workers, and to minimise the risk of transmission in long-term care facilities and other settings at high risk of COVID-19 outbreaks. Easy and timely access to testing is critical in order to identify infections in the community, to have a clear understanding of the evolving epidemic and to optimise the effectiveness of measures such as case isolation and contact tracing. If the number of suspected cases exceeds the available testing capacity in a country or an area, testing needs to be directed towards priority groups. Countries should also ensure that adequate supplies of medical equipment, personal protective equipment, laboratory reagents and consumables are available to prevent shortages due to the high demand worldwide.

https://www.ecdc.europa.eu/en/publications-data/covid-19-risk-assessment-increased-transmissionthirteenth-update

https://www.ecdc.europa.eu/sites/default/files/documents/RRA-COVID-19-EU-EEA-UK-thirteenth-update-23-Oct-2020.pdf

## Israel

Israel to begin human trials of coronavirus vaccine Source: 660 NEWS ID: 1008118461

JERUSALEM — The state-run Israel Institute for Biological Research announced Sunday that researchers will begin human testing on its coronavirus vaccine next week.

The institute said clinical tests on an initial group of 80 people would begin Nov. 1. The testing is to expand to a second phase of 960 people in December, with a third and final phase of 30,000 people next April or May depending on the results of the earlier phases.

"I believe in the abilities of our scientists and I am confident that we can produce a safe and effective vaccine," said Dr. Shmuel Shapira, director of the institute.

He said the goal is to produce 15 million doses "for the benefit of the residents of the state of Israel and our close neighbours." He did not elaborate.

The institute is run by the Defence Ministry. "This is a day of hope for the citizens of Israel," said Defence Minister Benny Gantz.

Over 40 coronavirus vaccine candidates are in clinical trials worldwide, according to the World Health Organization.

Israel, a country of about 9 million people, has reported over 300,000 cases of COVID-19 and nearly 2,400 deaths.

The Associated Press

One person in critical condition after building fire in Tuxedo Park

CALGARY (660 NEWS) – One person was taken to hospital in critical condition following a building fire in the city's northwest on Sunday morning.

Fire crews say they were made aware of the blaze shortly after 11 a.m. in Tuxedo Park, on 27 Avenue N.W. near Centre Street.

Upon arrival, firefighters found a large amount of smoke and flames coming from the second and third stories of the building.

Crews say they used an "aggressive interior attack" to get the blaze under control.

Four people self-evacuated from the building but one person needed assistance from fire personnel, who proceeded to administer CPR.

The patient was transported to Foothills Hospital and remains in critical condition.

The cause of the fire is under investigation.

Man found dead in police custody, ASIRT investigation underway

CALGARY (CITYNEWS) – Alberta's police watchdog is investigating after a man was found dead while in police custody inside a Calgary prison cell this week.

The Alberta Serious Incident Response Team (ASIRT) is looking into the circumstances surrounding the death that occurred at Spyhill Services Centre on Oct. 23.

According to a release from the Calgary Police Service (CPS), police took the man into custody earlier that day near the Marlborough CTrain Station. They were there following reports of a man in possession of an airsoft gun.

Police say the individual was "cooperative," and the arrest was incident-free and caught on officers' body cameras.

ASIRT has been directed to investigate an in-custody death that occurred at @CalgaryPolice Spyhill Services Centre. Details to follow.

- ASIRT (@ASIRT\_AB) October 25, 2020

The release said the man was charged with breach-related offences and taken to Spyhill Services Centre. He was allegedly cleared by a doctor before being moved to a holding cell.

"At 8 p.m., during a routine check of the cells, the man was eating his meal, however at the next check, the man was found unresponsive in his cell," read the emailed CPS release. "Despite significant lifesaving efforts, the man was pronounced dead at approximately 8:40 p.m."

CPS say they are up to date regarding in-custody care by they will be reviewing their methods following the incident "out of an abundance of caution."

Feds urged to act as data suggests COVID-19 making it hard for veterans to get help

OTTAWA — The federal government is being criticized for not doing enough to help disabled veterans as new figures appear to confirm fears COVID-19 is making it more difficult for them to apply for assistance. The figures from Veterans Affairs Canada show about 8,000 veterans applied for disability benefits during the first three full months of the pandemic, which was about half the normal number.

The sharp drop in the number of applications helped the department make a dent in the backlog of more than 40,000 requests for federal assistance waiting to be processed.

Yet the department also acknowledges at least part of the decline is likely because the pandemic made it harder for veterans to get the necessary information to apply, such as doctor's assessments.

That is exactly what Brian Forbes, chairman of the National Council of Veterans Associations, has been warning about since the spring.

Forbes, whose organization represents more than 60 veterans groups in Canada, says he is frustrated because the government has not moved to address the problem despite knowing about it for months, and that now is the time to act.

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

https://www.660citynews.com/2020/10/25/israel-to-begin-human-trials-of-coronavirus-vaccine/

## Netherlands

## Dutch transfer patients to Germany again as COVID infections spike

Source: National Post ID: 1008105736

Published: 2020-10-23 13:57 UTC Received: 2020-10-23 13:57 UTC (0 minutes)

The Netherlands began transferring COVID-19 patients to Germany again on Friday, as hospitals come under increasing strain from a second wave of coronavirus infections.

The Flevo hospital in the central Dutch town of Almere said it would transfer two of its intensive care patients by helicopter to a hospital in Muenster, around 65 km (40 miles) east of the Dutch-German border.

The transfers were the first during the second wave that began in the Netherlands early last month. During the first wave in March and April dozens of Dutch patients were transferred to Germany, where the intensive care capacity is significantly larger than in the Netherlands.

Dutch hospital association LCPS said it expected the transfer of four more patients to Germany over the weekend.

Coronavirus infections in the Netherlands have reached a record high almost every day since mid-September, and jumped to a new peak of almost 10,000 on Friday. Daily confirmed infections in Germany, where the population is almost five times bigger, were at 11,242.

The number of patients hospitalized with the coronavirus in the Netherlands has doubled in the past two weeks, while almost half of all intensive care beds in the country are now being used for COVID-19 patients.

The government imposed partial lockdown measures to contain the spread on Oct 14, including the closure of all bars and restaurants in the country.

(Reporting by Anthony Deutsch and Bart Meijer; editing by John Stonestreet and Philippa Fletcher) <u>https://nationalpost.com/pmn/health-pmn/dutch-transfer-patients-to-germany-again-as-covid-infections-spike</u>

## **United Kingdom**

Oxford vaccine 'will be ready by Christmas' says professor leading the hunt for coronavirus jab Source: News | Mail Online

ID: 1008119156

Medics and high-risk patients are likely to receive Oxford's Covid-19 vaccine before the end of the year, the professor leading the project said.

Adrian Hill said emergency approval would allow those most in need to receive the jab while the final trials are still under way.

Full authorisation would then follow, meaning the rest of the population could receive the vaccine from early 2021.

Professor Hill, founder and director of the University of Oxford's Jenner Institute, admitted timing was tight to begin vaccinations before Christmas – but insisted it was indeed possible.

'Billions of doses' are already being produced at ten factories across the globe by a consortium led by British drugs firms AstraZeneca, he said.

In an upbeat assessment of how the vaccination programme could unfold, he said: 'I'd be very surprised if this thing [the pandemic] isn't very clearly on the way down by late spring, at least in this country... we will get to the stage where there is herd immunity through vaccination.'

Two phases of successful clinical trials have established the Oxford vaccine is safe and triggers a strong immune response.

Phase three trials are now at an advanced stage.

The Jenner Institute is running trials at nine sites in Britain involving 10,000 volunteers, with others in Brazil and South Africa. Further trials are being run by its partners in India and the US.

The next critical stage in the process will be the 'unblinding' of trial results, which will see data from participants given the jab compared with the placebo group.

Until then, neither the participants nor the researchers leading trials themselves will know who has received the vaccine or the placebo – a process known as 'double blinding'. Professor Hill suggested that the unblinding is now imminent – but different countries' health regulators have different requirements before they license vaccines.

Researchers plan to seek emergency approval for vulnerable patients on the basis of interim results while conducting more trials to provide stronger evidence. 'The initial licence would be for emergency use, not full approval,' Professor Hill said.

'They will want to see more data on safety and maybe efficacy before they give a licence to vaccinate everybody. In this country, our priorities are pretty clear... we're going to vaccinate high-risk individuals before we vaccinate the young, the fit and healthy who are at lower risk. I think most countries will do that. 'So what we're looking for this year is an 'emergency use' authorisation that will allow us to go and vaccinate those most at risk as a priority, then early next year everybody else.' Medics and other key workers would also be able to receive the vaccine under an interim licence, he added.

The professor said Britain's Medicines and Healthcare products Regulatory Agency has already been 'fantastic', adding: 'That's why we say this is one of the best countries in the world to do clinical trials – we have a well-informed, sensible regulator that makes decisions on the basis of a risk-based analysis, rather than a set of dogmatic rules.'

He said he would 'be very surprised if they don't move very fast' when interim results are submitted. Professor Hill suggested data based on as few as 20 cases of Covid could produce statistically significant evidence that the vaccine is effective – but this may not be enough to get the jab cleared in some countries.

The US Food and Drug Administration, for example, insists on 150 infected participants before it accepts trial findings.

In addition, American trials are yet to restart after they were paused last month when a patient developed a neurological condition for reasons unrelated to the vaccine. Trials in Britain were also stopped as a result – but resumed swiftly.

Speaking online to members and alumni of Oxford's Magdalen College, Professor Hill said: 'Much of the reason why drug trials normally take so long is that academics had to spend months writing reports and seeking funding between their stages. In this case, money has been no object.'

He suggested the Oxford vaccine – administered with two jabs four weeks apart – was likely to provide strong protection from Covid-19 because it leads to both antibodies and T-cell immunity. The latter means the body's white blood cells are primed to destroy any tissue that does get infected.

https://www.dailymail.co.uk/news/article-8878451/Oxford-vaccine-ready-Christmas-says-professorleading-hunt-coronavirus-jab.html?ns\_mchannel=rss&ns\_campaign=1490&ito=1490

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

## Canada

**Regular, rapid testing at B.C. schools can help prevent COVID-19 outbreaks: study** Source: CityNews1130.com

ID: 1008105762

Published: 2020-10-23 14:23 UTC

Received: 2020-10-23 14:30 UTC (+7 minutes)

VANCOUVER (NEWS 1130) – Researchers at Simon Fraser University suggest there's a better way to prevent more outbreaks of COVID-19 at schools in B.C.: regular and rapid testing.

Currently, any outbreaks at schools are dealt with by testing students and staff who are showing symptoms, and then notifying their close contacts if their results come back positive for the coronavirus.

While the researchers say that helps limit the size of clusters at schools, their modelling shows that regular, proactive testing of all students — even before anyone starts to show symptoms — was effective at preventing large clusters of the virus.

"Rapid regular universal monitoring is far superior in preventing large clusters to testing that is initiated upon detection of a symptomatic case, even if a whole class is then tested soon afterward," the paper reads.

That's because it catches individuals who may be carrying the virus and are infectious, but who aren't showing any symptoms.

The study points out that early evidence suggested schools were low risk and children were unlikely to be very infectious. However, with a major COVID-19 outbreak reported at a school in Kelowna, and with many more exposure alerts being issued at schools across the Lower Mainland, it is becoming clear that young people can contract and transmit the virus at school and that clusters and outbreaks can be large.

About a third of school exposures in B.C. involve staff, Provincial Health Officer Dr. Bonnie Henry said Thursday. The remaining two thirds are students.

Q Kelowna outbreak details...

Dr H: Staff and students. some exposures like on school bus

In BC overall of 216 exposure events she says 1/3 are staff, 2/3 students (this is new was the other way a month ago)#bcpoli #bced @NEWS1130 #covid19

- LizaYuzda (@LizaYuzda) October 22, 2020

The researchers, whose findings have yet to be certified by peer review, suggest two other approaches to prevention.

For one, they say reducing community transmission can play a big role, adding "if exposures themselves are rare, the waiting time before a high-transmission introduction is likely to be much longer than if community transmission leads to frequent exposures."

Finally, the study finds that taking step to address the environment and how it plays a role in transmission could also help.

"Indoor, crowded, loud, poorly ventilated environments with singing, eating and dining are recognized to be comparatively high risk [36, 38]," the study reads.

"However, data could now be gathered prospectively with a focus on schools: when there are exposures in classroom settings, these could be linked to data on the room size, ventilation, whether windows were open, numbers of students in the class and classroom organization, and then further linked to follow-up on cluster size."

The researchers stress that if we are to keep schools open, it's imperative we do what we can to prevent large transmission clusters, "even if they are expected to be rare."

"The expected benefit of preventing large transmission clusters will naturally depend on the state of COVID-19 transmission in the community, with larger clusters likely to be amplified and spread onwards where community transmission is ongoing. Such settings will also have more school exposures, and the chance of an unfortunate high-transmission introduction to a school is correspondingly higher, creating a viscious (sic) cycle."

https://www.citynews1130.com/2020/10/23/regular-rapid-testing-bc-schools-covid-19/

#### Canada and United States

#### Study helps explain declines in death rates from COVID-19

Source: EurekAlert ID: 1008102546

Fewer New Yorkers are dying from the coronavirus than health experts had anticipated, a new study shows. Regional death rates have dropped from the highs seen at the start of the outbreak, partially due to a shift in the population contracting the disease toward those who are more resilient.

After New York became the epicenter for the pandemic in early March, with tens of thousands dying from COVID-19, experts had expected that the infection would remain as deadly in the following months.

Instead, a new investigation showed that by mid-August the death rate in those hospitalized with coronavirus-related illness had dropped from 27 percentage points to about 3 percentage points. Led by researchers at NYU Grossman School of Medicine, the study showed that a younger, healthier group of people were getting infected and were arriving at the hospital with less-severe symptoms than those infected in the spring.

However, the researchers' analysis showed that these factors accounted for only part of the improvement in survival. The rest, they suspect, resulted from health care providers' growing experience with the coronavirus. For example, physicians learned that resting COVID-19 patients on their stomachs rather than their backs and delaying the use of ventilators as long as possible were more effective practices, say the study authors. Drugs likely helped as well. In addition, other factors such as decreasing hospital volumes, less exposure to infection, and earlier testing and treatment, may have played a role.

"Our findings suggest that while COVID-19 remains a terrible disease, our efforts to improve treatment are probably working," says study lead author Leora Horwitz, MD, an associate professor in the Department of Population Health at NYU Langone Health. "Even in the absence of a silver-bullet treatment or vaccine, we are protecting more of our patients through a host of small changes," says Horwitz, who is also director of the Center for Healthcare Innovation and Delivery Science at NYU Langone.

New York was among the first states to grapple with a severe outbreak of COVID-19. By contrast, death rates in more recent waves in southern and western regions of the country, which also had younger, healthier coronavirus patients, have been lower, says Horwitz. However, it had remained unclear whether the virus was less deadly due to the different patient demographics or improved care.

Horwitz says the new study, publishing online next week in the Journal of Hospital Medicine, is the most detailed analysis to date of coronavirus death rates over time. By accounting for age, obesity, and other key factors, the researchers were able to eliminate some explanations from the analysis.

For the investigation, the research team analyzed 5,263 patient records of people treated for COVID-19 at NYU Langone hospitals in New York City and Long Island between March 1 and Aug. 8. Using a range of risk factors for the disease as well as indicators of the severity of the illness upon hospitalization, the study authors developed a model that predicted likelihood of death for each patient.

According to the findings, the likelihood of death was on average 22 percentage points lower in August than in March for most critically ill patients.

The average age of hospitalized COVID-19 patients also dropped from 63 to 47. In March, while 73 percent had chronic conditions like lung disease and diabetes, by mid-June only about 65 percent had such risk factors.

"Other pandemic hotspots should take hope from the lessons learned here in New York," says study senior author Christopher Petrilli, MD, an assistant professor in the Department of Medicine at NYU Langone. "If we can do better at managing the disease, they can too."

Still, he adds that the research team next plans to expand the investigation to hospitals outside of New York.

Petrilli also cautions that while death rates are improving, COVID-19 still causes symptoms in some people that continue long after hospital patients are sent home, including fatigue, blood clots, and lung damage. ####

NYU Grossman School of Medicine provided all the necessary funding for the study.

In addition to Horwitz and Petrilli, other NYU Langone researchers include Simon Jones, PhD; Robert Cerfolio, MD; Fritz Francois, MD; Joseph Greco, MD; and Bret Rudy, MD. Media Inquiries

https://www.eurekalert.org/pub releases/2020-10/nlh-she102120.php

## United States

#### Moderna hails diversity of coronavirus trial participants

Source: CTVNews.ca - Health - Public RSS ID: 1008101036

Published: 2020-10-22 21:29 UTC

Received: 2020-10-22 21:29 UTC (0 minutes)

WASHINGTON -- Biotech firm Moderna said Thursday that it had successfully recruited ethnic minorities, older people and those with underlying health issues for its COVID-19 vaccines trial, after it pushed to enrol groups most vulnerable to the virus.

Moderna said it had now signed up all 30,000 participants for the phase-3 trial, and more than 25,000 of them had already received a second dose of the vaccine, four weeks after the first.

The firm said it was working "to develop a vaccine for everyone, including communities that have historically been under-represented in clinical research and are disproportionately impacted by COVID-19."

More than 7,000 people taking part in the trial are over 65, and more than 5,000 under 65 have high-risk diseases such as diabetes, severe obesity and cardiac disease.

The firm said more than 11,000 are "from communities of color, representing 37 percent of the study population and similar to the diversity of the U.S. at large" -- 6,000 are Hispanic or Latino, and more than 3,000 are African-American.

Massachusetts-based Moderna is one of the few companies to have launched a large-scale clinical trial less than 10 months after the genetic sequencing of the novel coronavirus was established.

Some Chinese, Russian and other Western projects are also in advanced tests, including US firm Pfizer.

Moderna hopes to have sufficient results by the end of November and to then file an emergency authorization request with the US Food and Drug Administration (FDA).

The company has already said it was aiming to file for authorization soon after November 25, with Pfizer at the third week of November.

The U.S. government says it will distribute the first doses immediately after authorization free of charge.

Health Secretary Alex Azar said Wednesday there would be enough doses to vaccinate the "most vulnerable" Americans before the end of the year, then the elderly and health workers in January, and all Americans by early April.

In the trials, half of the volunteers receive a placebo, and the other half get the vaccine.

Initial FDA guidance stipulated that if the number of participants in the vaccinated group naturally contracting the virus and falling ill with COVID-19 was at least 50 percent lower than in the placebo group, the vaccine would be declared effective.

But on Thursday, a National Institutes of Health official said during a meeting of the FDA's advisory committee on vaccines that they would require a 60 percent efficacy for emergency use.

https://www.ctvnews.ca/health/moderna-hails-diversity-of-coronavirus-trial-participants-1.5156760

#### United Kingdom

Oxford COVID-19 vaccine follows its programmed genetic instructions, independent analysis finds Source: medicalxpress.com

ID: 1008100541

Published: 2020-10-22 19:30 UTC Received: 2020-10-22 19:30 UTC (0 minutes) A team at Bristol University has used recently developed techniques to validate that the vaccine accurately follows the genetic instructions programmed into it by the Oxford team.

The AstraZeneca Oxford COVID-19 vaccine (ChAdOx1 nCoV-19 and also known as AZD1222) now undergoing Phase III clinical trials, has already undergone rigorous testing to ensure the highest standards of quality and safety. Now a team at Bristol University has used recently developed techniques to further validate that the vaccine accurately follows the genetic instructions programmed into it by the Oxford team. This novel analysis provides even greater clarity and detail about how the vaccine successfully provokes a strong immune response.

The findings, led by scientists at the University of Bristol and published on the pre-print server ResearchSquare, represent the most in-depth analysis of any of the COVID-19 vaccine candidates, going significantly above and beyond any regulatory requirements anywhere in the world.

Work on the vaccine, developed by researchers at the University of Oxford's Jenner Institute and Oxford Vaccine Group, began in January 2020. Now undergoing Phase III clinical trials by the University of Oxford and AstraZeneca, the Bristol researchers' focus was to assess how often and how accurately the vaccine is copying and using the genetic instructions provided by the Oxford team. These instructions detail how to make the spike protein from the coronavirus, SARS-CoV-2 that causes COVID-19.

The Oxford vaccine is made by taking a common cold virus (adenovirus) from chimpanzees and deleting about 20 percent of the virus's instructions. This means it is impossible for the vaccine to replicate or cause disease in humans, but it can still be produced in the laboratory under special conditions. By removing these genetic instructions there is space to add the instructions for the spike protein from SARS-CoV-2. Once inside a human cell the genetic instructions for the spike protein need to be 'photocopied' many times—a process known as transcription. In any vaccine system, it is these 'photocopies' that are directly used to make large amounts of the spike protein.

Once the spike protein is made, the immune system will react to it and this pre-trains the immune system to identify a real COVID-19 infection. So, when the person vaccinated is confronted with the SARS-CoV-2 virus their immune system is pre-trained and ready to attack it.

Adenoviruses have been used for many years to make vaccines, and these are always tested to very high standards to make sure every batch of vaccine has the correct copy of genetic instructions embedded in the vaccine. However, thanks to very recent advances in genetic sequencing and protein analysis technology, researchers at Bristol were for the first time also able to directly check thousands and thousands of the 'photocopied' instructions produced by the Oxford vaccine within a cell. In this way they were able to directly validate that the instructions are copied correctly and accurately, providing greater assurance that the vaccine is performing exactly as programmed.

At the same time, the researchers checked the spike protein being made by the vaccine inside human cells also accurately reflects the instructions as programmed. This brand-new approach may be more routinely used in the future to help researchers fine tune the performance of these kinds of vaccines.

Dr. David Matthews, Reader in Virology from Bristol's School of Cellular and Molecular Medicine (CMM), who led the research, said, "This is an important study as we are able to confirm that the genetic instructions underpinning this vaccine, which is being developed as fast as safely possible, are correctly followed when they get into a human cell.

"Until now, the technology hasn't been able to provide answers with such clarity, but we now know the vaccine is doing everything we expected and that is only good news in our fight against the illness."

The study at Bristol was facilitated with support from Dr. Andrew Davidson, Reader in Systems Virology in CMM and Bristol UNCOVER and through key collaborations with Sarah Gilbert, Professor of Vaccinology at the University of Oxford, and AstraZeneca.

Sarah Gilbert, Professor of Vaccinology at the University of Oxford and lead on the Oxford vaccine trial, added, "This is a wonderful example of cross-disciplinary collaboration, using new technology to examine exactly what the vaccine does when it gets inside a human cell. The study confirms that large amounts of the coronavirus spike protein are produced with great accuracy, and this goes a long way to explaining the success of the vaccine in inducing a strong immune response."

Provided by University of Oxford

https://medicalxpress.com/news/2020-10-oxford-covid-vaccine-genetic-independent.html

## United Kingdom

COVID-19: Asymptomatic children with coronavirus may have LESS of the virus than those with symptoms

Source: Daily Mail Online ID: 1008105081

Published: 2020-10-23 12:28 UTC

Received: 2020-10-23 12:28 UTC (0 minutes)

Children who test positive for COVID-19 but show none of the outward signs may have lower viral levels than the infected and symptomatic kids, a study suggested.

Alternatively, experts said, the findings could be the result of the children being tested later in their disease — when their viral loads had fallen.

The US research team studied the viral loads of 817 children who tested positive for SARS-CoV-2 after attending hospitals in the US and Canada.

They found that virus levels were typically higher in asymptomatic children who were likely to have only been recently infected.

However, their data also suggested that — in those children who underwent regular testing — median viral loads were still lower in asymptomatic cases.

Further tests will be needed, the team said, to determine if asymptomatic children do have lower virus levels overall, or whether such falls as their case develops.

Such findings could impact our understanding of transmission risks among younger members of the population — especially in such settings as schools.

While these findings provide some reassurance about the safety of asymptomatically infected children attending school,' said paper author and epidemiologist Larry Kociolek of the Northwestern University in Illinois.

'These unanswered questions suggest that risk mitigation measures in daycares, schools and the community remain critical to reduce the spread of COVID-19.'

'Children must continue to wear masks, maintain social distance and wash their hands frequently.'

'At this stage, we can't predict which children are likely to carry more or less virus, because in every age group we tested, there were some asymptomatic kids with a higher viral load,' he continued.

'However, even the groups of asymptomatic kids with highest viral load in our study still had lower viral loads than the children with symptoms.'

In their study, the researchers analysed 478 symptomatic children and 339 asymptomatic children, aged between 0–17, who had tested positive for COVID-19 in tests undertaken at nine children's hospitals across the US and Canada.

The team found that asymptomatic children who had either diabetes or recently had contact with a known COVID-19 case were more likely to have high viral levels.

The same applied to those children tested for routine surveillance purposes — rather than those tested for pre-admission or pre-procedure assessments.

According to the team, the finding that children more likely to have had recent infections were also more likely to have high viral loads suggests that the the relative timing of infection and testing impacted the levels among asymptomatic kids.

However, the data also revealed that — even in the cohort of asymptomatic cases with the highest viral loads — mean levels were still significantly lower than in the equivalent symptomatic group.

'We now need to know what the peak viral loads are in asymptomatic kids with COVID-19,' said paper author and pathologist Nira Pollock of the Boston Children's Hospital and the Harvard Medical School.

'Did the timing of testing just miss the peak in many of the asymptomatic kids in this study, or do asymptomatic kids actually have lower peak viral loads than symptomatic kids?'

'It is important to recognize that rapid antigen tests are less sensitive than the PCR tests used in hospitals,' she added.

'Many of the asymptomatic kids in our study likely would have tested negative using the rapid tests based on our understanding of the limits of detection of those tests.'

'Our findings should raise caution about using low sensitivity tests for asymptomatic screening programs in paediatric populations.'

'Overall, we want to encourage more studies to better understand the viral loads in asymptomatic kids — particularly peak viral loads early in infection.'

The full findings of the study were published in the Journal of Clinical Microbiology.

Study finds stay-at-home orders barely change the R rate because people don't follow the rules

Ordering people to stay at home barely reduces COVID-19 infection rates on its own because people don't follow the rules, researchers said yesterday.

The R rate — the key measure of the virus's spread — drops by only 3 per cent after a month of the restriction being in place.

And a ban on gatherings of more than ten also cuts R by only the same amount – raising questions over the value of the Rule of Six.

The Edinburgh University study found that the main flaw with the two measures was the inability to ensure compliance.

Writing in a Lancet journal, the researchers found that banning public events was the most effective standalone intervention, reducing R by 24 per cent in four weeks.

At the start of the crisis big sporting occasions — such as the Cheltenham Festival and Liverpool's Champions League clash with Atletico Madrid — went ahead despite widespread warnings.

The research headed by Edinburgh's Harish Nair is based on an assessment of pandemic measures in 131 countries.

'If you tell people to stay at home it is very difficult to ensure compliance,' said the professor. 'And if you ask people not to meet in groups you have the same problem – it is about adherence. Banning mass events or closing schools, on the other hand, ensures compliance.'

Shutting schools reduced R by 15 per cent but the researchers found that, individually, very few measures have a significant impact. It is only in combination that they work to any great degree, which may explain why the limited local restrictions in England are achieving so little.

The Government's Sage scientific advisory panel calculated that lockdown in March, including the 'stay at home' order, resulted in a 75 per cent reduction in R.

It comes as the UK today announced another 21,242 positive coronavirus tests and the deaths of another 189 people due to the virus.

The chief scientific adviser, Sir Patrick Vallance, said that numbers are 'still heading in the wrong direction' but also admitted Britain's outbreak appears to be slowing.

## Advertisement

https://www.dailymail.co.uk/sciencetech/article-8871735/COVID-19-Asymptomatic-children-coronavirusvirus-symptoms.html

## Spain

## SARS-CoV-2 risk misclassification explains poor COVID-19 management

Source: The Lancet ID: 1008105182

One of the most striking facts about the COVID-19 pandemic is the notable difference in approach, attitude, control measures, case incidence, and mortality rates between eastern and western hemispheres. Results of a recent analysis1 show lessons to be learnt from the experiences of these countries and regions. The differences in approach and mortality could be explained, at least partially, if not totally, by the misclassification of the infectious agent risk.

WHO classifies microorganisms into four risk levels according to its biosafety manual.2 National legislation, in accordance with this classification, regulates prevention measures and biosecurity, mainly to protect occupational health.3 Group 4 includes new or known agents for which there is no vaccine or treatment and which can be spread at community level. Ebola virus and variola virus are categorised as group 4 agents. Group 3, however, includes dangerous microorganisms such as Mycobacterium tuberculosis that have available antibiotic therapy and other well known control measures.

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When severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) appeared in Wuhan, China, other Asian countries, Australia, and New Zealand put in place contingency plans against an infectious agent of the highest risk, not only in occupational health but also to protect the general population. Given the uncertainty about the nature and real risk of the threat, governments of these countries decided to take the strictest measures—the same measures that would have been used in a case of smallpox or plague. For this reason, protective equipment similar to that used against Ebola was used, the streets were disinfected with chlorine, patients with COVID-19 were separated from the rest of the patients in monographic centres,

and mandatory individual quarantines were ordered. Then collective quarantines in the form of lockdown were implemented.

By contrast, the western approach, according to a supposed risk classification of group 2 or 3, initially considered COVID-19 a new kind of influenza and determined that the general management of cases and contacts would be made in general hospitals and outpatients wards, without any type of mandatory quarantine or isolation in monographic hospitals. The European Commission debated in June, 2020, the classification of SARS-CoV-2, categorising it as a group 3 agent. This decision was strongly protested by members of the European Parliament, who disagreed and called for a group 4 categorisation.4, 5

If Europe and other countries in the western hemisphere want to achieve an epidemiological trend similar to Asian countries, then SARS-CoV-2 should be considered an agent of maximum risk in all technical approaches, clinical settings, and social levels.

I am former general director of public health of the Community of Madrid, Spain. I declare no competing interests.

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## Study

## A large national outbreak of COVID-19 linked to air travel, Ireland, summer 2020 ID: 1008101254

Source: CIDRAP, eurosurveillance.org

Despite implementing safety precautions, one summer flight into Ireland led to a 59-person outbreak in six of the country's eight health regions. Tests eventually confirmed that 13 (26.5%) of the original 49 passengers were positive for SARS-CoV-2, with the other 46 infected via contact with infected passengers.

In the *Eurosurveillance* study, researchers looked at four separate passenger groups, analyzing travel itineraries and their interactions with each other, including how close they sat together on the plane. Genome sequencing indicated a single source of COVID-19 spread the disease among the passengers, who came from elsewhere in Europe and two other, unspecified, continents.

The researchers found that the plausible attack rate was 17.8%, with 8 people contracting COVID-19 during the 7.5-hour flight, 3 incubating or infected after the flight, and 1 a tertiary contact of a flight case. At a minimum, the researchers determined, the virus attack rate was 9.8% if 4 of the passengers—those from the more isolated groups—contracted COVID-19 in-flight. They calculated the maximum attack rate to be 25%.

The airline practiced physical distancing and restricted crew and passenger interaction, and of the 13 known people who tested positive, 9 wore masks, 3 had unknown mask statuses, and 1 child did not wear a mask. The outbreak probe closed 28 days after the last symptom onset. Four people had to be hospitalized, with 1 needing intensive care. No deaths were reported.

To prevent future outbreaks linked to flights, the researchers recommend accessing flight manifests quickly, tracking not only flight information but transit information, and ensuring current contact information, as 11 passengers could not be reached.

https://www.eurosurveillance.org/content/10.2807/1560-7917.ES.2020.25.42.2001624

https://www.cidrap.umn.edu/news-perspective/2020/10/covid-19-scan-oct-23-2020

## **Domestic Events of Interest**

Ontario

85% of Ont. nursing homes break the law repeatedly with almost no consequences, data analysis shows ID: 1008105758 Source: CBC

Hidden camera reveals staff hitting, yelling at resident in nursing home with repeat abuse offenses

When Von took his mother out of his home and placed her in Craiglee Nursing Home in Scarborough, Ont., he and his partner, Mary, thought they were doing what was best for her.

But instead of loving care, Von's mother, Kostadinka, was met with physical and emotional abuse at the hands of at least four different care workers, caught on a camera they had hidden in her room.

"It was like a horror film," said Mary. "I will never be able to unsee those things."

What they didn't know at the time was that the home had a long and repeated history of staff physically abusing the residents. They didn't know — but the government did.

A data analysis of the most serious breaches of Ontario's long-term care home safety legislation reveals that six in seven care homes are repeat offenders, and there are virtually no consequences for homes that break that law repeatedly.

CBC Marketplace reviewed 10,000 inspection reports and found over 30,000 "written notices," or violations of the Long-Term Care Homes Act and Regulations (LTCHA), between 2015 and 2019 inclusive. The LTCHA sets out minimum safety standards that every care home in Ontario must meet.

Marketplace isolated 21 violation codes for some of the most serious or dangerous offences, including abuse, inadequate infection control, unsafe medication storage, inadequate hydration, and poor skin and wound care, among others. The analysis found that of the 632 homes in the Ontario database, 538 — or 85 per cent — were repeat offenders.

#### Top 30 Ontario long-term care homes with most reported violations

Jane Meadus, a lawyer with the Advocacy Centre for the Elderly, said the high number of repeated incidents shows that non-compliance with the law has been normalized within care homes.

Meadus said lack of proper care can lead to bedsores, for example, which residents can die from.

"If that person was in your home, if you were caring for your parent and they had these giant bedsores,

you would likely be charged criminally for that," she said.

"A home has never been charged criminally for what I think is criminal behaviour."

'We couldn't believe what we saw'

Craiglee Nursing Home was one of at least 248 homes that have been written up twice or more for abuse and 101 homes that have repeatedly failed to report abuse.

Craiglee also had repeated violations for neglect, lack of infection control, medication errors, and poor skin and wound care.

Unaware of the home's history, Von and Mary entrusted the home with Kostadinka's care in 2017 when her needs became more than a two person job.

Marketplace has agreed to tell their story using only their first names because they fear retaliation against them and their business.

When they saw Kostadinka's health declining, the partners put a camera in Von's mother's room as a precautionary measure in April of 2019, not expecting to see any problems. The camera ran for weeks before they were able to see what it had captured.

"We couldn't believe what we saw," said Von. "Abuse, torture, her holding onto the bed rails for dear life."

The videos showed several employees yanking on Kostadinka's arms, swatting her hands, or rubbing spilled food in her face. Although the videos have no audio, employees could be seen yelling at Kostadinka as she lay in bed, unable to move without their help.

#### More residents abused after videos submitted to ministry

After Von and Mary saw the extent of the abuse, they decided to call police. A personal support worker was arrested and ultimately entered into a three-year peace bond, agreeing not to work with vulnerable people. Kostadinka was moved to a different care home, where she died late last year.

The home would not agree to an interview with CBC. But Candace Chartier with Southbridge Care Homes, Craiglee's parent company, offered a statement.

"We strongly condemn the actions of the individuals involved," Chartier said in the statement. She said the home investigated Kostadinka's abuse in July of 2019 and reported it to police, after which one staff member was criminally charged and "several others were terminated."

Chartier said they also "re-educated all staff in the home on [the] zero-tolerance policy" for abuse, and enhanced their training.

The Ontario Ministry of Long-Term Care's inspection report from September 2019 that detailed Kostadinka's abuse revealed a lack of staff training on abuse policies. Yet, four months later, another report revealed 9.2 per cent of actively working staff had still not completed the mandatory training. Six months later, another incident of staff-to-resident abuse was documented in yet another report. There have also been incidents of financial abuse and resident-on-resident abuse.

Von said he was "disgusted" to learn that even after he sent video evidence of his mother's abuse to the ministry, there have been more written notices at Craiglee for abuse.

"What does it take?" said Von. "We brought it to the ministry's attention, brought it to the director of care's attention, we brought it to the authorities, to the police."

#### Family fights for criminal charges for nursing homes

While physical abuse is fairly clear, neglect can take on many forms such as lack of hydration or failure to

provide baths. Two hundred and twenty-six homes had repeat offences for failing to "ensure that residents are not neglected by the licensee or staff," but many more incidents were filed under different codes for specific acts of neglect, like improper skin and wound care — 278 homes had repeat offences.

Beverley Haines died in February of this year, only six weeks after she moved into Hope Street Terrace in Port Hope, Ont., because of large bedsores she sustained at the home. Sparky Johnson and Sherry Schernitzki, Haines's niece, are fighting to have the home's administration held criminally responsible for her death.

The partners, now separated, said that on the day Haines moved from a hospital into the home in January 2020, the staff identified a "hot spot," or patch of red skin. These spots must be monitored or treated so they don't get worse, and the pair left with confidence that it would be taken care of.

But the pair weren't informed that the hot spot had become an open bedsore until 23 days later. At that point, it had already progressed to a wound the size of a saucer with bone exposed.

"If the treatment had started when this bedsore was small, it should never ever have gotten to that," said Schernitzki.

"It's horrific. It's criminal," said Johnson.

The home had been written up for lack of proper wound care before. Reports from 2016 and 2018 both found the home was not following proper protocols for caring for "altered skin integrity."

Johnson called the ministry to report the bedsore, but was told an inspection would take some time. She made another call to police, and an investigation was launched.

She began documenting problems at the home, including multiple instances where Haines was left in bed all day, lying on her back on the open bedsore.

The ministry published a report in June finding the home's records didn't show proper monitoring of the bedsore, which should have included repositioning every one to two hours to ensure she wasn't lying on the wound.

"It was an excellent report, but what happens now? Who follows up?" said Schernitzki. "There are no consequences."

By the time that report was released, it was too late to address the issues within it. Haines died on Feb. 29. The family says they were told by the investigating coroner that she died of sepsis from the bedsore.

The two felt strongly that the home was criminally negligent, but the police investigation was closed after Haines died without charges being laid. They continue to fight, filing a complaint with the Office of the Independent Police Review Director, a civilian body that oversees complaints about police in Ontario. The case has since been reopened.

The home said it is "deeply saddened about the passing of this resident" and that its "utmost priorities are the safety and well-being of our residents."

#### 'No tolerance' for abuse, says minister

Most homes have not faced any punishment for failure to comply with the law. Only two Ontario homes have been shut down in the last decade for repeatedly failing to meet safety standards. Other sanctions available to the ministry appear to be ineffective in preventing future repeat offences.

Marketplace host David Common called into a press conference with Minister of Long-Term Care Merrilee Fullerton earlier this week to ask her to speak to the fact that despite orders that are available to inspectors, homes still appear to make the same behaviours repeatedly.

"There's no tolerance whatsoever for negligence or abuse," she said, noting that she feels her government is prioritizing serious offences in their inspections.

"They must be dealt with in a fulsome way."

#### 'No consequence,' says former inspector

But a former inspector said that in her experience, issues weren't dealt with in a fulsome way, and that's part of the reason why she left the job.

Rebecca de Witte, who worked as an inspector for three years up until March of 2017, said she felt identifying problems in the homes wasn't helping get rid of them.

"When you arrive, everything looks really good. And then as time goes by, old habits crop up again," she said.

She said she would often inspect a home and find the same problems that she saw when she had last been there.

"There is no consequence if the homes completely ignore everything you find," she said.

#### Federal government proposing new rules

In its speech from the throne in October, the federal government promised to work with the provinces and territories to set out a national standard of care for long-term care, and would amend the Criminal Code in order to "explicitly penalize those who neglect seniors under their care."

For de Witte, governments need to focus on the big picture instead of what she calls "band-aid" fixes.

MARKETPLACEHidden-camera footage reveals overstretched nursing home staff struggling to care for residents

"Funding for air conditioning isn't going to help long-term care, but changing the buildings will," she said. "Pandemic pay isn't going to help long-term care, but changing the funding model will."

Meadus wants to see criminal charges for negligence and monetary penalties for repeat offenders.

"If the home is not able to provide safe care they shouldn't be in business," she said. https://www.cbc.ca/news/marketplace/nursing-homes-abuse-ontario-seniors-laws-1.5770889

#### Ontario

Ottawa Paramedic Service has reached 'level zero' 400 times in 2020 ID: 1008108669 Source: ottawacitizen.com

There have been 400 times this year that the Ottawa Paramedic Service hasn't had a single ambulance and paramedic transport crew available, according to statistics provided by the city.

Paramedic Chief Pierre Poirier provided the information Friday in the aftermath of a committee meeting at which hospital executives were on the hot seats explaining the reasons for patient offload delays at emergency departments.

#### Ottawa Paramedic Service has reached 'level zero' 400 times in 2020. The paramedic service calls it "level zero" when there are no paramedic crews available to respond to 911 calls.

The 400 times that Ottawa has seen level zero this year has resulted in about 183 hours when no city paramedic crew was available.

When there are no city paramedics available, the work calls fall to paramedic teams based outside of Ottawa in the neighbouring counties. The domino effect has put strain on those outside municipalities since paramedics are required away from their home jurisdictions.

On Oct. 15, Ottawa council's community and protective services committee heard from CEOs of The Ottawa Hospital, Montfort Hospital and Queensway Carleton Hospital that the high-demand for beds inside their facilities have led to long wait times for staff to accept patients from paramedics.

They cited an increase in "alternate level of care" patients, who don't require hospital-level, but don't have other healthcare options.

As a result, paramedics are waiting at hospitals with their patients, sometimes for several hours, until the patients can be transferred.

The delays are hurting response times for the paramedic service.

Last year, Ottawa paramedics responded to life-threatening emergencies within eight minutes, 75.1 per cent of the time. The council-approved standard is for the eight-minute responses to happen 75 per cent of the time for those critical calls.

Plans are in the works to increase beds and offload staff in emergency departments. The hospitals are also working with the paramedic service to distribute ambulances to emergency departments so one hospital isn't overloaded.

https://ottawacitizen.com/news/local-news/ottawa-paramedic-service-has-reached-level-zero-400-timesin-2020

International Events of Interest

#### **United States**

San Joaquin County Sees Its 1st Human Case Of St. Louis Encephalitis Virus Since 1973 Source: CBS Sacramento

ID: 1008104945

Published: 2020-10-23 12:10 UTC

Received: 2020-10-23 12:10 UTC (0 minutes)

STOCKTON (CBS13) — For the first time in nearly a half-century, San Joaquin County health officials say they have confirmed a human case of St. Louis encephalitis virus (SLEV).

Back in August, county public health officials say they found SLEV in mosquitoes collected near Lodi. It was the first time since 1973 that officials had detected the virus in the county.

Then, on Thursday, public health officials announced that a Stockton resident had a confirmed case of SLEV. That person becomes the first human case of SLEV in San Joaquin County since 1973.

The person's current condition was not stated, but health officials said they were recovering at home.

SLEV is a disease that could cause serious swelling of the brain (known and encephalitis), although most people infected either have minor symptoms or don't ever develop any.

More from CBS Sacramento:

People can be infected with the virus when they are bitten by a mosquito who was also infected, often after biting a bird with SLEV. Health officials note that SLEV cannot be spread from person to person.

Health officials say SLEV is less common in California than West Nile virus, a disease with similar symptoms and way of transmission. As of Thursday, only one human case of West Nile virus had been reported in San Joaquin County this year.

Stanislaus County also recently found some mosquitos with SLEV, but no human cases have been confirmed in that area.

https://sacramento.cbslocal.com/2020/10/22/st-louis-encephalitis-virus-stockton-human-case/

## **United States**

Outbreak of *Listeria* Infections Linked to Deli Meats Source: CDC Investigation Notice Posted October 23, 2020 at 4:45 PM ET

CDC, public health and regulatory officials in several states, and the U.S. Department of Agriculture's Food Safety and Inspection Service (USDA-FSIS) are investigating a multistate outbreak of Listeria monocytogenes infections linked to deli meats.

Latest Outbreak Information Illustration of a megaphone. **At A Glance** Reported Cases: 10 States: 3 Hospitalizations: 10 Deaths: 1 Close-up shot of a platter of cold cuts including salami, pepperoni and cured ham.

10 people infected with the outbreak strain of Listeria have been reported from Florida, Massachusetts, and New York.

All 10 ill people were hospitalized. One death has been reported from Florida.

Epidemiologic evidence shows that deli meat is a likely source of this outbreak.

In interviews with 9 ill people, all reported eating Italian-style meats, such as salami, mortadella, and prosciutto. They reported purchasing prepackaged deli meats and meats sliced at deli counters at various locations.

A specific type of deli meat and common supplier have not yet been identified.

Advice to People at Higher Risk for Listeria Infection

Illustration of a clipboard with check marks on it.

You are at higher risk for getting sick with Listeria if you are pregnant, aged 65 years or older, or have a weakened immune system. If you are not in these groups, you are unlikely to get sick from Listeria.

Deli meats, also called lunch meat or cold cuts, can have Listeria bacteria.

Avoid eating deli meats, unless heated to an internal temperature of 165°F or until steaming hot just before serving.

## Take additional steps to prevent getting sick:

Clean

Wash your hands after handling deli meats.

Clean refrigerator shelves, kitchen countertops, utensils, and other surfaces that may have come into contact with deli meats. Listeria can survive in refrigerated temperatures and can easily spread to other foods and surfaces.

Separate

Don't let juice from deli meats get on other foods, utensils, and food preparation surfaces. Chill

Keep factory-sealed, unopened packages of deli meats in the refrigerator for no longer than 2 weeks. Keep opened packages and meat sliced at a local deli in the refrigerator for no longer than 5 days. Call your healthcare provider if you ate deli meats and are experiencing symptoms of Listeria infection.

#### Advice to Retailers

Illustration of a clipboard with check marks on it. Follow USDA-FSIS best practices external icon for controlling Listeria contamination in deli areas.

#### Symptoms of Listeria Infection

Illustration of a person with stomach pain.

Listeriosis can cause different symptoms, depending on the person and the part of the body affected. Pregnant women typically experience only fever and other flu-like symptoms, such as fatigue and muscle aches. However, infections during pregnancy can lead to miscarriage, stillbirth, premature delivery, or lifethreatening infection of the newborn.

People who are not pregnant may experience symptoms that include headache, stiff neck, confusion, loss of balance, and convulsions in addition to fever and muscle aches.

People with invasive listeriosis usually report symptoms starting 1 to 4 weeks after eating food contaminated with Listeria; some people have reported symptoms starting as late as 70 days after exposure or as early as the same day of exposure.

For more information, see Symptoms of Listeria Infection.

#### **Investigation Details**

#### October 23, 2020

CDC, public health and regulatory officials in several states, and the U.S. Department of Agriculture's Food Safety and Inspection Service (USDA-FSIS) are investigating a multistate outbreak of *Listeria monocytogenes* infections.

Public health investigators are using the <u>PulseNet</u> system to identify illnesses that may be part of this outbreak. PulseNet is the national subtyping network of public health and food regulatory agency laboratories coordinated by CDC. DNA fingerprinting is performed on *Listeria* bacteria isolated from ill people by using a standardized laboratory and data analysis method called <u>whole genome</u> <u>sequencing</u> (WGS). CDC PulseNet manages a national database of these sequences that are used to identify possible outbreaks. WGS gives investigators detailed information about the bacteria causing illness. In this investigation, WGS showed that bacteria isolated from ill people were closely related genetically. This means that people in this outbreak are more likely to share a common source of infection.

As of October 22, 2020, a total of 10 people infected with the outbreak strain of *Listeria monocytogenes* have been reported from three states. A list of the states and the number of cases in each can be found on the <u>Map of Reported Cases page</u>.

*Listeria* samples from ill people were collected from <u>August 6, 2020, to October 3, 2020</u>. Ill people range in age from 40 to 89 years, with a median age of 81 years. Eighty percent of ill people are female. All 10 ill people were hospitalized. One death has been reported from Florida.

## Investigation of the Outbreak

Epidemiologic evidence shows that deli meat is a likely source of this outbreak.

State and local public health officials interviewed ill people about the foods they ate in the month before they became ill. Of the nine people interviewed, all reported eating Italian-style deli meats, such as salami, mortadella, and prosciutto. They reported purchasing prepackaged deli meats and meats sliced at deli counters at various locations.

*Listeria* bacteria can spread easily to other foods and surfaces. The bacteria in a contaminated deli product may spread to other deli meats and cheeses in shared display cases or equipment at deli counters. A traceback investigation is ongoing to determine if there is a specific type of deli meat or a common supplier linked to illness.

People who are <u>higher risk of getting sick from *Listeria* should avoid eating deli meats, unless they are heated to an internal temperature of 165°F or until steaming hot just before serving.</u>

This investigation is ongoing. CDC will provide updates when more information becomes available. https://www.cdc.gov/listeria/outbreaks/delimeat-10-20/index.html

#### Europe

## Dengue in Europe: 18 locally acquired cases reported this year

ID: 1008106714

Source: outbreaknewstoday.com

The European Centre for Disease Prevention and Control (ECDC) reports that 18 autochthonous, or locally acquired dengue fever cases have been reported on the continent in two countries–Italy and France.

In Italy, 10 locally acquired cases have been reported in the Veneto region since the summer. Officials

say the probable origin of the primary travel-related case is West Sumatra, Indonesia.

The DEN-1 serotype is the viral strain reported. Aedes albopictus mosquitoes are endemic in the region. In France, eight total locally transmitted cases were reported in three departments– Hérault (1), Alpes-Maritimes (5) and Var department (2), including a Dutch tourist diagnosed on her return from vacation in Var.

In the past ten years, nearly 60 autochthonous dengue fever cases have been reported. Aedes aegypti mosquito

ECDC says dengue is not endemic in the EU/EEA and the vast majority of the cases are travelers infected outside of the EU/EEA. When the environmental conditions are favorable, in areas where Ae. albopictus is established, viremic travel-related cases may generate a local transmission of the virus. http://outbreaknewstoday.com/dengue-in-europe-18-locally-acquired-cases-reported-this-year-55097/

## South Korea (Update)

South Korea presses on with flu vaccination programme amid concerns about deaths Source: Reuters

ID: 1008104991

Published: 2020-10-23 12:19 UTC

Received: 2020-10-23 12:19 UTC (0 minutes)

Locations: France, SEOUL, Seoul, South Korea

SEOUL (Reuters) - The Korea Disease Control and Prevention Agency (KDCA) said on Friday it would not halt a wide flu vaccination programme aimed at heading off complications from the coronavirus, after reviewing more than two dozen cases of deaths that have raised public concern.

A review had shown no direct link between the vaccination and 26 deaths that were investigated, the KDCA said in a statement, adding it planned to meet on Saturday to review additional analysis.

The toll of deaths among people who have been vaccinated reached 36 on Friday, sparking calls from doctors and politicians for a halt to the programme, which aims to vaccinate about 30 million of the country's 52 million population.

One of the early cases of death was a 17-year-old boy. The National Forensic Service has conducted autopsies on some of the deceased and determined that the vaccine did not cause the boy's death, Yonhap news agency said, citing police.

Both the forensic agency and police were not immediately reachable for comment.

Prime Minister Chung Sye-kyun expressed condolences to the families of those who died, calling for a thorough investigation to verify the exact cause of deaths.

"So far experts said there was low possibility that the shots and deaths were related but many citizens remain anxious," he told a meeting.

The rising death toll has fuelled debate about whether the programme, which is free for some citizens, should be suspended. The country's largest grouping of doctors called for a halt until the safety of the vaccines is confirmed, while a major vaccine society said inoculation should continue as no relation to the deaths have been found.

ADVISED AGAINST SHOTS

Some local governments and district offices around the country have voluntarily advised residents against taking a flu shot or are considering suspending the programme.

The vaccine providers include domestic firms such as GC Pharma, SK Bioscience, Korea Vaccine and Boryung Biopharma Co Ltd, a unit of Boryung Pharm Co Ltd 003850.KS, along with France's Sanofi SASY.PA. They supply both the free programme and paid services.

Of those who have died, 10 people received products from SK Bioscience, five each from Boryung and GC Pharma, four from Sanofi and one from Korea Vaccine. There were no details about the latest 11 cases.

KDCA director Jeong Eun-kyeong said on Thursday that vaccines would continue to be supplied but the government might consider suspending some products that have identification numbers matching batches manufactured at the same plant on the same day if more people die using them. One batch consists of around 150,000 doses.

It was not immediately clear if any of the vaccines made in South Korea were exported, or if those supplied by Sanofi were also being used elsewhere.

All four domestic firms declined to comment.

Sanofi referred to the KDCA findings but said in a statement to Reuters that scientific assessments and monitoring were under way and that it would closely work with local health authorities.

South Korea ordered 20% more flu vaccines this year to ward off what it calls a "twindemic" of concurrent major flu and COVID-19 outbreaks in winter.

So far 8.3 million people had been inoculated since the programme began on Oct. 13, with about 350 cases of adverse reactions reported, the KDCA said.

The KDCA reported 155 new coronavirus cases as of Thursday midnight, bringing total infections to 25,698, with 455 deaths.

https://ca.reuters.com/article/idUSKBN278070

#### Peru

## In hard-hit Peru, worry mounts over both COVID-19 and dengue

ID: 1008105731

Two of Lidia Choque's close family members had already gotten sick with the new coronavirus when the mosquitos arrived.

The 53-year-old woman lives in a wooden house near the airport of a Peruvian city in the Amazon rainforest. City fumigators usually visit several times during the rainy season to eliminate the pests, but this year, because of the pandemic, they were absent.

When she went to a hospital after coming down with a fever and body aches, doctors delivered a double diagnosis: COVID-19 and dengue.

"I couldn't even walk," she said.

As Peru grapples with one the world's worst SARS-CoV-2 outbreaks, another virus is starting to raise alarm: dengue.

Health officials have reported over 35,000 cases this year, concentrated largely in the Amazon. The rise comes amid an overall dip in the number of new daily coronavirus infections, though authorities worry a second wave could strike as dengue cases rise.

In the city of Pucallpa, where Choque lives, doctors say they are already encountering patients with both illnesses. Two physicians said dengue symptoms like fever and muscle aches tend to dominate, though the combination with COVID-19 can prove deadly.

"There is more risk," said Dr. Rosmery Rojas, a physician at a public hospital she said is seeing 120 dengue patients a day.

The Ucayali region located along a muddy river has long seen periodic dengue outbreaks, though Rojas and others said this year's figures are already three times that seen in 2019. Throughout the Americas, there were more than 3.1 million dengue cases last year, the highest number on record, according to the Pan American Health Organization.

The Americas branch of the World Health Organization reports there has been an overall decrease in a dengue cases during the pandemic—with a little more than 2 million recorded so far this year, including 845 deaths. Nearly 1.4 million of those cases have been in Brazil.

It is unclear whether the reduction is related to COVID-19, though a spokeswoman said public health measures aimed at preventing the new virus may have played a role.

Nonetheless, in the Peruvian Amazon a mounting number of dengue patients are filling hospital beds that months before were overwhelmed by COVID-19 patients. Some, like Choque, are told they have both illness when they arrive at the hospital.

"Many people are arriving co-infected," said Dr. Mariano Alarcón.

Dengue is a mosquito-borne disease also known as "breakbone fever" for its severely painful symptoms. Southeast Asian countries like Singapore and Indonesia have also dealt with dual dengue and virus outbreaks this year as lockdowns put prevention activities on hold.

Dengue is not usually fatal but severe cases can require hospitalization. Removing trash, old tires and other objects containing standing water can help curb the disease—actions officials in Peru are now carrying out in hopes of quashing the uptick in dengue cases.

Choque said she went to the hospital after her symptoms didn't go away. A rapid virus antibody test—which can indicate a prior infection—came back negative, but a doctor saw spots on a chest X-ray that led her to diagnose COVID-19. The mother of three is still skeptical of whether she had the virus.

She stayed nearly two weeks in a ward with eight female dengue patients, riddled with anxiety over her condition.

"I felt desperate," she said.

Looking back, Choque believes the absence of fumigation likely contributed to her coming down with dengue. She set up cans filled with lit charcoal and dried eucalyptus leaves to drive the mosquitos away, but she said they were still rampant when she fell sick.

"There's been more focus on COVID," she said. "They've neglected dengue."

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https://medicalxpress.com/news/2020-10-hard-hit-peru-mounts-covid-dengue.html

#### IHR Announcement

Poliomyelitis (Circulating vaccine-derived poliovirus and Wild Poliovirus) – Global update 23 October 2020

Between 1 January and 21 October 2020, there have been several countries affected by poliomyelitis including circulating vaccine-derived poliomyelitis type 1 and 2 (cVDPV1 and cVDPV2) and wild poliovirus type 1 (WPV1) globally. This announcement is a weekly update on the status of cVDPV and WPV1 in these affected countries.

Between 15 and 21 October 2020, there have been three WPV1 in Acute Flaccid Paralysis (AFP) cases and two WPV1 positive environmental samples reported in Afghanistan and Pakistan. During the same period, there have been 82 cVDPV2 in AFP cases and 4 cVDPV2 positive environmental samples reported in Afghanistan, Benin, Burkina Faso, Côte d'Ivoire, Ethiopia, Mali, Nigeria, Somalia and Sudan. In addition, there were two cVDPV1 in AFP cases reported in Yemen. Below is the description of the reported cases by country:

•Afghanistan: one WPV1 in AFP case, one WPV1 positive environmental sample, 14 cVDPV2 in AFP cases and 2 cVDPV2 positive environmental samples

- •Pakistan: two WPV1 in AFP cases and one WPV1 positive environmental sample
- •Benin: one cVDPV2 positive environmental sample
- •Burkina Faso: 21 cVDPV2 in AFP cases
- •Côte d'Ivoire: 15 cVDPV2 in AFP cases
- •Ethiopia: four cVDPV2 in AFP cases
- •Mali: six cVDPV2 in AFP cases
- •Nigeria: one cVDPV2 in AFP case
- •Somalia: five cVDPV2 in AFP cases and one cVDPV2 positive environmental sample
- •Sudan: 16 cVDPV2 in AFP cases
- •Yemen: two cVDPV1 in AFP cases

Please find below the link to the weekly global polio update published by the global polio eradication initiative (GPEI) that includes an update on polio (WPV 1, cVDPV1, and cVDPV2) case count for this week (between 15 and 21 October 2020) and cumulative case count by country since 1 January 2020.

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

#### Public Health Response

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

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

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

## WHO risk assessment

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

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

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

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

i) The programme will continue, to the extent possible, its surveillance activities to monitor the evolution of the situation.

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

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

#### WHO advice

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

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

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

For more information:

•Global Polio Eradication Initiative: http://polioeradication.org/

•Polio Factsheet: https://www.who.int/topics/poliomyelitis/en/

•WHO/UNICEF estimates of national routine immunization:

https://apps.who.int/immunization\_monitoring/globalsummary/timeseries/tswucoveragedtp3.html

•GPEI Public health emergency status: http://polioeradication.org/polio-today/polio-now/public-healthemergency-status/

•International travel and health: https://www.who.int/ith/en/

•Vaccine-derived polioviruses: http://polioeradication.org/polio-today/polio-prevention/the-virus/vaccine-derived-polio-viruses/

•Use of OPV in the context of COVID-19: http://polioeradication.org/wp-content/uploads/2020/03/Use-of-OPV-and-COVID-20200421.pdf

•Guiding principles for immunization activities during the COVID-19 pandemic:

https://apps.who.int/iris/handle/10665/331590

•WHO guidance document - COVID-19: Operational guidance for maintaining essential health services during an outbreak: https://www.who.int/publications-detail/covid-19-operational-guidance-for-maintaining-essential-health-services-during-an-outbreak

## Researches, Policies and Guidelines

#### WHO

# United Nations at 75: bringing humanity together for a better tomorrow Source: WHO

Through the United Nations and the 2030 Agenda for Sustainable Development, the world can promote peace, health, prosperity, gender equity and human rights, and ensure a more sustainable tomorrow. Within the United Nations, WHO works to secure the health of all people, everywhere.

Building health across generations

In the past 75 years, the United Nations has made a real difference to the lives of billions of people across continents and across generations.

For example, when WHO announced the eradication of smallpox in 1980, a disease that had plagued humanity for over 3000 years, it also marked a victory for global cooperation. No country could have done it alone.

When WHO and its partners spearheaded efforts to tackle the HIV epidemic, the world witnessed a monumental shift in the way the disease was progressing. Global coordination means that today more and more people can manage the disease. And prevention efforts are returning promising results. No country could achieve this alone.

In 2020, the African continent was declared free of wild poliovirus, a historic milestone for all of humanity. Now, over 90% of the world's population is polio-free, because with WHO's support, countries came together and coordinated immunization and public health efforts. No country could have realized this alone.

Solidarity and multilateralism to move beyond the COVID-19 pandemic

Today, an unprecedented pandemic has plunged the world into a global health emergency, impacting our economies, our livelihoods and our health. Health is a human right, and when that human right is threatened, everything else is at risk.

The pandemic has highlighted now more than ever the need for the world to come together in unity and in solidarity. No country can beat these challenges alone.

"COVID-19 offers us an opportunity to build back a better society for the future. To achieve this, we already have necessity and innovation. Now we need courage and collaboration. I count on you, and you can count on the World Health Organization," said Dr Hans Henri P. Kluge, WHO Regional Director for Europe.

## UN75: The future we want, the United Nations we need

In January 2020, the United Nations launched a global consultation to mark its 75th anniversary. Through surveys and dialogues, it asked people about their hopes and fears for the future, and by 21 September this year, over 1 million people had taken part.

The top 3 findings are:

- 1. Amidst the current crisis, the immediate priority of most respondents everywhere is improved access to basic services: health care, safe water and sanitation, and education.
- 2. The next main priority is greater international solidarity and increased support to the places hardest hit by the pandemic. This includes tackling poverty and inequalities, and boosting employment.
- 3. While health is the most pressing issue now, respondents were hopeful about this area improving. They also believe access to education and women's rights will improve.

"Across this anniversary year, we have engaged in a global conversation. And the results are striking. People are thinking big – they are also expressing an intense yearning for international cooperation and global solidarity. Now is the time to respond to these aspirations and realize these aims. In this 75th anniversary year, we face our own 1945 moment. We must meet that moment. We must show unity like never before to overcome today's emergency, get the world moving and working and prospering again, and uphold the vision of the Charter," said United Nations Secretary-General António Guterres.

https://www.euro.who.int/en/about-us/partners/news/news/2020/10/united-nations-at-75-bringinghumanity-together-for-a-better-tomorrow

## WHO

#### Statement – World Polio Day: walking the last mile together towards polio eradication Source: WHO

23 October 2020, Dr Hans Henri P. Kluge, WHO Regional Director for Europe Dr Hans Henri P. Kluge, WHO Regional Director for Europe 23 October 2020 Vaccines save millions of lives every year.

Thanks to vaccination, smallpox, a disease which once caused millions of deaths every year, became the first disease affecting humans to ever be eradicated in 1980.

Polio could be the next.

In 1988, when the World Health Assembly pledged to make polio eradication a priority, the virus was still present in 125 countries. That same year, Rotary, WHO, the US Centers for Disease Control and Prevention and UNICEF formed the Global Polio Eradication Initiative to bring together key partners and stakeholders in the fight against polio. We were soon joined by the Bill & Melinda Gates Foundation and

Gavi, the Vaccine Alliance. Through united action, the incidence of wild polio cases has since dropped by over 99%. The WHO European Region was declared polio-free in 2002. By 2017, there were only three countries left in the world reporting cases of wild poliovirus: Nigeria, Afghanistan and Pakistan.

This success was followed by yet another significant milestone: in 2019, the WHO African Region had passed three consecutive years without any trace of wild poliovirus, which led to the official certification of eradication in August of this year. This means that five of the six WHO regions are now wild polio free, representing 90% of the world's population.

This is not all: two of the three types of wild poliovirus have been eradicated; while Type 2 wild poliovirus was declared eradicated in September 2015, Type 3 was officially declared eradicated on World Polio Day 2019.

Our last remaining task is to hold the line where the virus has been eradicated and remove the last few strongholds where it continues to spread. Our adversary has been reduced to just one type of the virus and just 0.1% of cases in two countries and one region of the world.

Today, on World Polio Day, I wish to congratulate the WHO African Region for its monumental achievement in eradicating polio. This milestone serves as an example of how a region made up of many different countries, cultures and health systems can unlock better health through joint action. It further shows that, guided by a common vision, disease eradication through vaccination is possible.

As a young doctor, I myself worked alongside many dedicated immunization professionals and volunteers in Africa, each of whom helped make this achievement possible. Knowing that future generations of nurses and doctors in Africa and elsewhere in the world will learn about polio from their history textbooks only, without ever having to see a child paralysed by wild poliovirus, touches me deeply.

To commemorate this World Polio Day in the European Region, I congratulate all volunteers, governments and their dedicated health and social care workers for their relentless efforts to leave no one behind in providing children with life-saving polio vaccines.

The COVID-19 pandemic is a stark reminder of the impact infectious diseases can have on our health systems and our communities. It proves that, specifically in times of growing interconnectivity and the rapid exchange of information, global issues need global solutions. Only if governments, institutions and communities join forces, can we create healthier societies.

The mission to eradicate polio represents one of the largest global public health efforts ever initiated, involving partners at all levels across all countries. These range from strengthening cold chain systems and the improvement of disease surveillance to capacity-building of country immunization programme teams, as well as communication and trust-building activities.

Against this backdrop, I wish to commend all countries that strived to maintain routine immunization services as a priority even during the darkest days of the COVID-19 pandemic. With polio cases continuing to occur near the Region's border in Afghanistan and Pakistan, this vigilance is not a luxury, but an absolute necessity to keep the Region polio free. Polio anywhere in the world is a threat to children everywhere if we let our guard down.

Strong health systems serve as the foundation to deliver life-saving vaccines to every last child. Immunization is one of four flagship initiatives of the new European Programme of Work, our agenda for health 2020–25, because lifting the burden of vaccine-preventable diseases is crucial to achieving our collective goal of better health for all.

Thanks to the visionaries who came before us, our generation has been presented with the unique opportunity to wipe out polio for good. We can make history. Vaccinating against polio and many other now preventable diseases is a right and a responsibility.

Everyone, everywhere can do their part – let's walk the last mile together.

https://www.euro.who.int/en/media-centre/sections/statements/2020/statement-world-polio-day-walking-the-last-mile-together-towards-polio-eradication

#### WHO

Steroids boost survival of preterm babies in low-resource settings, new study finds Source: WHO 23 October 2020 News release

Accurate pregnancy dating and quality care combined with the steroids are key to survival The results of a new clinical trial, published today in the New England Journal of Medicine, show that dexamethasone—a glucocorticoid used to treat many conditions, including rheumatic problems and severe COVID-19— can boost survival of premature babies when given to pregnant women at risk of preterm birth in low-resource settings.

The WHO ACTION-I trial resolves an ongoing controversy about the efficacy of antenatal steroids for improving preterm newborn survival in low-income countries. Dexamethasone and similar drugs have long shown to be effective in saving preterm babies lives in high-income countries, where high-quality newborn care is more accessible. This is the first time a clinical trial has proven that the drugs are also effective in low-income settings.

The impact is significant: for every 25 pregnant women treated with dexamethasone, one premature baby's life was saved. When administered to mothers at risk of preterm birth, dexamethasone crosses the placenta and accelerates lung development, making it less likely for preterm babies to have respiratory problems at birth.

"Dexamethasone is now a proven drug to save babies born too soon in low-income settings," says Dr Olufemi Oladapo, head of maternal and perinatal health unit at WHO and HRP, and one of the coordinators of the study. "But it is only effective when administered by health-care providers who can make timely and accurate decisions, and provide a minimum package of high-quality care for both pregnant women and their babies."

Globally, prematurity is the leading cause of death in children under the age of 5. Every year, an estimated 15 million babies are born too early, and 1 million die due to complications resulting from their early birth. In low-income settings, half of the babies born at or below 32 weeks die due to a lack of feasible, cost-effective care.

The study notes, healthcare providers must have the means to select the women most likely to benefit from the drug and to correctly initiate the treatment at the right time – ideally 48 hours before giving birth to give enough time to complete steroid injections for maximal effect. Women who are in weeks 26-34 of their pregnancy are most likely to benefit from the steroid, so healthcare providers must also have access to ultrasound to accurately date their pregnancies. In addition, babies must receive sufficiently good-quality care when they are born.

"When a minimal package of care for newborn babies – including management of infection, feeding support, thermal care and access to a CPAP machine to support respiration – is in place in low-income countries, antenatal steroids such as dexamethasone can help to save preterm babies' lives," says Dr Rajiv Bahl, head of the newborn health unit at WHO and one of the study coordinators.

Conducted from December 2017–November 2019, the randomized trial recruited 2852 women and their 3070 babies from 29 secondary and tertiary level hospitals in Bangladesh, India, Kenya, Nigeria, and Pakistan. Beyond finding a significantly lower risk of neonatal death and stillbirth, the study also found there was no increase in possible maternal bacterial infections when treating pregnant women with dexamethasone in low-resource settings.

https://www.who.int/news/item/23-10-2020-steroids-boost-survival-of-preterm-babies-in-low-resource-settings-new-study-finds

#### Sierra Leone

Pattern of post-Ebola symptoms resembles rheumatologic disease Source: Infectious Disease News ID: 1008118513

An analysis of Ebola survivors in Sierra Leone revealed that patients with post-Ebola syndrome experience clusters of symptoms that occur together, including some with a seemingly rheumatologic pattern of disease, researchers reported.

"Ebola survivors have a broad array of symptoms that fall into distinct patterns. One of these patterns resembles rheumatologic disease and may be related to gut dysfunction," Sarah Talia Himmelfarb, MD, a resident in internal medicine and pediatrics at Tulane University School of Medicine, explained to Healio. Research has shown that Ebola survivors may face long-term health effects from the illness.

"To date," Himmelfarb said, "several studies have been performed to determine if specific markers of inflammation are associated with post-Ebola syndrome. No marker has been identified when looking at survivors as a homogeneous group."

To identify patterns within the variety of symptoms experienced by Ebola survivors, Himmelfarb and colleagues identified survivors in Eastern Sierra Leone through the Sierra Leone Association of Ebola Survivors and household contacts of survivors and recruited them for a study. Himmelfarb presented findings from the study at IDWeek.

Participants from both groups received a questionnaire regarding self-reported symptoms and underwent a physical exam. The researchers compared symptoms between the groups and analyzed correlations between clusters.

"Our motivation in doing this was to see if any patterns fit known disease processes," Himmelfarb said. "In particular, we wanted to investigate the possibility that they fit the pattern of a rheumatologic or autoimmune disease. This would help us better understand this poorly characterized syndrome and might help lead to therapies for those who suffer from it."

Between March 2016 and January 2019, 375 Ebola survivors and 1,040 contacts were enrolled in the study. According to Himmelfarb and colleagues, at the time of enrollment, Ebola survivors across all age groups reported significantly more symptoms than contacts in all categories. The researchers identified six symptom clusters "representing distinct organ systems" and two general phenotypes with or without rheumatologic symptoms.

According to the study, clusters including rheumatologic symptoms were correlated with one another (r = 0.63) but not with other clusters (r < 0.35). Additionally, ophthalmologic/auditory symptoms were moderately correlated with the nonrheumatologic clusters (r > 0.5), whereas psychologic/neurologic, cardiac/gastrointestinal and constitutional clusters correlated with one another (r > 0.6) in all cases. After mapping the symptom clusters, the researchers determined that each symptom cluster was separated from the rest, particularly the phenotypes with rheumatologic symptoms.

The group of survivors with the seemingly rheumatologic pattern of disease complained of symptoms that included joint pain and decreased range of motion, Himmelfarb said. This group overlapped with a group with gastroenterological symptoms, such as abdominal tenderness.

"An intriguing possibility is that inflammation stemming from impaired gut barrier, as was detected in a previous study, may be an etiologic cause of this group of symptoms," Himmelfarb said. "This work has significance for the thousands of Ebola survivors who emerged from the 2014-2016 epidemic in Western Africa. It also contributes a small but growing body of knowledge of post-viral sequelae. This field has only become more relevant in the age of COVID-19."

https://www.healio.com/news/infectious-disease/20201024/pattern-of-postebola-symptoms-resemblesrheumatologic-disease