GPHIN Daily Report for 2020-09-23

Special section on Coronavirus

Canada

Areas in Canada with cases of COVID-19 as of 22 September 2020 at 07:00 pm EDT
Source: Government of Canada

Province, territory or other	Number of confirmed cases	Number of active cases	Number of deaths
Canada	146,663	10,525	9,234
Newfoundland and Labrador	272	1	3
Prince Edward Island	57	0	0
Nova Scotia	1,087	1	65
New Brunswick	196	3	2
Quebec	68,617	3,362	5,805
Ontario	47,752	3,578	2,832
Manitoba	1,632	380	18
Saskatchewan	1,824	146	24
Alberta	16,889	1,565	258
British Columbia	8,304	1,488	227
Yukon	15	0	0
Northwest Territories	5	0	0
Nunavut	0	0	0
Repatriated travellers	13	0	0

A detailed epidemiologic summary is available.
https://www.canada.ca/en/public-health/services/diseases/2019-novel-coronavirus-infection.html#a1

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

Canada

Federal throne speech to focus on health, economic recovery from COVID-19 pandemic
Source: citynews.ca

SEP 22, 2020 AT 1:01 PM EDT
OTTAWA — The Liberals will outline their plan to help Canada get through the COVID-19 pandemic and rebuild the economy in the throne speech Wednesday.

When Governor General Julie Payette reads the speech from the throne, the Liberal government is expected to present a three-pillar approach to helping the country out of the health crisis.
The immediate focus will be on dealing with the health challenges of the pandemic, followed by medium-term efforts to support Canadians struggling financially and get them back to work. In the long-run, the government plans to introduce measures to revive the economy with an environmental focus.
According to reports, the government is working on a billion-dollar electric car strategy, and Bloomberg says there will be spending commitments for vaccines, COVID-19 testing and containing local outbreaks.
As MPs prepare to return to the House of Commons, talks are still underway for the possibility of virtual voting.

“It’s a slow and very ponderous and technically challenging,” said Conservative MP Peter Kent.
Conservative Deputy Leader Candice Bergen has no fears about sittings in the house amid a pandemic, despite the fact her party’s leader, Erin O’Toole, and Bloc Quebecois Leader Yves Francois Blanchet are quarantining after testing positive for COVID-19.
“I feel satisfied everyone has the right motives, making sure that safety is paramount,” she said.
https://montreal.citynews.ca/2020/09/22/throne-speech-pandemic/

Canada
Federal health officials presented new data modelling today that shows the COVID-19 epidemic is accelerating nationally.
Source: citynews.ca
ID: 1007892411

SEP 22, 2020 AT 3:17 PM EDT
OTTAWA — Canada is on track to record as many as 10,000 more cases of COVID-19 by next Friday, according to the latest federal modelling data.
“Because daily reported cases will always lag behind transmission by one to two weeks, we will only learn about the spread that is happening now another one to two weeks in the future,” Chief Public Health Officer Dr. Theresa Tam said Tuesday.
“This is why our actions, right now, are what matters for keeping epidemic growth on the control.”
People aged 20 to 39 remain the demographic contracting the virus the most, she added.
While Tam said COVID-19 tends to lead to mild illness for younger people, the circulation of the virus among young people builds a reservoir for the virus.
The data was presented as every province west of the Atlantic travel bubble has seen a rise in COVID-19 cases.
Tam said if Canadians stay on the current path or let their guards down, there will likely be a massive spike in cases over the next couple of months.
“This surge could overwhelm our health system capacity and significantly impact social and economic systems as well,” she added.
But if public health measures are strengthened and Canadians take more personal protective measures and limit contact with others, Tam said the curve will flatten out this fall.
“If we maintain our current rates of contacts, the epidemic is forecast to come back. If we increase our current ratio contacts, the epidemic is forecast to come back faster and stronger. But if we decrease our current rate of contacts, the epidemic is forecast to come back under control and most locations,” Tam said.
The latest modelling data also showed the deaths from COVID-19 remain low and under control, she added.
As of Tuesday morning, Canada had 146,406 confirmed cases of COVID-19 overall, along with 9,232 deaths, while 126,234 have recovere
https://montreal.citynews.ca/2020/09/22/canada-could-see-10000-more-covid-19-cases-in-next-week-dr-tam/

Canada

Flu shot campaign first pillar of Ontario fall pandemic preparedness plan: Ford

ID: 1007892771

Source: CTV News

TORONTO — Encouraging Ontario residents to get the flu shot is the first part of the province's plan to combat COVID-19 this fall, Premier Doug Ford announced Tuesday, as critics said rising case counts warranted far more decisive action.

Ford said the rest of his government's pandemic preparedness strategy would be released in the coming days, adding that a robust flu vaccination campaign would help preserve hospital capacity.

"The flu shot helps reduce visits to our emergency rooms and doctors' offices," he said.

Ontario will spend $70 million to purchase 5.1 million doses of the flu vaccine — 700,000 more than the previous year — and high-dose shots geared towards seniors will be available in pharmacies for the first time, Ford said.

Other yet-to-be announced elements of the province's plan will focus on expanded testing, case and contact management, as well as quick identification, management and prevention of COVID-19 outbreaks, Ford said.

The strategy will also address ways to reduce health service backlogs, prepare for case surges and recruit and train health-care workers, he said.

Health Minister Christine Elliott said the flu shot campaign will be a key piece of province's COVID-19 response this fall. The first shipments of the flu shots should be arriving next week.

"We will be supplying that vaccine to residents of long-term care homes and staff members as well and people in hospitals and retirement homes and other places of congregate living," Elliott said. "This is a top priority to keep these very vulnerable citizens safe and healthy."

In recent weeks, opposition politicians have repeatedly pressed the government to deliver the fall preparedness plan, asking questions daily about the timing of its release and for details on how it will impact schools, the health-care system and long-term care homes where more than 1,820 people have died during the pandemic.

NDP Leader Andrea Horwath called Ford's Tuesday announcement "disappointing", saying it didn't immediately address some of the key threats of a potential COVID-19 second wave.

"Just to make a pronouncement that you've got to get your flu shots this year ... it's just not even good enough," she said. "Nevermind, the fact that there really isn't a plan on any of the other pieces, whether it's schools, whether it's long-term care, whether it's hospital pressures."

Ontario Liberal Leader Steven Del Duca criticized the staggered roll-out of the plan, saying the approach is not clear or transparent.

"I just don't understand, and I think most Ontarians agree with me, why we haven't seen the plan before today," he said.

Green party Leader Mike Schreiner said the government spent much of the summer hearing from Ontario residents during legislative committee testimony and should have been better prepared.

"(People) clearly stated over and over again that the government needed to have a plan for the second wave and it needed to be communicated clearly," he said. "I'm shocked they're failing to do that."

Ford said the plan is complex, which is why the government decided to release it in stages.

"This is a massive, massive plan, very jammed with items," Ford said. "If we laid it all down at once, the message isn't going to get out to the people."

The province reported 478 new cases of the novel coronavirus Tuesday, along with three more associated deaths.

This report by The Canadian Press was first published Sept. 22, 2020.

https://toronto.citynews.ca/2020/09/22/flu-shot-campaign-first-pillar-of-ontario-fall-pandemic-preparedness-plan-ford/

Canada

Slow adherence to public health guidelines' leads to new class order in Ottawa

Chief Medical Officer of Health Dr. Vera Etches says residents can be fined $5,000 every day for which an offence occurs.

ID: 1007892649

Source: ottawamatters.com

Ottawa's Chief Medical Officer of Health is envoking a class order, demanding that anyone who tests positive for COVID-19, shows signs or symtoms of the virus, is in close contact with a positive case, is awaiting a test result, or otherwise believes they have the illness, must isolate for 14 days. Anyone who does not follow the class Section 22 order under the Health Protection and Promotion Act could face fines up to $5,000 for every day, or part of a day, on which the offence occurs or continues.
Dr. Vera Etches explains the order is being put into place in light of an increase in community transmission of COVID-19 and recent siutuations where there's been "slow adherence to public health guidance."
The doctor says section 22 orders have been used previously, to facilitate obtaining a list of close contacts from residents.
"We have not had to take anyone to court," adds Dr. Etches.
"Because the numbers of people that we're working with has increased so much, a class order will support timely escalation when needed," she notes.
Full details of the class order can be found on Ottawa Public Health's website.
"We must once again plank the curve through our actions," says Dr. Etches. "This order is another intervention that targets the increasing non-adherence with the basic prevention measures of staying home when you have symptoms. Self-isolation of ill people ensures that the virus will not be passed onto others."
https://www.ottawamatters.com/local-news/slow-adherence-to-public-health-guidelines-leads-to-new-class-order-in-ottawa-2734038

Canada
Quebec raises COVID alert level for three more regions, including Laval and Outaouais
ID: 1007892808
Source: CTV News

MONTREAL _ Quebec is raising the COVID-19 alert level for three regions as health authorities warn the province is witnessing a second wave of the pandemic.
Health Minister Christian Dube said today the Laval region north of Montreal and the Outaouais region in western Quebec will be moving to the orange, or moderate, alert level.
He says the Centre-du-Quebec region in central Quebec will move from green to the yellow, early-warning level.
Orange is the second-highest level in the province's COVID-19 risk-assessment system, which measures the risk posed by COVID-19 in specific geographic areas.
Laval and Outaouais join Montreal, the Quebec City area as well as the Chaudiere-Appalaches region in the orange list, which involves tighter restrictions on bars and restaurants as well as lower limits on most indoor gatherings.
Quebec reported 489 new cases today, one day after the province's public health director announced that the second wave of COVID-19 had begun in the province.
This report by The Canadian Press was first published Sept. 22, 2020.
https://montreal.citynews.ca/2020/09/22/quebec-raises-covid-alert-level-for-three-more-regions-including-laval-and-outaouais/

Canada
Ottawa-Carleton District School board reports first four COVID-19 cases
ID: 1007892941
Source: CTV News

OTTAWA -- Ottawa's largest school board has reported its first four COVID-19 cases.
The Ottawa-Carleton District School board is reporting one student case each at Cairine Wilson Secondary School, Ottawa Technical Secondary School, Bayview Public School and Queen Mary Street Public School.
Overall, the number of cases associated with schools in the capital continues to increase. There are now 50 cases associated with 37 schools across the four school boards in the city.

Only one school outbreak has been declared: at Monsignor Paul Baxter School, which was closed down over the weekend and will remain shut for at least two weeks.
Ottawa Public Health declares an outbreak in a school once it's determined that two people have tested positive for COVID-19 with an epidemiological link.
The Ottawa Catholic School Board is reporting 11 cases at seven different schools.
The French Catholic school board now has 24 cases at 18 schools. The French public board has 11 cases in eight schools. Five classes in that board have been closed because of the virus.
https://ottawa.ctvnews.ca/ottawa-carleton-district-school-board-reports-first-four-covid-19-cases-1.5115353

Canada
'School will remain open': COVID-19 case confirmed at Father F.X. O'Reilly Catholic School in Tottenham
Source: Alliston Herald
Unique ID: 1007890023

In a letter that went out to parents Sunday, Sept. 20, the Simcoe Muskoka Catholic District School Board (SMCDSB) said there was a confirmed case of the virus at Father F.X. O'Reilly.
Citing privacy issues, the board did not specify whether the person was a student or staff member, but parents who received the letter are reporting it was a kindergarten student.
The board said it will follow the process the Simcoe Muskoka District Health Unit has in place to prevent further spread and to protect staff and students. A list of specific actions was included in the letter.
The letter said close contacts, including those with no symptoms, have been advised to get COVID-19 tests and to self-isolate for 14 days. It also said enhanced cleaning and disinfection will be performed in affected areas.
"The school will remain open and no further action has been suggested by the Health Unit at this point," reads a portion of the letter.
Local residents were quick to comment on the case after the letter was posted to Facebook.
"So unfortunate! But, not entirely unexpected. I wish the person and their family a speedy recovery!" wrote Facebook user Sandy Eichler.
The board's St. John Vianney Catholic School, located in Barrie, also has a positive COVID-19 test. A running list of cases can be viewed on the SMCDSB website.
The public board has also experienced cases at Bear Creek Secondary School in Barrie and at Twin Lakes Secondary School in Orillia. An updated list of confirmed cases can be found on the board website.
https://www.simcoe.com/news-story/10204907--school-will-remain-open-covid-19-case-confirmed-at-father-f-x-o-reilly-catholic-school-in-tottenham/

Canada
Queen's prepares for an outbreak with new Incident Command Structure - Queen's Journal
Source: Queen's Journal
Unique ID: 1007890202

Principal Patrick Deane asked Provost and Vice-Principal (Academic) Mark Green to lead the University's Incident Command Structure,(link is external) which is designed to further protect the health and safety of faculty, staff, and students, as well as the greater Kingston community. Members of the Incident Command Team Executive meet three times a week to review the status of COVID-19 cases in the Queen's community and adjust campus operations and communications accordingly. According to Green, the Incident Command Team has collaborated with local public health officials to walk through several different scenario planning exercises in preparation for making decisions in emergency situations. Just days after a Queen's student tested positive for COVID-19, the University shared its plans for managing an outbreak of the virus in the community.
Principal Patrick Deane asked Provost and Vice-Principal (Academic) Mark Green to lead the University's Incident Command Structure,(link is external) which is designed to further protect the health and safety of faculty, staff, and students, as well as the greater Kingston community.

The Incident Command Team Executive includes Green, Dr. David Walker, special advisor to the Principal on COVID-19, and other members of the senior administration.
READ MORE: 'We have active cases in this population now in our community': University confirms Queen's student tested positive for COVID-19
Members of the Incident Command Team Executive meet three times a week to review the status of COVID-19 cases in the Queen's community and adjust campus operations and communications accordingly.
Supported by the Executive, the Provost will act as the University Incident Commander in the event of an outbreak. If there is a specific area on campus impacted by the outbreak, the relevant Dean or portfolio lead will be included on the team.
According to Green, the Incident Command Team has collaborated with local public health officials to walk through several different scenario planning exercises in preparation for making decisions in emergency situations.
READ MORE: Queen's opens COVID-19 testing centre on campus
Green noted clear and fast communication is one of the most important factors identified through these exercises.
This communication will begin with Public Health informing the University of confirmed cases within the Queen's community as necessary—for example, the University will be contacted if a student or staff member in residence tests positive because of special protocol for preventing the spread of the virus in these buildings.
For other members of the Queen's community, including faculty, staff, and students living off-campus, Public Health will only notify the University with the permission of those involved, or if sharing the information is essential for contact tracing.
Regarding the legal restrictions to sharing personal health information under the Personal Health Information Privacy Act, the University said all identifying personal information will be removed from emails discussing the case.
Individuals who learn of a confirmed case on campus are asked to inform Dan Langham by emailing dan.langham@queensu.ca (link sends e-mail) or by calling 613-533-6000 x 74980. Langham will confirm the information with Public Health and alert the Incident Command Team.
Want to see more like this? Subscribe to our newsletter, Campus Catch-Up(link is external) to receive regular updates right in your inbox.
https://www.queensjournal.ca/story/2020-09-21/university/queens-prepares-for-an-outbreak-with-new-incident-command-structure/

Canada
Third staff member at Champlain Long Term Care Residence tests positive for COVID-19
Source: Ottawa Matters
Unique ID: 1007890483

A third staff member at the City of Ottawa-run Champlain Long Term Care Residence has tested positive for COVID-19. The home has been in outbreak status since a staff member tested positive for the virus on September 11. Armstrong Home both remain in outbreak status due to positive staff results last week.
A third staff member at the City of Ottawa-run Champlain Long Term Care Residence has tested positive for COVID-19.
The home has been in outbreak status since a staff member tested positive for the virus on September 11.
All affected staff are in self-isolation at home.
The Peter D. Clark Long-Term Care Centre and the Garry J. Armstrong Home both remain in outbreak status due to positive staff results last week.
There are currently no active positive cases at Carleton Lodge.
The city's General Manager of Community and Social Services Department, Donna Gray, said no residents in any of the four city-run long-term care homes are actively positive for COVID-19.
https://www.ottawamatters.com/local-news/third-staff-member-at-champlain-long-term-care-residence-tests-positive-for-covid-19-2731949

Canada

Health system looks to new tricks to roll out an old vaccine
Source: The Star Phoenix
Unique ID: 1007890499

The University of Saskatchewan professor and epidemiologist says the annual jab may help keep pressure off the province's hospitals and COVID testing centres during the colder months, when some predict a 'second wave' of infections may arrive. He indicated the SHA is also preparing for a different kind of immunization campaign, including possibly leveraging resources deployed for COVID-19 to get the shot into as many arms as possible. Saskatchewan Health Authority CEO Scott Livingstone and the Ministry of Health could not say how many doses of the flu vaccine they have ordered or exactly how it will be distributed.
Dr. Cordell Neudorf wants you to get your flu shot.
The University of Saskatchewan professor and epidemiologist says the annual jab may help keep pressure off the province's hospitals and COVID testing centres during the colder months, when some predict a 'second wave' of infections may arrive.
"Normally during the wintertime, what we get every year is a spike in demand in health care because of influenza," Neudorf said.
"The last thing you want is your system already taxed."
The common flu isn't as deadly or infectious as COVID-19, but it still taxes resources and can result in serious complications for the elderly. Last year's flu season in Saskatchewan saw 36 intensive care unit admissions and 15 deaths.
Beyond that, Neudorf noted flu infections might also put more pressure on the province's COVID-19 testing facilities, since the viruses share symptoms like fever, fatigue and sore throat.
Saskatchewan Health Authority CEO Scott Livingstone and the Ministry of Health could not say how many doses of the flu vaccine they have ordered or exactly how it will be distributed. Livingstone said some measures used in previous years, like immunizations in long-term care, will still happen.

He indicated the SHA is also preparing for a different kind of immunization campaign, including possibly leveraging resources deployed for COVID-19 to get the shot into as many arms as possible.
"We think there's an opportunity with existing assessment sites and testing sites that have been geared up for COVID to help support that work, as well as the drive-thru testing sites in Saskatoon and Regina, which we found out very quickly was a preferred option for lots of residents," Livingstone said.
Livingstone noted reports from the southern hemisphere point to a mild flu season, but combined with COVID-19 lockdown measures in those countries, guessing the severity is more complicated.

Neudorf said the big challenge is getting enough people to take the shot. The flu vaccine isn't a perfect shield: it's protective somewhere between 30 and 70 per cent of the time, which means a lot of people need to take it to stop the spread.
"If we want to maintain this dance we're doing with the pandemic in not having to resort to a big shutdown again … we'll hopefully see a reduced flu season," Neudorf said.
Flu shot clinics are set to open on Oct. 19, according to the SHA's website.
https://thestarphoenix.com/news/local-news/health-system-considering-new-tricks-to-roll-out-an-old-vaccine

Canada

Canada to join global coronavirus vaccine procurement program - National
Source: Global News
Unique ID: 1007890737

Canada is also joining the COVAX Facility, a vaccine sharing program connected to international organizations including the World Health Organization and the Vaccine Alliance of the Bill and Melinda Gates Foundation.
The Canadian government will sign on to a global vaccine procurement program and by week's end hopes to announce how much money it will pledge to the cause.
Procurement Minister Anita Anand is set to announce further deals with vaccine developers Tuesday as the federal government seeks to make sure Canadians have access to a COVID-19 vaccine as soon as

one is approved for use here.
Canada is also joining the COVAX Facility, a vaccine sharing program connected to international organizations including the World Health Organization and the Vaccine Alliance of the Bill and Melinda Gates Foundation.
[Sign up for our Health IQ newsletter for the latest coronavirus updates]
COVAX links wealthy, low and middle-income countries to ensure access to COVID-19 vaccines is not limited just to countries with the money to buy them.
COVAX has two groups: one any country can join to get access to vaccines, and a second to help low-income countries join.
Canada intends to join both and Anand says more details on Canada's participation will be announcing "in the coming days."
https://globalnews.ca/news/7350359/canada-to-sign-onto-global-coronavirus-procurement-program/

Canada
Ontario hiring 98 more labour inspectors to speed up pandemic workplace response
Source: **National Post**
Unique ID: 1007897050

TORONTO — Ontario says it will hire 98 new labour inspectors this fall as part of efforts to prevent the spread of COVID-19 in workplaces.
Labour Minister Monte McNaughton says the government will begin to recruit the workers in October.
The hiring blitz will increase the number of government inspectors from 409 to 507 and will cost $11.6 million.
McNaughton says the inspectors will allow the government to respond faster to situations that may arise during the pandemic.
Labour inspectors investigate workplace hazards, injuries, fatalities and work refusals.
They also have the power to stop unsafe work, order employers to comply with the law, and initiate prosecutions.
This report by The Canadian Press was first published Sept. 23, 2020.
https://nationalpost.com/pmn/news-pmn/canada-news-pmn/ontario-hiring-98-more-labour-inspectors-to-speed-up-pandemic-workplace-response

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

United States
Guidance for Reopening Buildings after Prolonged Shutdown or Reduced Operation
Source: CDC

Ensure the safety of your occupants and building water system and devices

- Mold
- *Legionella* and Legionnaires' disease
- Lead and Copper
- Additional Resources

Summary of Changes

- Added guidance for lead and copper in building water systems with low or no use
- Added guidance for mold awareness, monitoring, and remediation during and after prolonged building shutdowns
- Updated *Legionella* guidance for people with weakened immune systems and the use of respiratory protection when flushing water systems
- Updated title to reflect content

The temporary shutdown or reduced operation of a building and reductions in normal water use can create hazards for returning occupants. Check for hazards before reopening after a prolonged period of building inactivity. Hazards include **mold**, ***Legionella*** (the cause of Legionnaires' disease), and lead and

copper contaminationpdf iconexternal icon from corroded plumbing. For mold, a “prolonged period” may be **days**, **weeks**, or **months** depending upon building-specific factors, season, and weather variables.[1] For *Legionella*, a “prolonged period” may be **weeks** or **months** depending on plumbing-specific factors, disinfectant residuals, water heater temperature set points, water usage patterns, and pre-existing *Legionella* colonization.[2] For lead and copper, a “prolonged period” may be **hours**, **days**, **weeks**, or **months** depending on plumbing and water-specific factors, the amount of time the water remains stagnant inside the pipes, whether there are protective scales or coatings present inside pipes that prevent metals from leaching into water, and the materials used to build the plumbing system.[3] Note that additional hazards not discussed on this page may exist for returning occupants. These can include other hazards, such as non-tuberculous mycobacteria, disinfection by-products, and sewer gases that enter buildings through dry sanitary sewer drain traps.

Mold

Mold will grow on building materials where there is moisture, produced from leaks or condensation from roofs, windows, or pipes, or from a flood. Mold can grow on a variety of surfaces, such as ceiling tiles, wallpaper, insulation, drywall, carpet, and fabric. People with asthma and other respiratory conditions and those with mold allergy or weakened immune systems should avoid buildings suspected or confirmed to have mold contamination. Ensure that your building does not have mold after a prolonged shutdown to maintain a safe working environment for returning occupants.

5 steps to minimize mold risk during and after a prolonged shutdown

1. Maintain indoor humidity as low as possible, not exceeding 50%, as measured with a humidity meter. Building managers may consider continuous monitoring of indoor humidity using a digital hygrometer, ideally more than once daily, to minimize the need to access the building.
2. After a prolonged shutdown and before occupants return, buildings should be assessed for mold and excess moisture.

a. Building inspections by trained industrial hygienists can recognize dampness or mold by sight or odor, without the need for sampling and laboratory analysis. NIOSH offers tools and instructions to assess dampness and mold in schools and general buildings. These tools can be used by building maintenance staff as well as industrial hygienists.
b. If dampness or mold is detected, address the source of water entry first. Clean-up and remediation should then be conducted before the building is reoccupied. Plan the remediation before beginning work. Resources for remediation of buildings and homes with mold are provided by NIOSH, the New York City Department of Health and Mental Hygienepdf iconexternal icon, the Environmental Protection Agencyexternal icon (EPA), and CDC.

3. After an assessment has confirmed that mold and moisture are not detected (Step 2a), OR after remediation has been completed (Step 2b), a building HVAC system that has not been active during a prolonged shutdown should be operated for at least 48 to 72 hours (known as a “flush out” period) before occupants return.

a. During this period, open outdoor air dampers to the maximum setting that still allows desired indoor air temperatures.
b. If an odor is detected that suggests mold growth (such as a musty smell) after the “flush out” period, look for mold that may not have been identified earlier. If mold is found, conduct remediation as described in Step 2b.
c. Continue the “flush out” process until no odors are apparent.
d. The condition of HVAC filters used during the “flush out” period should be carefully assessed prior to building occupancy and replaced with new or clean filters as necessary.

4. After a building is reopened and occupied, routine (e.g., weekly) checks of the HVAC system are recommended to ensure operating efficiency.

a. During HVAC checks, inspect and replace filters as indicated or needed.
b. The frequency of HVAC system checks can be gradually reduced (e.g., monthly, quarterly), depending on the operational and maintenance specifications for the HVAC system.
c. Maintain indoor temperature and relative humidity within ranges recommended in ASHRAE Standard 55-2017, Thermal Environmental Conditions for Human Occupancyexternal icon.

5. If no routine HVAC operation and maintenance program is in place for the building, one should be developed and implemented. At a minimum, consider including the following:

a. Inspection and maintenance of HVAC components
b. Calibration of HVAC system controls

c. HVAC testing and balancing
Content adapted from the National Institute for Occupational Safety and Health [NIOSH] Heating, Ventilation, and Air Conditioning [HVAC] Cleaning and Remediation guidance.
Additional information and CDC guidance on controlling dampness issues that result in indoor mold growth, as well as on renovation and remediation if indoor mold has become an issue is available from NIOSH.
Legionella and Legionnaires' disease
Stagnant or standing water in a plumbing system can increase the risk for growth and spread of *Legionella* and other biofilm-associated bacteria. When water is stagnant, hot water temperatures can decrease to the *Legionella* growth range (77–108°F, 25–42°C). Stagnant water can also lead to low or undetectable levels of disinfectant, such as chlorine. Ensure that your water system is safe to use after a prolonged shutdown to minimize the risk of Legionnaires' disease and other diseases associated with water.
People at increased risk of developing Legionnaires' disease, such as those with weakened immune systems, should consult with a medical provider regarding participation in flushing, cooling tower cleaning, or other activities that may generate aerosols. Wearing a half-face air-purifying respirator equipped with an N95 filter, or an N95 filtering facepiece, may be appropriate in enclosed spaces where aerosol generation is likely. Respirators must be used in accordance with a comprehensive respiratory protection program, which includes fit testing, training, and medical clearance ahead of their use (see OSHA standard 29 CFR 1910.134external icon and OSHA Legionellosis websiteexternal icon). For more information about N95 respirators, visit the NIOSH National Personal Protective Technology Laboratory (NPPTL) website.

8 steps to minimize *Legionella* risk before your business or building reopens

1. Develop a comprehensive water management program (WMP) for your water system and all devices that use water. Guidance to help with these processes are the following:

a. Water Management Program Toolkit:
This toolkit is designed to help people understand which buildings and devices need a *Legionella* water management program to reduce the risk of Legionnaires' disease, what makes a good program, and how to develop it.
https://www.cdc.gov/legionella/wmp/toolkit/index.html

b. Preventing Legionnaires' Disease: A Training on *Legionella* Water Management Programs (PreventLD Training):
Take this training from CDC and partners on creating a water management program to reduce risk of Legionnaires' disease. PreventLD Training aligns with industry standards on managing risk of *Legionella* bacteria.
https://www.cdc.gov/nceh/ehs/elearn/prevent-LD-training.html

c. Hotel Guidance:
Considerations for Hotel Owners and Managers: How to Prevent Legionnaires' Disease
https://www.cdc.gov/legionella/wmp/hotel-owners-managers.html

d. Operating Public Hot Tubs/Spas:
https://www.cdc.gov/healthywater/swimming/aquatics-professionals/operating-public-hot-tubs.html

e. Reduce Risk from Water: Plumbing to Patients:
Water management programs in healthcare facilities are an important way to help protect vulnerable patient populations as well as staff and visitors.
https://www.cdc.gov/hai/prevent/environment/water.html

f. Preventing Occupational Exposure to *Legionella:*
https://www.cdc.gov/niosh/docs/wp-solutions/2019-131/default.html

2. Ensure your water heater is properly maintained and the temperature is correctly set.

a. Determine if your manufacturer recommends draining the water heater after a prolonged period of disuse. Ensure that all maintenance activities are carried out according to the manufacturer's instructions or by professionals.

b. Make sure that your water heater is set to at least 140°F.

c. Higher temperatures can further reduce the risk of *Legionella* growth, but ensure that you take measures to prevent scalding.

3. Flush your water system

a. Flush hot and cold water through all points of use (e.g., showers, sink faucets)

i. Flushing may need to occur in segments (e.g., floors, individual rooms) due to facility size and water pressure. The purpose of building flushing is to replace all water inside building piping with fresh water.
b. Flush until the hot water reaches its maximum temperature. Where possible, hot water at the tap should reach at or above 120°F. Anti-scalding controls and devices may limit the maximum temperature at the point of use.
c. Care should be taken to minimize splashing and aerosol generation during flushing.
d. Other water-using devices, such as ice machines, may require additional cleaning steps in addition to flushing, such as discarding old ice. Follow water-using device manufacturers' instructions.
4. Clean all decorative water features, such as fountains
a. Be sure to follow any recommended manufacturer guidelines for cleaning.
b. Ensure that decorative water features are free of visible slime or biofilm.
c. After the water feature has been re-filled, measure disinfectant levels to ensure that the water is safe for use.
5. Ensure hot tubs/spas are safe for use
1. Check for existing guidelines from your local or state regulatory agency before use
2. Ensure that hot tubs/spas are free of visible slime or biofilm before filling with water
3. Perform a hot tub/spa disinfection procedure before use
i. CDC Hot Tub Disinfection Guidance (follow Steps 4–9 and 12–13). https://www.cdc.gov/legionella/downloads/hot-tub-disinfection.pdfpdf icon
ii. Facilities may decide to test the hot tub/spa for *Legionella* before returning to service if previous device maintenance logs, bacterial testing results, or associated cases of Legionnaires' disease indicate an elevated level of risk to occupants. All *Legionella* testing decisions should be made in consultation with facility water management program staff along with relevant public health authorities.
6. Ensure cooling towers are clean and well-maintained
a. Ensure that cooling towers are maintained (including start-up and shut-down procedures) per manufacturer's guidelines and industry best practices.
i. Guidance on start-up and shut-down procedures from the Cooling Technology Institute (CT 159): https://cti.org/pub/cticode.phpexternal icon
b. Ensure that the tower and basin are free of visible slime, debris, and biofilm before use.
i. If the tower appears well-maintained, perform an online disinfection procedure.
- Guidance on disinfection procedures from the Cooling Technology Institute: http://www.cti.org/downloads/WTP-148.pdfpdf iconexternal icon
7. Ensure safety equipment including fire sprinkler systems, eye wash stations, and safety showers are clean and well-maintained
a. Regularly flush, clean, and disinfect these systems according to manufacturers' specifications.
8. Maintain your water system
a. Consider contacting your local water utility to learn about any recent disruptions in the water supply. This could include working with the local water utility to ensure that standard checkpoints near the building or at the meter to the building have recently been checked or request that disinfectant residual entering the building meets expected standards.
b. After your water system has returned to normal, ensure that the risk of *Legionella* growth is minimized by regularly checking water quality parameters such as temperature, pH, and disinfectant levels.
c. Follow your water management program, document activities, and promptly intervene when unplanned program deviations arise.

Lead and Copper in Building Water Systems with Low or No Use

Metals, such as lead and copper, can enter drinking water in a building from corrosion of a building's plumbing (pipes, fixtures). Corrosion is a chemical reaction that dissolves or wears away metal from pipes and fixtures. Corrosion may occur during long periods of low or no water use, leading to potentially high levels of lead or other metals in the building's drinking water. Lead is harmful to health, especially for children, as there is no known safe level in children's blood. For more information on corrosion and how lead gets into water, visit CDC's Lead in Drinking Water webpage or EPA's Basic Information About Lead in Drinking Water websiteexternal icon.

Additionally, water sitting stagnant (not flowing) in the pipes can make the water chemistry more corrosive over time and use up any corrosion control chemicals added by water utilities to limit the release of lead and copper. This may further disturb protective pipe scales or coatings inside plumbing materials. If pipe

scales are disrupted, lead and copper could continue to be released at higher levels until the scales are restored after the building returns to normal operations.
To prevent high levels of lead and copper in the drinking water while there is low or no use of the building, follow **EPA's Maintaining or Restoring Water Quality in Buildings with Low or No Use**external icon guidance. This guidance has strategies to maintain the water quality in the building and prevent water stagnation. Maintaining water quality will flush potentially corrosive water and disrupted pipe scale containing lead out of the pipes. It will ensure fresh water containing proper levels of corrosion control chemicals is brought into the building and help restore any disrupted pipe scales prior to building opening.
Take additional steps to reduce lead and copper in drinking water. Preventing stagnation does not completely prevent the release of lead into drinking water and may require additional steps, including:

1. **Learn about the water coming into your building.**
   Contact your water utility if you'd like to receive a copy of their latest annual drinking water quality consumer confidence report. More information and ways to locate these reports is available from EPAexternal icon. If your water comes from a private well or water supply, check with your health department for information on water quality in your area.
2. **Test your water for lead.**
   If you are served by a water utility, they may test your water upon request. You may also contact laboratories certified to test for lead in water. For information on locating these laboratories, see EPA's List of laboratories included in the National Lead Laboratory Accreditation Programexternal icon.
3. **Sample from faucets used for drinking water or cooking**, including drinking fountains, breakroom and/or kitchen sinks, and any kitchen kettle (large containers used for cooking) filler outlets. Do not sample from faucets not used for drinking water or cooking, such as sinks in janitor closets or outdoor hoses.
4. **Use cold water.**
   Use only cold water for drinking and cooking. Water that comes out of the tap warm or hot can have higher levels of lead. Remember, boiling water does not remove lead from water.
5. **Clean your aerators.**
   Regularly clean faucet screens (also known as aerators). Sediment, debris, and lead particles can collect in your aerator. If lead particles are caught in the aerator, lead can get into your water.
6. **Use filters properly.**
   If you use filters, make sure they are certified to remove lead. Follow manufacturer instructions for installation and maintenance. Replace filter cartridges before they expire to maintain their effectiveness. Do not run hot water through filters. Find more information about choosing a filter certified to reduce lead on EPA's websiteexternal icon.

[1] For example, a building that is damp and has poor ventilation in a humid region might develop mold growth in a few days that will proliferate unless these conditions change. In contrast, a building that is dry and well-ventilated in a arid climate might not develop significant mold growth for weeks, months, or at all.
[2] For example, a building potable water system with extensive dead-legs, low disinfectant residuals, tepid hot water temperatures, minimal water flow, and an established *Legionella* biofilm might promote substantial *Legionella* growth and dissemination in weeks or months. In contrast, a building with an efficiently designed potable water system that maintains high disinfectant residuals, elevated hot water temperatures, regular water flow, and has no preexisting *Legionella* population may not support *Legionella* colonization at all.
[3] For example, a building potable water system with a lead service line, lead-soldered plumbing fittings, elevated water temperature, and low mineral content would create conditions conducive for lead to leach into the water in a few hours. In contrast, a building water system constructed with lead-free plumbing materials and supplied with water that contains corrosion control chemicals would prevent metals from leaching into the water system and reduce or eliminate exposure.
https://www.cdc.gov/coronavirus/2019-ncov/php/building-water-system.html

United States
FAQs for Wildland Firefighters
Source: CDC

Updated Sept. 21, 2020

What steps can be taken by wildland fire personnel to prevent infection and spread of COVID-19? How can a crew, module, or resource “isolate as a unit” to better protect themselves?
The best way to prevent COVID-19 is to avoid being exposed to SARS-CoV-2, the virus that causes COVID-19. All firefighters and support personnel should have a basic understanding of COVID-19, how the disease is thought to spread, what the symptoms of the disease are, and what measures can be taken to prevent or minimize the transmission of the virus that causes COVID-19.

During the fire season, it will be important that members of each fire crew or module make an effort to operate and isolate as a unit. Management will need to develop and implement procedures and protocols to prevent possible exposures to the virus. When possible, crews should not interchange personnel or equipment between units and should limit the number of personnel who must interact with people in the community (e.g. fueling vehicles, picking up supplies, etc.). This will require planning and using technology to safely accomplish tasks while maintaining social distancing, keeping a safe space between others outside of their unit, as much as possible. This may include implementing procedures that allow fire crews or incident management personnel to stay remote, isolate from other units, or complete tasks or missions virtually. If close contact with others in the community is necessary, it is advised that all personnel wear cloth masks for source control.
Wildfire management and personnel should prioritize reducing fatigue and remaining healthy throughout the fire season. Rest and proper hydration and nutrition should be prioritized and emphasized every workday.
In many situations, fire personnel travel from many different geographic locations and live and work closely in shared living spaces, such as bunkhouses, during the fire season. In these situations, how do you prevent infection and spread of COVID-19 for co-workers or crewmates?
When personnel arrive to their duty stations, it is recommended that management provide separate spaces for the personnel to socially distance themselves from others on their crew for 14 days, if possible. During this period, personnel should take special precautions to limit any close interactions with other people (maintaining at least 6-feet distance) and avoid sharing kitchens, living spaces (bedrooms), bathrooms, or household items.
If shared living spaces and common areas must be utilized during the initial 14 day period after reporting, all personnel should still practice social distancing (maintaining at least 6 feet distance from one another), wear cloth masks, and frequently clean and disinfect shared and high touch surfaces. Personnel should also consider sleeping in opposite directions (head to toe) and avoid using bunk beds in shared sleeping quarters. Management should also consider increasing ventilation rates and/or the percentage of outdoor air that circulates within the shared living and working areas if outdoor air qualityexternal icon is considered to be in a healthy range.

When feasible, management should employ mechanisms to support their employees and limit employees’ interactions with others during this period. This may include online ordered and delivered groceries, delivered meals, and virtual and online training tasks.
After the initial 14-day period is over, fire crews and modules who work together and do not have regular interactions with other people can isolate as a unit. During this time, personnel should continue to cover their mouth and nose with tissue or elbow when they cough or sneeze, perform proper hand hygiene and frequently clean and disinfect shared spaces, vehicles, and equipment with EPA-registered disinfectantsexternal icon that are appropriate for the surface and effective against SARS-CoV-2, following label instructions. If a crew operates as a unit, it is not necessary for crew members to wear cloth masks unless they are not feeling well or interacting with the public (consistent with CDC guidelines for households living in close quarters). If interactions with the general public must occur, all personnel should practice social distancing, wear cloth masks, perform hand hygiene, and disinfect surfaces, objects, or items that are shared with the general public.
For more information, see CDC’s COVID-19 Guidance for Shared or Congregate Housing.
https://www.cdc.gov/coronavirus/2019-ncov/community/wildland-firefighters-faq.html

United States
Holiday Celebrations
Source: CDC

Updated Sept. 21, 2020

As many people in the United States begin to plan for fall and winter holiday celebrations, CDC offers the following considerations to help protect individuals, their families, friends, and communities from COVID-19. These considerations are meant to supplement—**not replace**—any state, local, territorial, or tribal health and safety laws, rules, and regulations with which holiday gatherings must comply. When planning to host a holiday celebration, you should assess current COVID-19 levels in your community to determine whether to postpone, cancel, or limit the number of attendees.

Virus spread risk at holiday celebrations

Celebrating virtually or with members of your own household pose low risk for spread. In-person gatherings pose varying levels of risk. Event organizers and attendees should consider the risk of virus spread based on event size and use of mitigation strategies, as outlined in the Considerations for Events and Gatherings. There are several factors that contribute to the risk of getting infected or infecting others with the virus that causes COVID-19 at a holiday celebration. In combination, these factors will create various amounts of risk, so it is important to consider them individually and together:

Community levels of COVID-19 – Higher levels of COVID-19 cases and community spread in the gathering location, as well as where attendees are coming from, increase the risk of infection and spread among attendees. Family and friends should consider the number and rate of COVID-19 cases in their community and in the community where they plan to celebrate when considering whether to host or attend a holiday celebration. Information on the number of cases in an area can be found on the area's health department website.

The location of the gathering – Indoor gatherings generally pose more risk than outdoor gatherings. Indoor gatherings with poor ventilation pose more risk than those with good ventilation, such as those with open windows or doors.

The duration of the gathering – Gatherings that last longer pose more risk than shorter gatherings.

The number of people at the gathering – Gatherings with more people pose more risk than gatherings with fewer people. CDC does not have a limit or recommend a specific number of attendees for gatherings. The size of a holiday gathering should be determined based on the ability to reduce or limit contact between attendees, the risk of spread between attendees, and state, local, territorial, or tribal health and safety laws, rules, and regulations.

The locations attendees are traveling from – Gatherings with attendees who are traveling from different places pose a higher risk than gatherings with attendees who live in the same area. Higher levels of COVID-19 cases and community spread in the gathering location, or where attendees are coming from, increase the risk of infection and spread among attendees.

The behaviors of attendees prior to the gathering – Gatherings with attendees who are not adhering to social distancing (staying at least 6 feet apart), mask wearing, hand washing, and other prevention behaviors pose more risk than gatherings with attendees who are engaging in these preventative behaviors.

The behaviors of attendees during the gathering – Gatherings with more preventive measures, such as mask wearing, social distancing, and hand washing, in place pose less risk than gatherings where fewer or no preventive measures are being implemented.

People who should not attend in-person holiday celebrations

People with or exposed to COVID-19

Do not host or participate in any in-person festivities, if you or anyone in your household

Has been diagnosed with COVID-19 and has not met the criteria for when it is safe to be around others

Has symptoms of COVID-19

Is waiting for COVID-19 viral test results

May have been exposed to someone with COVID-19 in the last 14 days

Is at increased risk of severe illness from COVID-19

People at increased risk for severe illness

If you are at increased risk of severe illness from COVID-19, or live or work with someone at increased risk of severe illness, you should

Avoid in-person gatherings with people who do not live in your household.

Avoid larger gatherings and consider attending activities that pose lower risk (as described throughout this page) if you decide to attend an in-person gathering with people who do not live in your household.

https://www.cdc.gov/coronavirus/2019-ncov/daily-life-coping/holidays.html

United States

The Number of Americans Planning to Take a COVID Vaccine Right Away Has Plummeted
Source: Vice
Unique ID: 1007890716

President Donald Trump is insisting that a vaccine for COVID-19 will be conveniently available right around the time of the election. The problem is that it seems no one wants to take it.
The number of Americans who say they'll get the coronavirus vaccine as soon as it's available has plummeted in the last month, a new Axios-Ipsos poll showed. While 39% of respondents said they would take the first generation vaccine, 60% say they won't take the vaccine as soon as it becomes available. Last month, the same pollster showed that the numbers were roughly split. The numbers have tanked for members of both parties; whereas last month 56% of Democrats said they plan to take the first-generation vaccine, now just 43% say they do. And among Republicans, just a third of those polled say they plan to take the vaccine when it's available, as opposed to more than 40% last month. Independents notably remained largely unmoved.
Asked when they would be comfortable taking a vaccine, the largest share of people surveyed—30%—said they would wait a few months. The next-largest share, 23%, said they wouldn't get it at all, and just 13% said they would try to get the vaccine immediately.
Trump said last week that the U.S. could begin distributing a coronavirus vaccine as early as October, directly contradicting CDC Director Dr. Robert Redfield's statement in a Senate hearing last week where he set a timeline of next summer or early fall with limited vaccinations beginning in November and December. The CDC has also issued guidance to public health officials in all 50 states outlining a process to distribute vaccines to healthcare workers and high-risk groups in late October or early November—right around the time of the election.
"I think he made a mistake when he said that," Trump said of Redfield's testimony during a White House press briefing last Wednesday. "It's just incorrect information, and I called him and he didn't tell me that and I think he got the message maybe confused, maybe it was stated incorrectly."
Trump also said last week that all Americans would have doses of the vaccine by March, but then he changed it to April. "Hundreds of millions of doses will be available every month, and we expect to have enough vaccines for every American by April," the president said Friday.
Nine potential vaccines are currently in large-scale Phase III trials, according to the New York Times. Vaccines normally take years to develop, and the risks associated with rushing a vaccine to market are clear; earlier this month, global pharmaceutical company AstraZeneca paused its Phase III trial in the U.S. after a volunteer participant developed a rare spinal inflammatory disorder.
AstraZeneca and eight other companies, including Pfizer and Moderna, signed a pledge earlier this month promising to develop their vaccines with "high ethical standards and sound scientific principles," in order to "ensure public confidence in the rigorous scientific and regulatory process."
Cover: A "promotora" (health promoter) from CASA, a Hispanic advocacy group, tries to enroll Latinos as volunteers to test a potential COVID-19 vaccine, at a farmers market in Takoma Park, Maryland, on Sept. 9, 2020. (AP Photo/Federica Narancio)

https://www.vice.com/en_us/article/889ppx/the-number-of-americans-planning-to-take-a-covid-vaccine-right-away-has-plummeted

IHR Announcement

Invitation to Ministers to participate in the COVID-19 Information session on Thursday, 24 September 2020

Announcement Displayed From: Wednesday, September 23, 2020 - 11:25

Please find below connection details for the session on Thursday 24 September 2020, 12.30 CET

Dial by your location

+41 43 210 71 08 Switzerland

Meeting ID: 962 4146 3521

Passcode: 040820798

Find your local number: https://who.zoom.us/u/abkekCUGwJ

WHO

WHO - Weekly Epidemiological Update Coronavirus disease 2019 (COVID-19) - 21 September 2020 (Official)
Source: WHO

The global epidemiological situation is presented. Besides, the report's key weekly updates are:

- WHO shared three messages during the virtual 75th UN General Assembly from 15- 31 September:
    1. Equitable access to COVID-19 tools. WHO calls on world leaders to support the Access to COVID-19 Tools (ACT)-Accelerator, while strengthening health systems.
    2. Maintain the momentum towards achieving the Sustainable Development Goals. According to a recent WHO survey, 90% of countries are experiencing disruptions to essential health services.
    3. Countries must prepare for the next pandemic together, now. A year ago the independent Global Preparedness Monitoring Board warned of the threat of a pandemic, calling for global leaders to take urgent, united action to prepare. The Board has issued its 2020 report, 'A World in Disorder', which outlined five urgent actions to be taken: responsible leadership; engaged citizenship; strong and agile systems for health security; sustained investment; and robust global governance of preparedness.
- WHO Director-General in his regular media briefing on 18 September highlighted that this is a critical moment for countries. As cases and deaths have started to spike again, the official called upon leaders to put targeted measures in place, which can help suppress the spread of the virus and ensure that health systems and workers are protected.
- WHO has published new guidance on school-related public health measures that examines considerations for school operations, and the measures needed to minimize the risk to students and staff of COVID-19.
- On 17 September, countries celebrated World Patient Safety Day to raise global awareness of the importance of health worker safety and its interlinkages with patient safety. The COVID-19 pandemic has exerted unprecedented pressure on health systems worldwide.
- WHO has released a slide set on 'What we know about the long-term effects of COVID-19'. Typically people recover from COVID-19 after two to six weeks; however, for some people, including young adults and persons with no underlying medical conditions who were not hospitalized, symptoms may linger or recur for weeks or months following initial recovery. Much is still unknown, and more time and research are needed to understand the long-term effects of COVID-19.

https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200921-weekly-epi-update-6.pdf?sfvrsn=d9cf9496_6

PAHO

PAHO reports more than 60,000 confirmed cases of COVID-19 in pregnant women, with 458 deaths
22 Sep 2020

Pregnant women are at increased risk of presenting with severe forms of COVID-19, according to recently published results and studies. PAHO asks countries to ensure prenatal care services

Washington, September 22, 2020 (PAHO) -- Since the first cases of COVID-19 in the Americas, 60,458 confirmed cases of COVID-19 were reported among pregnant women, including 458 deaths, or 1%, in 14 countries, according to a new Epidemiological Update from the Pan American Health Organization (PAHO).
Until September 14, the highest number of deaths were reported by Mexico, with 140 deaths among 5,574 cases in pregnant and postpartum women, followed by Brazil, with 135 deaths in 2,256 women who had COVID-19. The United States had 44 deaths among 20.798 women, Colombia reported 40 deaths in 2,726 pregnant women, and Peru had 35 deaths among 19,909 pregnant and postpartum women. Panama had 8 deaths in 525 pregnant women, showing the highest maternal mortality ration of 10.1 of the countries reporting.
PAHO has asked countries in the Americas to step up efforts to ensure access to prenatal care services for pregnant women, noting that "Recently published results and studies based on COVID-19 surveillance data have indicated an increased risk among pregnant women of presenting with severe forms of COVID-19 and, therefore, of being hospitalized and admitted to intensive care units."

PAHO's recent epidemiological update notes that 2,619,938 additional confirmed cases of COVID-19, including 74,670 deaths, have been reported in the Region of the Americas, representing a 21% increase in cases and a 17% increase in deaths since August 26.
The highest increase in cases was observed in Central America, with a 28% increase in cases and a 22% increase in deaths, followed by South America, with a 26% increase in cases and a 23% increase in deaths. The Caribbean and the Atlantic Ocean Islands reported a 24% increase in cases and a 34% increase in deaths, while North America, which includes the U.S., Canada and Mexico, showed a 16% increase in cases and a 12% increase in deaths, the report said.

Increased cases in indigenous populations
Among indigenous populations, 11 countries reported 120,593 confirmed cases of COVID-19, including 2,639 deaths since the previous epidemiological update of August 26. A relative increase in cases and deaths was observed in all the countries with available data, with Colombia representing the largest relative increase in cases and Ecuador representing the largest relative increase in deaths in indigenous populations, the report said.
The report also noted that 16 countries have reported multisystem inflammatory syndrome (MIS) in children and adolescents, with 1,503 cases of MIS temporally related to COVID-19, including 43 deaths.
https://www.paho.org/en/news/22-9-2020-paho-reports-more-60000-confirmed-cases-covid-19-pregnant-women-458-deaths

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

United States
U.S. FDA to tighten coronavirus vaccine trial standards -paper
Source: National Post
ID: 1007892779

The U.S. Food and Drug Administration is expected to soon announce new, higher standards for an emergency authorization of a coronavirus vaccine, lowering the chances that a vaccine might be cleared before the Nov. 3 election, the Washington Post reported on Tuesday.
The agency is issuing the guidance to boost transparency and public trust as health experts have become increasingly concerned that the Trump administration might be interfering in the approval process, the paper said.
According to the report, the FDA is expected to ask vaccine manufacturers seeking an emergency authorization to follow trial participants for a median of at least two months after they receive a second

vaccine shot. It also said the agency is asking that trials identify a specific number of cases of severe COVID-19, the disease caused by the coronavirus, in patients treated with a placebo.
(Reporting By Deena Beasley Editing by Marguerita Choy)
https://nationalpost.com/pmn/health-pmn/u-s-fda-to-tighten-coronavirus-vaccine-trial-standards-paper

Russia

Russia to register second COVID-19 vaccine by October 15 - TASS
Source: Cape Breton Post
Unique ID: 1007889536

MOSCOW (Reuters) - Russia expects to register a second potential vaccine against COVID-19 by Oct. 15, the TASS news agency cited Russian consumer safety watchdog Rospotrebnadzor as saying on Tuesday.
The vaccine has been developed by Siberia's Vector Institute, which completed early-stage human trials of the vaccine last week.
Russia registered its first vaccine candidate, developed by Moscow's Gamaleya Institute, in August. Late-stage trials, involving at least 40,000 people, are ongoing.
(Reporting by Maria Kiselyova; writing by Polina Ivanova; editing by Jason Neely)
https://www.capebretonpost.com/news/world/russia-to-register-second-covid-19-vaccine-by-october-15-tass-500150/

International

International update: Global Covid cases pass 31.3 million – US deaths near 200,000
Source: Pharmaceutical technology
Unique ID: 1007890199

22 September
Global: Worldwide Covid-19 cases have now passed 31.3 million, with deaths nearing 965,000 according to Johns Hopkins University tracker.
US: At least 199,884 Americans are known to have died since the start of the pandemic, according to Johns Hopkins, which relies on official government data. With the worst death toll in the world, the US accounts for one in five coronavirus-related fatalities worldwide.
India: India, with more than 5.5 million cases the second-worst affected country, reported 75,083 new coronavirus infections in the lowest daily increase since 7 September.
Mexico: Mexico surpassed 700,000 confirmed cases on Monday after the health ministry reported 2,917 new confirmed cases in the Latin American country, bringing the total to 700,580 as well as a cumulative death toll of 73,697.
China: China reported six new Covid-19 cases on 21 September, down from 12 a day earlier, the national health authority said on Tuesday, Reuter's reports.
Thailand: Thailand found five new imported coronavirus cases, all detected in state quarantine, after people travelled from India and Switzerland.
South Korea: South Korea reported 61 new coronavirus cases on Tuesday, the third straight day that the increase has been below 100.
Australia: Victoria, Australia's worst-hit state, reported a jump in new infections on Tuesday with 28 new cases and three more deaths.
Greece: Greece reported 453 cases, a new daily high since the beginning of the pandemic in March.
Vaccine news
Global: An $18 billion initiative to deploy a Covid-19 vaccine around the world is moving into the next phase, with 156 countries and regions joining the program.
Lockdown updates
UK: Pubs, bars and restaurants in England will have to shut by 10pm from Thursday under new nationwide restrictions to halt an "exponential" rise in coronavirus cases. Boris Johnson is expected to make an address to the nation on Tuesday setting out the new measures. Scotland is also expected to announce new restrictions on Tuesday.
Hong Kong: Hong Kong's four-person limit on public gatherings and other social distancing measures will be extended by a week to 1 October, Chief Executive Carrie Lam told a briefing.

Czech Republic: Prime Minister Andrej Babis admitted on Monday that his government had made a mistake when it eased restrictions over the summer.
New Zealand: New Zealand recorded no new cases of Covid-19 on Tuesday, as restrictions on much of the country were entirely removed, and measures imposed on Auckland, the largest city, were due to ease further.
https://www.pharmaceutical-technology.com/special-focus/covid-19/international-update-global-covid-cases-pass-31-3-million-us-deaths-near-200000/

Japan

Ushio launches world's 1st UV lamp safely killing coronavirus
Source: **Kyodo News**
Unique ID: 1007889991

The "Care 222" UV lamp, which Ushio developed together with Columbia University, is expected to be used for disinfection at occupied spaces where people keep coming in and out and the risk of contracting the deadly virus runs high, such as buses, trains, elevators and offices, the company said. The Care 222, when emitted from a ceiling, inactivates 99 percent of viruses and bacteria in the air and up to a 3-square-meter surface of objects some 2.5 meters away from the lamp, in six to seven minutes. Ushio's new lamp, however, emits the UV rays with a wavelength of 222 nanometers, as opposed to the conventional 254-nanometer wavelength, making them lethal to germs but benign to humans.
Major Japanese light equipment maker Ushio Inc. has recently launched an ultraviolet lamp that can kill the coronavirus without harming human health -- the first of its kind in the world.
The "Care 222" UV lamp, which Ushio developed together with Columbia University, is expected to be used for disinfection at occupied spaces where people keep coming in and out and the risk of contracting the deadly virus runs high, such as buses, trains, elevators and offices, the company said.
UV lamps have been widely used as an effective means of sterilization notably in the medical and food-processing industries. But conventional UV rays cannot be used in spaces where there are people as they cause skin cancer and eye problems.
Ushio's new lamp, however, emits the UV rays with a wavelength of 222 nanometers, as opposed to the conventional 254-nanometer wavelength, making them lethal to germs but benign to humans.
At this particular wavelength, the firm said, UV rays cannot infiltrate the surface of the skin nor the eyes to bring about cancer-causing genetic defects and other damage.
The Care 222, when emitted from a ceiling, inactivates 99 percent of viruses and bacteria in the air and up to a 3-square-meter surface of objects some 2.5 meters away from the lamp, in six to seven minutes.
A recent third-party study by Hiroshima University confirmed the 222-nanometer UV rays are effective in killing the new coronavirus, Ushio said.
The 1.2-kilogram Care 222 emitting device comes in about the size of a hardcover book and with a price tag of 300,000 yen ($2,860).
The company said it only accepts orders from medical institutions for the moment but will serve other customers once production catches up with demand.
Ushio has also teamed up with Toshiba Lighting and Technology Corp., a subsidiary of Toshiba Corp., to develop general-purpose lamps with Care 222 emitters installed to cater to a broad range of situations.
The companies aim to release such products next January.
U.N. calls for renewed multilateralism in fight against pandemic
Japan sees week-low 312 virus cases, tourist spots busy on holidays
Fujifilm ends delayed Avigan clinical test, looks to gov't application
https://english.kyodonews.net/news/2020/09/a897375a08d4-ushio-launches-worlds-1st-uv-lamp-safely-killing-coronavirus.html

Cuba

Cuba's Deputy PM monitors vaccine strategy against Covid-19
Source: Prensa Latina
Unique ID: 1007890515

According to two tweets issued on the official website of that institution (@FinlayInstituto), Morales Ojeda toured the facilities accompanied by the president of the BioCubaFarma Biotechnology and Pharmaceutical Industries Group, Eduardo Martinez.
Havana, Sep 21 (Prensa Latina) Cuba's Deputy Prime Minister Roberto Morales Ojeda visited on Monday the Finlay Vaccine Institute of Havana to monitor the progress of the ongoing projects in the center, especially the country's vaccine against Covid-19, Soberana 01.
According to two tweets issued on the official website of that institution (@FinlayInstituto), Morales Ojeda toured the facilities accompanied by the president of the BioCubaFarma Biotechnology and Pharmaceutical Industries Group, Eduardo Martinez.
Both leaders conducted an exchange of opinions with workers from the Finlay Institute and 'contributed important ideas that will help enrich the strategy of the Cuban vaccine against Covid-19,' the entity referred on Twitter.
BioCubaFarma is in charge, along with the Finlay Vaccine Institute, of the production of the Cuban vaccine candidate Soberana 01, currently in the clinical trials phase.
This drug started human trials on August 24, when experts injected 20 individuals aged 19 to 59 years with it. A week later, they administered the med to a second group comprised of the same number of volunteers from 60 to 80 years old.
So far, the only adverse effect is mild pain at the injection site, a common side effect for all vaccines, early reports indicated.
Soberana 01 is the first vaccine candidate in Latin America.
https://www.plenglish.com/index.php?o=rn&id=60002&SEO=cubas-deputy-pm-monitors-vaccine-strategy-against-covid-19

The United Arab Emirates

UAE grants urgent use of China-developed coronavirus vaccine
Source: ECNS
Unique ID: 1007890571

The move is aimed at helping to save millions of people's lives and offering health care to infected people as the country reported 777 new COVID-19 cases on Monday, bringing the total confirmed cases to 80,266. The United Arab Emirates (UAE) has approved a China-developed COVID-19 vaccine for emergency use, six weeks after human trials in the Gulf Arab state started, the Global Times reported.
According to the country's top crisis authority, the vaccine had been tested on 31,000 volunteers, including 1,000 suffering from chronic diseases, and no complications occurred after vaccination.
The United Arab Emirates (UAE) has approved a China-developed COVID-19 vaccine for emergency use, six weeks after human trials in the Gulf Arab state started, the Global Times reported.
"The vaccine will be available to our first line of defense heroes who are at the highest risk of contracting the virus," the UAE's National Emergency Crisis and Disaster Management Authority tweeted on Monday.
The move is aimed at helping to save millions of people's lives and offering health care to infected people as the country reported 777 new COVID-19 cases on Monday, bringing the total confirmed cases to 80,266.
According to the country's top crisis authority, the vaccine had been tested on 31,000 volunteers, including 1,000 suffering from chronic diseases, and no complications occurred after vaccination.
"The results of clinical trials in our country are moving on the right path, with all tests being successful so far," noted the authority.
The drug is an inactivated vaccine developed by the China National Pharmaceutical Group (Sinopharm).
A Phase III trial of the vaccine kicked off in the Gulf country on July 16.
http://www.ecns.cn/news/society/2020-09-22/detail-ihaaeqyp8472125.shtml

South Korea

30% of COVID-19 patients experienced mental illness - COVID-19 World News
Source: Korea Herald
Unique ID: 1007890786

Kang Gi-yun of the People Power Party, 24 out of 80 patients hospitalized at the institution as of the end of April were diagnosed with mental illnesses including panic disorder, depression and stress disorder.

Around 30 percent of hospitalized COVID-19 patients in a sample experienced mental illness, data showed Tuesday, raising concerns over the virus outbreak's impact on mental health. The data excludes confirmed patients who were already diagnosed with mental illness or dementia prior to being hospitalized for COVID-19.
Around 30 percent of hospitalized COVID-19 patients in a sample experienced mental illness, data showed Tuesday, raising concerns over the virus outbreak's impact on mental health.
According to National Medical Center data obtained by the office of Rep. Kang Gi-yun of the People Power Party, 24 out of 80 patients hospitalized at the institution as of the end of April were diagnosed with mental illnesses including panic disorder, depression and stress disorder.
Twenty percent, or 16 patients, were prescribed medicine for psychological disorders. The data excludes confirmed patients who were already diagnosed with mental illness or dementia prior to being hospitalized for COVID-19.
"There has been no disease other than COVID-19 that has caused nationwide concern with all information related to the disease shared in real time all over the world," Kang said in a statement.
"The disease control authority should recognize the importance of people's mental health and swiftly pursue ways to provide mental illness consultation, diagnosis and treatment options for high-risk groups while sharing accurate information on COVID-19 to lower the level of public concern."
Mental illness has become more common even among those not infected since the virus outbreak started, earlier data showed.
According to the Health Insurance Review & Assessment Service, 595,724 people were treated for depression in the six months that ended June 30, up 5.8 percent from a year earlier.
At the same time, the number of suicide reports received by the police increased by 1,170 to 42,291 from the same period a year earlier, according to the National Police Agency.
Source: KOREA HERALD
https://covid19data.com/2020/09/22/30-of-covid-19-patients-experienced-mental-illness/

China

China suspends imports from Norwegian aquatic producer over coronavirus
Source: ECNS
Unique ID: 1007897031

China's General Administration of Customs on Wednesday announced emergency precautionary measures against a Norwegian aquatic product maker after a sample of an imported frozen seafood package tested positive for the novel coronavirus.
Special: Battle Against Novel Coronavirus
China's General Administration of Customs on Wednesday announced emergency precautionary measures against a Norwegian aquatic product maker after a sample of an imported frozen seafood package tested positive for the novel coronavirus.
Starting from Wednesday, Chinese customs authorities will suspend accepting import applications related to the producer, identified as "GADUS NJORD," for a week.
The coronavirus-positive sample was from a batch of frozen fish, the administration said in a statement on its website.
http://www.ecns.cn/news/2020-09-23/detail-ihaaeqyp8472311.shtml

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

COVID-19: Babies born to mothers infected with the virus generally do well
Outbreak News Today
ID: 1007892983

Infants born to women with COVID-19 showed few adverse outcomes, according to the first report in the country of infant outcomes through eight weeks of age.
The study, led by researchers at UC San Francisco, suggests that babies born to mothers infected with the virus generally do well six to eight weeks after birth, however there was a higher rate of neonatal intensive care unit (NICU) admissions reported if the mothers had COVID-19 up to two weeks prior to

delivery.

Among 263 infants in the study, adverse outcomes — including preterm birth, NICU admission, and respiratory disease — did not differ between those born to mothers testing positive for SARS-CoV-2 and those born to mothers testing negative. No pneumonia or lower respiratory tract infection were reported through eight weeks of age.

The study is published as a prepublication accepted manuscript in Clinical Infectious Diseases.
“The babies are doing well, and that’s wonderful,” said lead author Valerie J. Flaherman, MD, MPH, associate professor of pediatrics and of epidemiology and biostatistics at UCSF. “When coronavirus first hit, there were so many strange and unfortunate issues tied to it, but there was almost no information on how COVID-19 impacts pregnant women and their newborns. We didn’t know what to expect for the babies, so this is good news.”
The prospective study is part of a national project led by UCSF called PRIORITY (Pregnancy Coronavirus Outcomes Registry), which began in March 2020, shortly after the pandemic erupted in the United States. The project is designed for pregnant women with suspected or confirmed COVID-19, with the goal of better understanding how pregnant and postpartum women and their infants are affected by the virus.
It’s known that pregnant women have alterations in their immune system that may increase the risk of severe illness from influenza viruses. In past outbreaks, women who contracted flu during pregnancy have been at higher risk for hospitalization, miscarriage or stillbirth, and their babies have had an increased likelihood of having birth defects.
While studies have reported that maternal SARS-CoV-2 infection increases the risk of preterm birth and can be transmitted from the mother to the infant, overall risks for the infants were not known and almost no information is available about how COVID-19 affects infants as they grow.
The new paper reports on live births among 179 mothers with a positive test for SARS-CoV-2 and 84 mothers who had a negative test. The births occurred at more than 100 U.S. hospitals. On average, the mothers were about 31 years old. Among women testing positive, 146 (81 percent) were symptomatic; among those testing negative, 53 (63 percent) were symptomatic.
Of the 263 infants in total, 44 were admitted to a NICU but no pneumonia or lower respiratory tract infections were reported during the study. Among the 56 infants assessed for upper respiratory infection, it was reported in two infants with COVID-positive mothers, and in one with a COVID-negative mother. Among infants born to mothers who tested positive, the estimated incidence of a positive infant SARS-CoV-2 test was low at 1.1 percent, and COVID did not appear to impact those infants, the authors said.
“Overall, the initial findings regarding infant health are reassuring, but it’s important to note that the majority of these births were from third trimester infections,” said senior author Stephanie L. Gaw, MD, PhD, assistant professor of obstetrics, gynecology and reproductive sciences at UCSF. “The outcomes from our complete cohort will give the full picture of risks throughout pregnancy.”

Two infants born to mothers who tested positive in the third trimester were reported to have birth defects, each with multiple congenital anomalies reported (one had cardiac, vertebral, renal and pulmonary anomalies, while the other had facial, genital, renal, brain and cardiac anomalies). One mother who tested negative reported an infant with gastrointestinal, renal and cardiac anomalies.

The researchers said the findings could help inform national and international guidelines and policies, but also noted some study limitations. Among those, tests for infection might be biased by false-positive or false-negative results. They also said that Latinas and Blacks were underrepresented in the study – in May, PRIORITY launched a new project to increase enrollment of underrepresented groups – and noted that further research is needed on infant incidence following maternal infection.

Long-term COVID-19 containment will be shaped by strength, duration of immunity
Living with COVID-19: Harnessing the potential of communities
Global polio: Four additional wild poliovirus cases, 28 cVDPV2 cases reported
Ontario: E. coli outbreak at Valens Lake Conservation Area
Hong Kong officials investigate two suspected ciguatoxin poisoning cases
Sweden: 97 percent of two-year-olds were fully vaccinated in 2019, HPV vaccination rates also high

A 90-minute COVID-19 test has been shown to have over 94 per cent sensitivity, and 100% specificity in a new study
http://outbreaknewstoday.com/covid-19-babies-born-to-mothers-infected-with-the-virus-generally-do-well-25599/

United Kingdom

Press release: Record numbers offered flu vaccine as those with flu and COVID-19 more likely to die
Source: Public Health England

New Public Health England research suggests that people infected with both viruses between January and April were more at risk of severe illness and death.
Published 22 September 2020
Last updated 22 September 2020 — see all updates
From: Public Health England

Three of the nation's senior medics – Dr Yvonne Doyle, Professor Jonathan Van-Tam and Dr Nikita Kanani – are calling on all eligible people to get vaccinated against flu, as new research from Public Health England (PHE) suggests the risk of death more than doubled for people who tested positive for both flu and COVID-19, compared to those with COVID-19 alone.

The research, looking at cases between January and April this year, also found that those with co-infection of the 2 viruses were more at risk of severe illness. Most cases of co-infection were in older people and more than half of them died.
Flu is a serious condition that kills, on average, 11,000 people in England each year and hospitalises many more. Adults at high risk from flu are also most at risk from COVID-19. The free vaccine is more important than ever to help protect the nation from a double threat this winter.

This year, the programme is being expanded to help protect people from flu and ease pressure on the NHS and urgent care services.

The health system is working to provide the free flu vaccine to 30 million people, the highest number on record.
All primary school children and, for the first time, Year 7 children will be offered the flu 'nasal spray' in schools to reduce community transmission. Two- and three-year-olds will be offered the vaccine through their GP.
The most vulnerable, including adults aged 65 and over, those with long-term health conditions and pregnant women, will be offered the flu vaccine first through their GP or pharmacy.

It will also be offered to household contacts of people on the NHS Shielded Patient List and all health and all social care workers who have direct contact with the people they care for.
Once uptake has been maximised in the most at-risk groups, the newly eligible 50- to 64-year-olds will be invited for vaccination later in the season. Anyone who is 50 to 64 years old with long-term health conditions should be vaccinated earlier in the season, in line with all others in risk groups.

As part of England's biggest ever flu campaign – alongside adverts across the media and posters in GP surgeries, pharmacies and hospitals – eligible people will receive additional direct reminders prompting them to book their appointment, supporting the hard work of local GP practices and pharmacies in driving uptake among their registered eligible patients.

To help increase uptake in the social care sector, for the first time, pharmacists will be able to vaccinate residents and care home staff at the same time.
Employers of frontline health and social care workers also have a responsibility to ensure their staff can get the free vaccine. A record number of NHS staff – three-quarters of a million (74.3%) of frontline healthcare workers – took up their workplace vaccination last year.

Overall, nearly two-thirds of eligible people received their free vaccine last year, making uptake rates in England among the highest in Europe.
Dr Yvonne Doyle, Medical Director at Public Health England, said:
“It is dangerous to dismiss influenza as ‘just’ the flu – it can be extremely serious and can lead to hospitalisation, permanent disability or even death.

“The flu vaccine is more important than ever, to help reduce transmission of flu and protect the nation from the double threat of flu and COVID-19. You may be offered it for the first time this year – it is important that you take up the offer to protect yourself and others.”
Deputy Chief Medical Officer Professor, Jonathan Van-Tam, said:
“Flu can be deadly and it is easily spread in children and adults. The vaccine is the best way to protect yourself from becoming ill with the flu, especially if you are in a vulnerable group.

“This winter with COVID still circulating, and the increased risk to life if you are ill with both viruses simultaneously, it is even more vital to get the free jab as soon as you can.”
Dr Nikita Kanani, London GP and NHS medical director for primary care, said:
“My frontline NHS colleagues across England are working harder than ever to prepare for winter, including expanding and adapting services to ensure people can get the care and vaccinations they need safely and conveniently.
“So if you are eligible, please help us help you and get your free flu vaccine as soon as possible. It could save your life, or someone you love.”

Secretary of State for Health and Social Care, Matt Hancock, said:
“This year more than ever, it’s vital that those eligible for the flu jab get it this winter, so you can protect yourself, your family and the NHS. We’re pulling out all the stops to prepare for this uniquely challenging winter and we have enough vaccines for 30 million people this year, more than we’ve ever done before.

“With the simultaneous risk of flu and COVID-19, make sure you get your flu jab if you’re eligible, don’t gather in groups larger than 6 and remember ‘Hands Face Space’, so we can look after each other.”
The unprecedented vaccine drive will be supported by a scaled-up marketing campaign across TV, radio and digital advertising. The ‘Just’ The Flu campaign, launching in early October, will reinforce the seriousness of flu, urge people to re-evaluate their own risk to the virus and remind people that vaccination is the best protection for themselves and those around them.
For further information please contact:
Public Health England press office
Wellington House
133-155 Waterloo Road
London SE1 8UG

United Kingdom

Evaluating detection of SARS-CoV-2: AntiBodies at Home study
Source: Public Health England

The EDSAB-HOME research study is evaluating the detection of SARS-CoV-2 antibodies using home testing kits.
Published 22 September 2020
From: Research and analysis
Public Health England
On 22 September 2020, Public Health England posted its Evaluating detection of SARS-CoV-2: AntiBodies at Home study. The EDSAB-HOME research study is evaluating the detection of SARS-CoV-2 antibodies using home testing kits. These kits called lateral flow immunoassays, appear similar to a pregnancy test kit and analyse a small amount of blood obtained from a finger prick. The study is being run by Public Health England at the request of the Department of Health and Social Care. Recruitment has now ceased, but the study is ongoing.
EDSAB-HOME study: details, research protocol and outputs
Ref: PHE publications gateway number: GW-1553 PDF, 45.7KB, 4 pages

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Details
The EDSAB-HOME study is evaluating the detection of SARS-CoV-2 antibodies using home testing kits. These kits are called lateral flow immunoassays. They appear similar to a pregnancy test kit and analyse a small amount of blood obtained from a finger prick.
The study is being run by Public Health England at the request of the Department of Health and Social Care.
Recruitment has now ceased, but the study is ongoing.
Published 22 September 2020
Explore the topic
Infectious diseases
Coronavirus (COVID-19)
https://www.gov.uk/government/publications/evaluating-detection-of-sars-cov-2-antibodies-at-home-study

Study

Investigational Cancer Therapy Kills SARS-CoV-2
Source: Contagion Live
Unique ID: 1007890027

The shape of the virus is critical to its ability to infect and replicate," Dent, professor in the VCU Department of Biochemistry and Molecular Biology and the Universal Corporation Chair in Cancer Cell Signaling and a member of the Cancer Cell Signaling research program at Massey, said. Dent and other investigators have published findings showing it to be effective against viruses including Zika, mumps, measles, rubella, chikungunya, RSV, CMV, drug resistant HIV and influenza. Unlike any other anti-viral drug, it inhibits cellular chaperones, which are proteins that are required to maintain the right 3D shape of viral proteins.
Investigators from the Virginia Commonwealth University (VCU) Massey Cancer Center are reporting an experimental cancer drug called AR-12 kills SARS-CoV-2.
The discovery was made by a team of scientists at Massey and led by Paul Dent, PhD. Their findings were published Biochemical Pharmacology.
“AR12 is a derivative of celecoxib which no-longer acts against COX2 but instead inhibits the ATPase activity of multiple chaperone proteins, in particular GRP78. GRP78 acts as a sensor of endoplasmic reticulum stress and is an essential chaperone required for the life cycle of all mammalian viruses,” wrote the investigators.
The experimental therapy has been studied as a cancer and antiviral drug. Dent and other investigators have published findings showing it to be effective against viruses including Zika, mumps, measles, rubella, chikungunya, RSV, CMV, drug resistant HIV and influenza.
"AR-12 works in a unique way. Unlike any other anti-viral drug, it inhibits cellular chaperones, which are proteins that are required to maintain the right 3D shape of viral proteins. The shape of the virus is critical to its ability to infect and replicate," Dent, professor in the VCU Department of Biochemistry and Molecular Biology and the Universal Corporation Chair in Cancer Cell Signaling and a member of the Cancer Cell Signaling research program at Massey, said.
For the SARS-CoV-2 research, Dent has worked with Jonathan Rayner, PhD, at the University of South Alabama and Laurence Booth, PhD, from Dent's lab.
Andrew Poklepovic, MD, member of the Developmental Therapeutics research program and medical director of the Clinical Trials Office at Massey is leading efforts to translate these findings into a clinical trial.
AR-12 has been shown to be safe and well-tolerated in a previous clinical trial, and is an oral therapy giving it a potential benefit.
"Most COVID-19 drugs are given intravenously, so this would be a unique therapeutic option and potentially suitable for outpatient therapy, similar to the way one would take an antibiotic," Poklepovic said.

To stay informed on the latest in infectious disease news and developments, please sign up for our weekly newsletter.
Study: https://www.sciencedirect.com/science/article/pii/S0006295220304639
https://www.contagionlive.com/news/investigational-cancer-therapy-kills-sarscov2

Sweden

Expert claims Sweden now has 'herd immunity' from coronavirus
Source: Daily Mail Online
Unique ID: 1007890747

He told Denmark's Politiken newspaper: 'There is some evidence that the Swedes have built up a degree of immunity to the virus which, along with what else they are doing to stop the spread, is enough to control the disease. Sweden was initially criticised at the start of the outbreak after recording a spike in its mortality rates which was five times that of Denmark and ten times that of Norway and Finland. But scientists believe that this may have helped it avoid a second wave of Covid-19 as it continues to record its lowest number of cases since March - with just 28 infections per 100,000 people.
Sweden has beaten coronavirus by refusing to shut the country down and achieving herd immunity, according to an expert.
The Scandinavian nation was the only country in Europe not to introduce strict lockdown measures at the start of the pandemic.
But scientists believe that this may have helped it avoid a second wave of Covid-19 as it continues to record its lowest number of cases since March - with just 28 infections per 100,000 people.
This figure is less than half of the UK's own infection rate of 69 per 100,000 people.
Professor Kim Sneppen, an expert in the spread of coronavirus at the Niels Bohr Institute in Copenhagen, said that Sweden might have beaten the pandemic.
He told Denmark's Politiken newspaper: 'There is some evidence that the Swedes have built up a degree of immunity to the virus which, along with what else they are doing to stop the spread, is enough to control the disease.
'Perhaps, the epidemic is over there.'
He said that the virus may now have run out of steam.
He added: 'That is what they have said.
'On the positive side, they may now be finished with the epidemic.'
Sweden was initially criticised at the start of the outbreak after recording a spike in its mortality rates which was five times that of Denmark and ten times that of Norway and Finland.
Number of deaths per 24 hours peaked in April at 115 with more than half in care homes.
But its seven-day average for coronavirus-related deaths is now zero.
Sweden's state epidemiologist Anders Tegnell, who has become the face of the no-lockdown strategy, said in a recent interview that voluntary hygiene measures had been 'just as effective' as complete shutdowns.
Sweden kept open schools for children under 16, banned gatherings of more than 50 people and told over-70s and vulnerable groups to self-isolate.
Shops, bars and restaurants stayed open throughout the pandemic and the wearing of masks has not been advised by the government.
'The rapidly declining cases we see in Sweden right now is another indication that you can get the number of cases down quite a lot in a country without having a complete lockdown,' he previously told Unherd.
Tegnell added that 'deaths are not so closely connected to the amount of cases you have in a country', saying the death rate was more closely linked to whether older people are being infected and how well the health system can cope.
'Those things will influence mortality a lot more, I think, than the actual spread of the disease,' he said.
Swedish economic activity has also started to pick up with the effects of the downturn looking less severe than previously feared.
The economy had shrunk by nine per cent but this too was less than the 20 per cent dip seen in the UK.
It is thought that because many younger people have already had coronavirus in Sweden it now has less chance to spread through the population.
Recent studies suggested that an infection rate of 43 per cent may be enough to achieve herd immunity -

a figure much lower than the 60 per cent previously cited.
WHAT IS HERD IMMUNITY?
Herd immunity is a situation in which a population of people is protected from a disease because so many of them are unaffected by it - because they've already had it or have been vaccinated - that it cannot spread.
To cause an outbreak a disease-causing bacteria or virus must have a continuous supply of potential victims who are not immune to it.
Immunity is when your body knows exactly how to fight off a certain type of infection because it has encountered it before, either by having the illness in the past or through a vaccine.
When a virus or bacteria enters the body the immune system creates substances called antibodies, which are designed to destroy one specific type of bug.
When these have been created once, some of them remain in the body and the body also remembers how to make them again. Antibodies - alongside T cells - provide long-term protection, or immunity, against an illness.
If nobody is immune to an illness – as was the case at the beginning of the coronavirus outbreak – it can spread like wildfire.
However, if, for example, half of people have developed immunity – from a past infection or a vaccine – there are only half as many people the illness can spread to.
As more and more people become immune the bug finds it harder and harder to spread until its pool of victims becomes so small it can no longer spread at all.
The threshold for herd immunity is different for various illnesses, depending on how contagious they are – for measles, around 95 per cent of people must be vaccinated to it spreading.
https://www.dailymail.co.uk/news/article-8760031/Expert-claims-Sweden-herd-immunity-coronavirus.html?ns_mchannel=rss&ns_campaign=1490&ito=1490

United Kingdom
Having flu and COVID together doubles death risk in hospitalized patients.
Source: Infosurhoy
Unique ID: 1007890806

While health officials worry about a potential “twindemic” of COVID-19 and the flu this winter, a new study finds that hospital patients who were infected with both viruses were more than twice as likely to die as those infected only with the new coronavirus. To achieve this, existing databases would be linked up so that, for example, a patient who received a vaccine at a public health center in January could go to a CVS pharmacy 28 days later in another state and be assured of getting the second dose of the right vaccine, the Times reported. In a sign that the Pfizer vaccine trials are moving along smoothly, German pharmaceutical company BioNTech, which is developing a coronavirus vaccine with Pfizer, announced recently it was buying a new production plant so it can ramp up production of a COVID-19 vaccine when needed, CNN reported.
While health officials worry about a potential “twindemic” of COVID-19 and the flu this winter, a new study finds that hospital patients who were infected with both viruses were more than twice as likely to die as those infected only with the new coronavirus.
British government scientists conducted the research during the early months of the pandemic, and the results were troubling: 43% of patients who were hospitalized with both infections died, compared with 26.9% of people who were hospitalized for coronavirus infection alone, the Washington Post reported. While the study only followed 58 people between the months of January and April, the findings line up with similar research that is underway, the Post reported.
“If you get both, you are in some serious trouble, and the people who are most likely to get both of these infections may be the very people who can least afford to in terms of their own immune system, or their risk for serious outcomes,” Yvonne Doyle, Public Health England’s medical director, said in an agency news release. She urged people considered high-risk to go for a flu shot if they were eligible.
“The flu vaccine is more important than ever, to help reduce transmission of flu and protect the nation from the double threat of flu and COVID-19,” Doyle said.
As for a COVID-19 vaccine, some U.S. pediatricians are warning that a coronavirus vaccine for children might not arrive before the fall of 2021. While scientists are racing to develop a vaccine for adults, no one has started the process for children, The New York Times reported.

“Right now, I’m pretty worried that we won’t have a vaccine available for kids by the start of next school year,” Dr. Evan Anderson, a pediatrician at Children’s Healthcare of Atlanta, told the Times.
Anderson and his colleagues recently published a commentary in the journal Clinical Infectious Diseases in which they called for vaccine makers to address the issue.
Many vaccines, including ones for measles, polio and tetanus, were developed to be given to children. In such cases, vaccine makers typically start with trials in adults to check for any safety issues, and then move on to testing in children, the Times reported.
Anderson said that vaccine makers could have started running trials for children over the summer, as soon as they had good results in adults. But that has not happened, and when these trials do start it could take a year or more to ready a coronavirus vaccine for children, Anderson said.
Coronavirus distribution plan unveiled
Meanwhile, the details of a plan to rapidly deliver a future coronavirus vaccine to Americans has been unveiled by federal.
Two of the key parts of the plan are to begin distributing a vaccine with 24 hours of any approval or emergency authorization and offering the vaccine for free, the Times reported.
Officials from Operation Warp Speed—the multiagency effort created to quickly vaccinate Americans against coronavirus—also said the timing of a vaccine was still unclear, the Times reported. That is despite repeated statements from President Donald Trump that a shot could be ready before the election on Nov. 3.
“We’re dealing in a world of great uncertainty. We don’t know the timing of when we’ll have a vaccine, we don’t know the quantities, we don’t know the efficacy of those vaccines,” Paul Mango, the deputy chief of staff for policy at the U.S. Department of Health and Human Services, told the Times. “This is a really quite extraordinary, logistically complex undertaking, and a lot of uncertainties right now.”
Who will get the vaccine first? Initial distribution of a vaccine, possibly on an emergency basis, would to a limited group of high-priority people, such as health care workers, in the final three months of this year and into next year, the Times reported. The Department of Defense is providing logistical support for shipping and storing the vaccine, and for keeping track of who has gotten a vaccine and whether they got the full two doses, the newspaper said.
To achieve this, existing databases would be linked up so that, for example, a patient who received a vaccine at a public health center in January could go to a CVS pharmacy 28 days later in another state and be assured of getting the second dose of the right vaccine, the Times reported.
Right now, three drug makers are testing vaccine candidates in late-stage trials in the United States. One of those companies, Pfizer, has said that it could apply for emergency authorization as early as October, while the other two, Moderna and AstraZeneca, have said they hope to have something before the end of the year.
In a sign that the Pfizer vaccine trials are moving along smoothly, German pharmaceutical company BioNTech, which is developing a coronavirus vaccine with Pfizer, announced recently it was buying a new production plant so it can ramp up production of a COVID-19 vaccine when needed, CNN reported.
New Drug May Help Prevent Severe COVID
A single infusion of an experimental drug dramatically lowers levels of coronavirus in the bodies of newly infected patients and cuts their chances of hospitalization, the drug’s maker has reported.
Eli Lilly’s announcement did not include detailed data and hasn’t been peer-reviewed or published yet, the Times reported.
The news comes from interim results of a trial sponsored by Eli Lilly and the U.S. National Institutes of Health. NIH officials would not comment on the announcement until they have seen more detailed data from the trial, the Times reported.
How does the drug work its magic? It is a monoclonal antibody, a manmade copy of an antibody produced by a patient who recovered from COVID-19, the Times reported. Scientists around the world have high hopes that that monoclonal antibodies will prove to be powerful coronavirus treatments, but they come with a caveat: They are difficult to manufacture, and would take time to produce, the Times reported.
In the trial, 452 newly diagnosed COVID patients received the monoclonal antibody or a placebo infusion. Some 1.7 percent of those who got the drug were hospitalized, compared with 6 percent of those who received a placebo— a 72 percent reduction in risk, Eli Lilly said.
At the same time, blood levels of the coronavirus plummeted among those who received the drug, and their symptoms were fewer and milder, the Times reported.

This is the first treatment aimed at patients who are not already seriously ill and hospitalized, the newspaper added.
Dr. Myron Cohen, director of the Institute for Global Health and Infectious Diseases at the University of North Carolina at Chapel Hill, told the Times he was impressed by the findings.
"It's exciting," said Cohen, who was not involved in the study. The trial appears to be rigorous, and the results are "really compelling," he added. Other monoclonal antibody drugs to combat the coronavirus are in development, he noted.
Cases keep mounting
By Tuesday, the U.S. coronavirus case count passed 6.8 million as the death toll passed 199,700, according to a Times tally.
According to the same tally, the top five states in coronavirus cases as of Tuesday were: California with over 792,000; Texas with more than 744,700; Florida with over 685,000; New York with more than 455,000; and Georgia with nearly 290,000.
Curbing the spread of the coronavirus in the rest of the world remains challenging.
By Tuesday, India's coronavirus case count had passed 5.5 million, just over one month after hitting the 3 million mark, the Times reported.
Nearly 89,000 coronavirus patients have died in India, but when measured as a proportion of the population, the country has had far fewer deaths than many others. Doctors say this reflects India's younger and leaner population.
Still, the country's public health system is severely strained, and some sick patients cannot find hospital beds, the newspaper said. Only the United States has more coronavirus cases.
Meanwhile, Brazil posted over 4.5 million cases and more than 137,000 deaths as of Tuesday, the Times tally showed.
Cases are also spiking in Russia: The country's coronavirus case count has passed 1.1 million, the Times reported. As of Tuesday, the death toll in Russia was over 19,500.
Worldwide, the number of reported infections passed 31.3 million on Tuesday, with over 965,000 deaths, according to the Hopkins tally.
https://infosurhoy.com/news-summary/having-flu-and-covid-together-doubles-death-risk-in-hospitalized-patients/

United States
NIH expands clinical trials to test convalescent plasma against COVID-19
Source: National Institute of Health
Unique ID: 1007890890

Rigorous studies to build on earlier efforts to test the experimental treatment
Two randomized, placebo-controlled clinical trials funded by the National Institutes of Health (NIH) are expanding enrollment to further evaluate convalescent plasma as a treatment for patients hospitalized with COVID-19. Preliminary observational studies indicate that convalescent plasma may improve outcomes among severely ill and hospitalized patients with COVID-19. Prospective, well-controlled randomized trials are needed to generate sufficient data on whether convalescent plasma is effective and safe for the treatment of COVID-19.
Convalescent plasma is blood plasma taken from people who have recovered from COVID-19. It contains antibodies that can recognize and neutralize SARS-CoV-2, the virus that causes COVID-19, as well as other components that may contribute to an immune response.

"The evidence on convalescent plasma as a treatment for severe cases of COVID-19 is promising but incomplete. We need to carry out rigorous randomized control clinical trials to determine how this therapy can improve outcomes," said NIH Director Francis S. Collins, M.D., Ph.D. "While the world waits for an effective vaccine, it is vital that we simultaneously expand the options for available treatments for those currently suffering from the worst effects of this disease."

The trials expect to enroll hospitalized patients across the country at academic and community-based hospitals. Participants will be randomly assigned to receive the treatment or a placebo. Outcomes will be compared with respect to clinical improvement measures and resource needs, such as ventilators. Both trials currently are enrolling participants and anticipate results as early as this fall.

The trials are receiving $48 million in support through Operation Warp Speed (OWS), a collaborative initiative across federal agencies to advance the development, manufacturing and distribution of COVID-19 vaccines, therapeutics and diagnostics.The National Center for Advancing Translational Sciences (NCATS), part of NIH, will oversee the grant awards through its Clinical and Translational Science Awards (CTSA) Program research network. The CTSA's Trial Innovation Network (TIN) will play a key role in working to add study sites and enroll patients, including those from communities disproportionately affected by COVID-19.

"The rapid expansion of these vital randomized, controlled convalescent plasma clinical trials demonstrates how nimbly the network of CTSA Program hubs and the TIN can respond to the nation's research needs and shorten the path from discovery to treatment," said NCATS Director Christopher P. Austin, M.D. One trial, called Convalescent Plasma to Limit COVID-19 Complications in Hospitalized Patients, was launched in April by NYU Langone Health in New York, with collaboration from the Albert Einstein College of Medicine and Yale University, New Haven, Connecticut, and with funding from NCATS. To increase enrollment in the trial, NYU is partnering with The University of Texas Health Science Center at Houston and the University of Miami in Florida to enroll participants at sites in these states.

With these additional sites, this trial expects to enroll approximately 1,000 hospitalized patients 18 years or older with respiratory symptoms of COVID-19. The trial is primarily assessing clinical improvement at 14 and 28 days and also will be evaluating outcomes based on mortality, intensive care unit admission and patient antibody concentrations. Additional information about this study and participation is available at ClinicalTrials.gov under study identifier NCT04364737.
The trial called Passive Immunity Trial of Our Nation for COVID-19 also is expanding to enroll about 1,000 participants. Vanderbilt University Medical Center in Nashville, Tennessee, which launched the trial in April, will have access to about 50 additional clinical trial sites across the CTSA Program. Participants are 18 years or older with acute respiratory infection symptoms and laboratory-confirmed SARS-CoV-2 infection; they may be hospitalized or in an emergency department and likely to be admitted. The trial primarily will assess clinical improvement at 15 days and also will evaluate ventilation use, supplemental oxygen use, acute kidney injury and cardiovascular events. Additional information about this study and participation is available at ClinicalTrials.gov under study identifier NCT04362176.

About the National Center for Advancing Translational Sciences (NCATS): NCATS conducts and supports research on the science and operation of translation — the process by which interventions to improve health are developed and implemented — to allow more treatments to get to more patients more quickly. For more information about how NCATS helps shorten the journey from scientific observation to clinical intervention, visit https://ncats.nih.gov.
About the National Institutes of Health (NIH): NIH, the nation's medical research agency, includes 27 Institutes and Centers and is a component of the U.S. Department of Health and Human Services. NIH is the primary federal agency conducting and supporting basic, clinical, and translational medical research, and is investigating the causes, treatments, and cures for both common and rare diseases. For more information about NIH and its programs, visit www.nih.gov.
https://www.nih.gov/news-events/news-releases/nih-expands-clinical-trials-test-convalescent-plasma-against-covid-19

Study

Study shows that 40% of healthcare workers asymptomatic when COVID-19 positive, raising risk of silent transmission.
Source**:** Infosurhoy
Unique ID: 1007896678

The study is by Dr. Sergio Gómez-Ochoa, Cardiovascular Foundation of Colombia, Floridablanca, Colombia, Professor Oscar H Franco and Dr. Taulant Muka from the Institute Of Social And Preventive Medicine (ISPM), University Of Bern, Switzerland, and colleagues, and is to be published in the American Journal of Epidemiology. A review of studies (meta-analysis) presented at this year's ESCMID

Conference on Coronavirus Diseases (ECCVID, online 23-25 September) shows that 40% of healthcare workers who test positive for COVID-19 were asymptomatic, raising the risk of silent transmission in healthcare settings. Preprint and peer-reviewed published articles of any language reporting the prevalence of COVID-19 in HCW and evaluating the risk factors, clinical characteristics, and clinical outcomes of SARS-CoV-2 infection among HCW were included.
A review of studies (meta-analysis) presented at this year's ESCMID Conference on Coronavirus Diseases (ECCVID, online 23-25 September) shows that 40% of healthcare workers who test positive for COVID-19 were asymptomatic, raising the risk of silent transmission in healthcare settings.
The study is by Dr. Sergio Gómez-Ochoa, Cardiovascular Foundation of Colombia, Floridablanca, Colombia, Professor Oscar H Franco and Dr. Taulant Muka from the Institute Of Social And Preventive Medicine (ISPM), University Of Bern, Switzerland, and colleagues, and is to be published in the American Journal of Epidemiology.
"Health care workers (HCW) are at the frontline response to the new coronavirus disease 2019 (COVID-19), exposing themselves to a higher risk of acquiring the disease, and subsequently, exposing patients and colleagues," says study co-author Professor Oscar H Franco. The authors aimed to systematically review the evidence on the prevalence, risk factors, clinical characteristics, and prognosis of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection among HCW.
Searches in Embase, Pubmed, LILACS, MedxRiv and Google Scholar databases (up to July 8th, 2020) were performed. Preprint and peer-reviewed published articles of any language reporting the prevalence of COVID-19 in HCW and evaluating the risk factors, clinical characteristics, and clinical outcomes of SARS-CoV-2 infection among HCW were included. Two reviewers independently selected the studies, extracted the data, and assessed the quality of evidence. Estimates were pooled using a random-effects meta-analysis.
A total of 97 studies, including 230,398 HCW across 24 countries, met the inclusion criteria. From the screened HCW using PCR testing and the and the presence of antibodies, the estimated prevalence of SARS-CoV-2 infection was 10% and 7%, respectively.
The study shows that 48% of those testing positive for COVID-19 were nurses, followed by physicians (25%) and other HCW (23%). Most of the COVID-19 positive medical personnel were working in regular/non-surgical/non-COVID wards during the screening (43%), followed by 24% in the operating room, 16% in the emergency room and 9% in ICU, with 29% reporting 'other' locations.
"Loss of taste and smell (anosmia), fever and muscle pain were identified as the only symptoms significantly associated with SARS-CoV-2 positivity among HCW," explains co-author Dr. Taulant Muka. Pooled data from 15 studies showed, that among RT-PCR positive HCW, 40% did not show symptoms at time of diagnosis. Finally, 1 in 20 (5%) of the COVID-19 positive HCW developed severe clinical complications, and 1 in 200 (0.5%) died.
Dr. Muka says: "Healthcare workers suffer a significant burden from COVID-19. A significant proportion of healthcare workers are positive for COVID-19 while asymptomatic, which leads to the silent transmission of the disease. The symptoms associated with COVID-19 in HCW could be used as an indicator for screening in settings with limited testing capacities.
Professor Franco concludes: "Because we might miss a large proportion of COVID-19 cases if screening targets only symptomatic HCW, universal screening for all exposed HCW regardless of symptoms should be the standard strategy. While more research is needed to understand specific interventions that can help reducing SARS-CoV-2 infection among healthcare personnel, it is clear that providing healthcare workers with adequate personal protective equipment and training is essential."
Study: https://academic.oup.com/aje/advance-article/doi/10.1093/aje/kwaa191/5900120
https://infosurhoy.com/news-summary/study-shows-that-40-of-healthcare-workers-asymptomatic-when-covid-19-positive-raising-risk-of-silent-transmission/

Japan

Fujifilm's Avigan shown to be effective in Japanese Phase-3 trial for COVID-19
Source: Cape Breton Post
Unique ID: 1007896832

TOKYO (Reuters) - Fujifilm Holdings Corp said on Wednesday a late-stage study of its antiviral drug Avigan showed it reduced recovery times for COVID-19 patients with non-severe symptoms, boosting expectations for regulatory approval in Japan.

The Phase 3 clinical study of 156 patients in Japan showed that those treated with Avigan improved after 11.9 days, versus 14.7 days for a placebo group. Results of the study, conducted by subsidiary Fujifilm Toyama Chemical, were statistically significant, the company said in a release.
The announcement sent Fujifilm shares up more than 4% in Tokyo to their highest level in four months.
Former Japanese Prime Minister Shinzo Abe had touted Avigan's potential as Japan's contribution to a global race for coronavirus treatments, aiming for domestic approval in May.
The government called on Fujifilm to triple national stockpiles of Avigan, approved in 2014 as an emergency flu treatment, and pledged to donate it to countries on request.
But a lack of patients in Japan hampered clinical testing. In July, researchers at Fujita Health University said their Avigan study failed to reach statistically significant results.
In its statement, Fujifilm said it would perform further analysis of the trial data and seek to file for approval of Avigan for use in COVID-19 as early as October.
This week, the Nikkei newspaper cited ministry sources as saying approval could be granted within a month of receiving such a request.
In July, Fujifilm sold its global rights to Avigan to India's Dr Reddy's Laboratories. Already available generically in many countries under the name favipiravir, the drug has been approved to treat COVID-19 in India and Russia.
Avigan acts on the RNA of viruses, inhibiting their ability to replicate. It is the subject of dozens of trials worldwide, but concerns remain over birth defects it caused in animal studies.
Dr Reddy's shares were 0.7% higher at 0430 GMT.
(Reporting by Rocky Swift and Chris Gallagher in Tokyo; Editing by Stephen Coates)
https://www.capebretonpost.com/news/world/fujifilms-avigan-meets-primary-endpoint-in-phase-3-trial-for-covid-19-500605/

Domestic Events of Interest

Alberta

New street drug discovered after seizure sparks warning from Grande Prairie RCMP
Source: My Grande Prairie Now
ID: 1007891901

Grande Prairie RCMP is warning the public about a potential new street drug threat in the city after lab analysis on a recent seizure raised some serious concerns.
Police say in July officers investigating a traffic stop, seized a substance believed to be fentanyl.
Authorities say the suspected fentanyl was sent to a Health Canada laboratory for analysis. The results of the analysis indicated the presence of a substance known as 2-Fluorordeschloroketamine, along with fentanyl, MDMA, meth, and caffeine.
Mounties say it's the first time 2-Fluorordeschloroketamine has been encountered in this city and is known to be associated with overdoses or deaths.
Police say information surrounding the overall safety of 2-Fluorordeschloroketamine is limited and could pose a risk to people even handling it without taking appropriate health and safety precautions. RCMP further warns that individuals consuming drugs may be unaware of this substance is present.
Police say the use of the substance can be highly addictive and can often lead to harmful side effects including overdose and death. Officials add there is an increased risk when different drugs are combined or with alcohol, and when the user is unaware of the content of the drugs they are consuming.

https://www.mygrandeprairienow.com/76065/new-street-drug-discovered-after-seizure-sparks-warning-from-grande-prairie-rcmp/

International Events of Interest

Africa (International)

Deadly malaria and cholera outbreaks grow amongst refugees as COVID pandemic strains health systems, warns IRC – World

Source: ReliefWeb
Unique ID: 1007890576

New York, NY, September 22, 2020 — The International Rescue Committee is extremely concerned about the rise of infectious diseases alongside COVID-19. There is an increase in malaria and cholera cases compared to previous years due in part to COVID-related disruptions severely impeding diagnosis and treatment of the diseases, access to relief from floods as well as affordability of mosquito nets. Displaced and refugee families live together in small tents and makeshift homes and are confined together in small spaces without access to proper water, sanitation and hygiene, making the conditions ripe for outbreaks of these diseases as well as contracting COVID-19. The International Rescue Committee (IRC) has been responding to the pandemic as well as the two outbreaks and is now calling for a rapid increase of funding to scale up our response and mitigate disease spread.
Mesfin Teklu Tessema, Senior Director of Health at the IRC, said,
"We are extremely concerned about the spike in malaria and cholera cases amidst the COVID-19 pandemic. The COVID-19 pandemic has caused more strain on the existing health system for those most vulnerable, and now these other disease outbreaks are worsening the situation amidst a scarcity in health personnel and supplies. The IRC has been training our health care workers to recognize symptoms and safely support patients suffering from malaria, cholera and COVID-19. Still, health services in many countries are not fit to handle coinciding outbreaks of these diseases, and we need urgent support to scale up our response now.
"For those displaced, these diseases are especially dangerous due to cramped living spaces and poor access to water and sanitation facilities and shelter. In countries such as Afghanistan and Pakistan which hosts more than 1.4 million refugees, the monsoon season has brought an increase in the risk of these diseases. Apart from the strain on health facilities during the pandemic, in some countries such as Somalia, Kenya and Sierra Leone, we are seeing that a fear of exposure to COVID-19 has prevented parents from taking their children to hospital, delaying diagnosis and treatment of malaria and increasing preventable deaths. COVID restrictions in some countries have also meant pregnant women have missed antimalarial drugs. Untreated malaria in pregnant women can increase the risk of anaemia, premature births, low birth weight and infant death. According to the World Health Organization (WHO), 80% of programs designed to fight HIV, tuberculosis and malaria have been disrupted due to the pandemic and 46% of 68 countries report experiencing disruptions in the treatment and diagnosis of malaria.
"In Kenya's Kakuma refugee camp, cholera cases were previously few and immediately contained but this year the situation has worsened due to seasonal rains and poor sanitation facilities at the camp. In previous years, spraying greatly reduced the burden of malaria by more than 80%; this has not been done in 2020. COVID has also coincided with ongoing malaria outbreaks in Niger and Zimbabwe this year. In DRC, malaria remains the leading cause of death even as the country battles COVID-19 and a new Ebola outbreak.
"With more funding, the IRC can scale up its work by hiring and training health workers, procuring essential drugs, targeting expectant mothers in malaria prevention, improving access to water and sanitation, increasing surveillance for potential cases, ensuring our clients are informed and know how best to protect themselves and reinforcing infection, prevention and control at our health facilities. During this session of the UNGA, support must urgently be provided to health needs beyond COVID: including the spread of other deadly but preventable diseases. More support from the international community will help us mitigate the spread of disease and save lives."
The IRC has launched a US $30 million appeal to help us mitigate the spread of coronavirus among the world's most vulnerable populations. We are working across three key areas: to mitigate and respond to the spread of coronavirus within vulnerable communities; protect IRC staff; and ensure the continuation of our life-saving programming as much as possible across more than 40 countries worldwide.
https://reliefweb.int/report/world/deadly-malaria-and-cholera-outbreaks-grow-amongst-refugees-covid-pandemic-strains

Researches, Policies and Guidelines

Canada

International experts call for independent probe of Canadian research linking fluoride and lower IQ

Source: National Post
Unique ID: 1007889860

An arm's-length review is needed to determine whether 'ideology is being misrepresented as science,' the group of academics and health officials says in a letter

Several international experts have taken the unusual step of urging a Canadian university to arrange an independent investigation into research that controversially linked fluoride in drinking water to lower intelligence in children.

The academics and public health officials from six countries say studies by York University's Christine Till have been widely criticized, yet are still influencing often-emotional debates over fluoridation in American and Canadian cities.

An arm's-length review is needed to determine whether "ideology is being misrepresented as science," the group says in a letter sent to York's board Monday.

The fact Till is using an animated video and public comments to advocate against pregnant women drinking fluoridated water, despite shortcomings in her research, makes this more than a simple scientific debate, said Myron Allukian Jr., one of the signatories.

"It's bothersome that an academic goes around yelling 'Fire, fire,' when there's no fire," said Allukian, former president of the American Public Health Association and Harvard dental professor. "She is misleading the public and others by distorting the data and not doing the proper analyses."

The letter is also signed by professors and other experts in the U.S., the U.K., Australia, New Zealand and Chile.

Till, a neuropsychologist, could not be reached for comment. But she has strenuously defended her work, saying that it's in line with other research looking at the neurological effects of fluoride.

Her critics are simply unwilling to accept that fluoridation is anything but "unequivocally safe," despite a number of studies suggesting it poses a risk to children, she said in a commentary published earlier this year.

Till described "the challenges of conducting fluoride research and the overt cognitive biases we have witnessed in the polarized fluoride debate."

n fact, the prominent journal that published Till's key study on fluoride and IQ said it subjected the paper to added scrutiny and peer review because of its implications. The JAMA Pediatrics editor has said he would tell his wife not to drink tap water if she were pregnant.

And separate studies from China, Mexico and other places, though also criticized and generally considered less rigorous, have had similar findings.

Barbara Joy, a university spokeswoman, said York has policies in place to deal with such requests and "we will be responding fully once we have carefully reviewed the concerns."

The U.S. Centers for Disease Control has declared fluoridation of drinking water one of the 10 greatest public health achievements of the 20th Century, reducing cavities by an estimated 25 per cent.

But it has long been a contentious issue. Opposition once veered into conspiracy-theory territory, though now relies more on published research into possible harms. The movement still has links to the scientifically dubious anti-vaccination lobby.

Till's study last year on IQ and fluoridation thrust her into the centre of the fray. It examined maternal consumption of the chemical, both by looking at fluoride in urine and mothers' reports of their fluoridated-water consumption.

Of the 500 mothers from six Canadian cities included in the study, those with 1 part per million more fluoride in their urine had boys whose IQ was an average of 4.5 points lower between ages three and four. Their girls had slightly higher IQs, and there was no difference when the sexes were combined.

Those who reported higher fluoridated-water consumption had children of both sexes with an average 3.7 points lower IQ, the study concluded.

Till has also published a paper linking fluoridated water and ADHD, and one that concluded baby formula made with fluoridated water was associated with lower IQs.

The letter cites critiques that largely dismissed the results of the IQ paper on various grounds.

A detailed report by Canada's CADTH, the independent, government-funded agency that evaluates new drugs and other health issues, said Till's conclusions were simply "not supported by the data."
The report cited "multiple weaknesses," including potentially wrong estimation of the mothers' fluoride exposure and variables like parental IQ and diet after birth that weren't considered but could have skewed the results.

A review by Germany's Leibniz Research Centre for Working Environment and Human Factors raised similar concerns and concluded the study did not justify calling fluoride a "human developmental neurotoxin."
The letter also points to an animated video produced by Till and colleagues that leaves out much of the nuance in her findings. It states flatly that her study and one in Mexico found "fluoride led to IQ deficits in children." Till's work suggested there was an association between the two, not a proven cause-and-effect relationship.
The review by an independent, international committee should look at whether the animation accurately represents her findings. If not, there should be a "forensic audit" into whether public research funds were used to produce it, the letter says.
Meanwhile, Till also wrote to the city council of Green Bay, Wis., in July as it debated fluoridation, suggesting that, based on her results and others, pregnant women should decrease their fluoride intake.
"Dr. Till wrote on York University stationery to undermine public health recommendations, during a pandemic, in another country based on her research which her own national agency CADTH has fully discredited," said Jennifer Meyer, a population health sciences professor at Alaska's College of Health, who also signed the letter. "Junk science can harm the public. Junk science finds voice in social media that can be louder than the expert voices who can read, analyse and interpret the data for the public."
The study: https://jamanetwork.com/journals/jamapediatrics/fullarticle/2748634
https://nationalpost.com/health/international-experts-call-for-independent-probe-of-canadian-research-linking-fluoride-and-lower-iq

United States

FDA Launches the Digital Health Center of Excellence
Source: PR Newswire
ID: 1007892314

An integral part of the launch includes the activities that will be provided to complement advances in digital health technology -- such as launching strategic initiatives that advance digital health technologies, facilitating synergies in regulatory science research in digital health, and facilitating and building strategic partnerships. The Digital Health Center of Excellence is primarily focused on helping both internal and external stakeholders achieve their goals of getting high quality digital health technologies to patients by providing technological advice, coordinating and supporting work being done across the FDA, advancing best practices, and reimagining digital health device oversight. The FDA will continue to build and formalize the coordinating structure and operation of the Digital Health Center of Excellence as part of an effort to modernize digital health policies and regulatory approaches, and provide efficient access to highly specialized expertise, knowledge, and tools to accelerate access to safe and effective digital health technology.
SILVER SPRING, Md., Sept. 22, 2020 /PRNewswire/ -- Today, the U.S. Food and Drug Administration announced it is launching the Digital Health Center of Excellence within the Center for Devices and Radiological Health (CDRH). The launch of the Digital Health Center of Excellence is an important step in furthering the agency's overarching dedication to the advancement of digital health technology, including mobile health devices, Software as a Medical Device (SaMD), wearables when used as a medical device, and technologies used to study medical products.
"Establishing the Digital Health Center of Excellence is part of the FDA's work to ensure that the most cutting-edge digital health technologies are rapidly developed and reviewed in the U.S.," said FDA Commissioner Stephen M. Hahn, M.D. "Today's announcement marks the next stage in applying a comprehensive approach to digital health technology to realize its full potential to empower consumers to make better-informed decisions about their own health and provide new options for facilitating prevention, early diagnosis of life-threatening diseases, and management of chronic conditions outside of traditional care settings. The Digital Health Center of Excellence will provide centralized expertise and serve as a

resource for digital health technologies and policy for digital health innovators, the public, and FDA staff."
The FDA will continue to build and formalize the coordinating structure and operation of the Digital Health Center of Excellence as part of an effort to modernize digital health policies and regulatory approaches, and provide efficient access to highly specialized expertise, knowledge, and tools to accelerate access to safe and effective digital health technology. The agency is appointing Bakul Patel as the first director. Bakul Patel has been leading regulatory and scientific efforts related to digital health devices at the FDA since 2010.
"The establishment of the Digital Health Center of Excellence is part of the planned evolution of the FDA's digital health program to amplify the digital health work that is already being done and building upon years of work at the agency," said Jeff Shuren, M.D., J.D., director of CDRH. "In the last several years, we have established partnerships internally and externally to coordinate digital health activities and to promote the consistency of regulatory policy while continuing to innovate in our regulatory approaches."
The Digital Health Center of Excellence is primarily focused on helping both internal and external stakeholders achieve their goals of getting high quality digital health technologies to patients by providing technological advice, coordinating and supporting work being done across the FDA, advancing best practices, and reimagining digital health device oversight. Along those lines, the Digital Health Center of Excellence is creating a network of digital health experts and engaging in Collaborative Communities to share knowledge and experience concerning digital health issues and priorities with FDA staff. An integral part of the launch includes the activities that will be provided to complement advances in digital health technology -- such as launching strategic initiatives that advance digital health technologies, facilitating synergies in regulatory science research in digital health, and facilitating and building strategic partnerships.
The Digital Health Center of Excellence is committed to strategically advancing science and evidence for digital health technologies within the framework of the FDA's regulatory and oversight role. While there are many aspects of the Digital Health Center of Excellence that are still under development, ultimately the goal is to empower digital health stakeholders to advance health care by fostering responsible and high-quality digital health innovation.
Additional Resources:
https://ichgcp.net/news/fda-launches-the-digital-health-center-of-excellence

WHO

WHO advisors urge flu vaccination to prioritize health workers, seniors
Source: WHO
ID: 1007892478

Summary The WHO Strategic Advisory Group of Experts (SAGE) said flu transmission might have been altered by COVID-19 measures and limited travel due to travel restrictions, but noted the steps vary by country and flu transmission could rise and circulate alongside SARS-CoV-2 as steps are relaxed.
Vaccine advisors to the World Health Organization (WHO) yesterday released new interim guidance for flu vaccination during the COVID-19 pandemic, which slightly changes the order of the priority risk groups to put health workers at the top of the list, followed by older adults.
21 Sept.

Vaccine advisors to the World Health Organization (WHO) yesterday released new interim guidance for flu vaccination during the COVID-19 pandemic, which slightly changes the order of the priority risk groups to put health workers at the top of the list, followed by older adults.
The WHO Strategic Advisory Group of Experts (SAGE) said flu transmission might have been altered by COVID-19 measures and limited travel due to travel restrictions, but noted the steps vary by country and flu transmission could rise and circulate alongside SARS-CoV-2 as steps are relaxed.

It emphasized that the interim recommendations should be considered alongside its 2012 guidance, knowing that demand for flu vaccine this year might be higher. Modifications this year were made to optimize control of flu during the COVID-19 pandemic and should not interfere with targeting existing risk groups based on national policies.
The expert's interim guidance also covers program considerations for those planning flu vaccine

campaigns, research considerations, and knowledge gaps.
https://www.cidrap.umn.edu/news-perspective/2020/09/news-scan-sep-22-2020
https://www.who.int/immunization/policy/position_papers/Interim_SAGE_influenza_vaccination_recommendations.pdf?ua=1

WHO

Tobacco responsible for 20% of deaths from coronary heart disease
Source: WHO
Unique ID: 1007889978

22 September 2020
News release
Geneva
Every year, 1.9 million people die from tobacco-induced heart disease, according to a new brief released today by the World Health Organization, World Heart Federation and the University of Newcastle Australia ahead of World Heart Day, marked on 29 September.
This equates to one in five of all deaths from heart disease, warn the report's authors, who urge all tobacco users to quit and avoid a heart attack, stressing that smokers are more likely to experience an acute cardiovascular event at a younger age than non-smokers.
Just a few cigarettes a day, occasional smoking, or exposure to second-hand smoke increase the risk of heart disease. But if tobacco users take immediate action and quit, then their risk of heart disease will decrease by 50% after one year of not smoking.
"Given the current level of evidence on tobacco and cardiovascular health and the health benefits of quitting smoking, failing to offer cessation services to patients with heart disease could be considered clinical malpractice or negligence. Cardiology societies should train their members in smoking cessation, as well as to promote and even drive tobacco control advocacy efforts," s*aid Dr Eduardo Bianco, Chair of* the World Heart Federation Tobacco Expert Group.
The brief also shows that smokeless tobacco is responsible for around 200 000 deaths from coronary heart disease per year. E-cigarettes also raise blood pressure increasing the risk of cardiovascular disease.
Moreover, high blood pressure and heart disease increase the risk of severe COVID-19. A recent WHO survey found that among people dying of COVID-19 in Italy, 67% had high blood pressure and in Spain, 43% of people who developed COVID-19 were living with heart disease.
*"*Governments have a responsibility to protect the health of their people and help reverse the tobacco epidemic. Making our communities smoke-free reduces the number of tobacco-related hospital admissions, which is more important than ever in the context of the current pandemic," *said Dr Vinayak* Prasad, Unit Lead of the WHO No Tobacco Unit.
Tobacco control is a key element for reducing heart disease. Governments can help tobacco users quit by increasing tax on tobacco products, enforcing bans on tobacco advertising and offering services to help people give up tobacco.
https://www.who.int/news-room/detail/22-09-2020-tobacco-responsible-for-20-of-deaths-from-coronary-heart-disease

Study

Vaping in pregnancy increases risk of having a child with behavioural issues, study finds
Source: Infosurhoy
Unique ID: 1007896878

Exposure to flavoured e-cig chemicals in the womb leads to hyperactive offspring, while those with nicotine cause even more dramatic changes to a growing foetus' grey matter, warn scientists. Prof Vijayan said: "We tested the effects of flavoured blue raspberry and cinnamon and unflavored vape liquids with and without nicotine. Lead author Professor Mathilakath Vijayan said: "Vape flavourants dull sensory perception and cause hyperactivity in developing zebrafish embryos."
Vaping in pregnancy increases the risk of having a child with behavioural problems, according to new research.
Exposure to flavoured e-cig chemicals in the womb leads to hyperactive offspring, while those with

nicotine cause even more dramatic changes to a growing foetus' grey matter, warn scientists.
Lead author Professor Mathilakath Vijayan said: "Vape flavourants dull sensory perception and cause hyperactivity in developing zebrafish embryos."
Smoking conventional cigarettes during pregnancy has been linked to ADHD (attention deficit hyperactivity disorder) and autism in children.
The latest findings, published in the journal Biology Letters, suggest vaping could also trigger neurological conditions.
Experiments on zebrafish indicate it harms the developing structure of a baby's brain. Embryonic development is surprisingly similar in the humble marine creature.
Smoke toxins can pass to a foetus and have an affect on brain chemistry, explained Prof Vijayan.
He said: "Vaping during pregnancy exposes the developing baby's brain to chemicals in the vape.
"Our results suggest flavours have the potential to impact pre-natal brain development."
His team at the University of Calgary, Canada, used a technique called PMR (photomotor response). It causes zebrafish embryos to move under light.
The animal model showed exposure to vaping in the womb altered their behaviour – and dulled sensory perception.
Prof Vijayan said: "We tested the effects of flavoured blue raspberry and cinnamon and unflavored vape liquids with and without nicotine.
"While the unflavored vapes had no impact, the flavoured vapes even without nicotine caused profound behavioural changes which were similar to nicotine alone.
"Vaping during pregnancy exposes the developing baby's brain to chemicals in the vape."
He added: "Flavoured vapes with nicotine caused even more behavioural alterations."
The use of e-cigs during pregnancy has been on the rise, partly due to the perception they are safer than traditional tobacco.
Last year the Royal College of Midwives advised pregnant women to use them to help them quit smoking.
But Prof Vijayan said there is limited information on the health impacts to unborn children.
He said: "With more than 7,000 vape flavours on the market, each having unique profiles of chemicals in the final aerosol, characterising their potential neurotoxicity will be an onerous task."
One in 10 women in England are smokers at the time they give birth, rising to one in five in the worst areas.
Prof Vijayan added: "Results from this study provide the first evidence that the PMR may prove to be an ideal candidate for screening vape flavours for developmental neurotoxicity."
Studying pregnancy in zebrafish is ideal as the process is much faster – and can be watched as it unfolds.
One day after fertilisation, a woman's egg has divided into two – and nine months later a child is born.
In zebrafish, the split happens in 15 minutes. After 24 hours, the embryo is a recognisable organism with a beating heart and circulating blood cell.
Speed is not the only advantage. In the first days of the life, the embryo is transparent. It is possible to follow the development in real time under a microscope.

Study

Potential hand, foot and mouth disease drug candidate identified
Source: Outbreak News Today
Unique ID: 1007890739

When a virus like enterovirus 71 (or SARS-CoV-2, the virus that causes COVID-19) infects a human cell, it injects its RNA into the cell, hijacking the internal machinery to make copies of itself that eventually burst out to infect neighboring cells. The compound of interest is a small molecule that binds to RNA, the virus's genetic material, and changes its 3-D shape in a way that stops the virus from multiplying without harming its human host. But much of the genome in humans and their microbial pathogens doesn't code for proteins, which means that only a fraction of their genetic material is targeted by existing drugs.
A study appearing next week in the journal Nature Communications offers some good news in the search for antiviral drugs for hard-to-treat diseases. Researchers have identified a potential new drug candidate against enterovirus 71, a common cause of hand, foot and mouth disease in infants and young children.
The compound of interest is a small molecule that binds to RNA, the virus's genetic material, and changes its 3-D shape in a way that stops the virus from multiplying without harming its human host.

There are currently no FDA-approved drugs or vaccines for enterovirus 71, which affects hundreds of thousands of children each year, particularly in Southeast Asia. While most people get better within 7 to 10 days after suffering little more than a fever and rash, severe cases can cause brain inflammation, paralysis and even death.
The work could pave the way for new treatments for other viral infections as well, says a team of scientists at Duke University, Case Western Reserve University and Rutgers University.
Traditionally, most drugs are designed to bind to proteins to block or disrupt their role in causing disease. But much of the genome in humans and their microbial pathogens doesn't code for proteins, which means that only a fraction of their genetic material is targeted by existing drugs.
"For diseases that don't have good treatments, maybe the problem is we've been targeting the wrong thing," said co-author Amanda Hargrove, associate professor of chemistry at Duke.
Instead of targeting proteins, Hargrove and others are looking for small molecules that target RNA, which most drug discovery programs have overlooked.
When a virus like enterovirus 71 (or SARS-CoV-2, the virus that causes COVID-19) infects a human cell, it injects its RNA into the cell, hijacking the internal machinery to make copies of itself that eventually burst out to infect neighboring cells.
Previous work on enterovirus 71 singled out one part of its RNA structure that helps the virus co-opt the host machinery it needs to replicate. This RNA region folds over on itself to form a hairpin, with a bulge in the middle where unpaired nucleotides balloon out to one side.
If a drug can be developed to inhibit this region, the researchers say, we might be able to block the virus before it has a chance to spread.
For the current study, Hargrove and colleagues screened a library of some 30 small molecules, looking for ones that bind tightly to the bulge and not other sites in the virus's RNA.
RNA is a wiggly molecule; when it binds to other molecules such as host proteins or small molecule drugs it takes on different 3-D shapes.
The researchers identified one molecule, dubbed DMA-135, that enters infected human cells and attaches itself to the surface of the bulge, creating a kink in this region.
This shape change, in turn, opens access to another molecule — a human repressor protein that blocks the "reading out" of the virus's genetic instructions, stopping viral growth in its tracks.
In an experiment, the researchers were able to use the molecule to stop the virus from building up inside human cell cultures in the lab, with bigger effects at higher doses.
Hargrove says it would take at least five years to move any new drug for hand, foot and mouth disease from the lab to medicine cabinets. Before their small molecule could reach patients, the next step is to make sure it's safe and effective in mice.
In the meantime, the researchers are building on their success with enterovirus 71 and looking at whether RNA-targeting small molecules could be used to tackle other RNA viruses too, including SARS-CoV-2.
http://outbreaknewstoday.com/potential-hand-foot-and-mouth-disease-drug-candidate-identified-73897/

Brazil

Evidence for current circulation of an ancient West Nile virus strain (NY99) in Brazil
Source: BioRxiv (Cold Spring Harbor Laboratory)
ID: 1007893197

Posted September 21, 2020.

Introduction: In Brazil, West Nile virus (WNV) was first detected in 2018 from horses with neurological disease.
Aim: Here we present the first reported case in Ceará state and complete genome sequence from an isolated in Espírito Santo state from 2019.
Methods: The virus was isolated from a horse that died with neurological signs in Espírito Santo and was sequenced by MiSeq.
Results: Phylogenetic analysis reveals that this isolate belongs to lineage 1a, clustering with NY99 strain, that disappeared from the USA since 2005.

Conclusions: Our findings reinforce the hypothesis that WNV has been silently circulating in Brazil for many years.Abstract

Introduction: In Brazil, West Nile virus (WNV) was first detected in 2018 from horses with neurological disease. Aim: Here we present the first reported case in Ceará state and complete genome sequence from an isolated in Espírito Santo state from 2019. Methods: The virus was isolated from a horse that died with neurological signs in Espírito Santo and was sequenced by MiSeq. Results: Phylogenetic analysis reveals that this isolate belongs to lineage 1a, clustering with NY99 strain, that disappeared from the USA since 2005. Conclusions: Our findings reinforce the hypothesis that WNV has been silently circulating in Brazil for many years.
Competing Interest Statement
The authors have declared no competing interest.
https://www.biorxiv.org/content/10.1101/2020.09.21.307199v1
Full text: https://www.biorxiv.org/content/10.1101/2020.09.21.307199v1.full.pdf+html

Japan

Study finds Japanese stewardship guidelines did not lessen antibiotic use
Source: CIDRAP
ID: 1007892504

Study finds Japanese stewardship guidelines did not lessen antibiotic use
National guidelines to promote the appropriate use of antibiotics in Japan had no effect on trends in antibiotic use for patients with acute respiratory tract infection (ARTI) and gastroenteritis, Japanese researchers reported today in Infection Control and Hospital Epidemiology.
Using data from a national claims database from June 2016 to June 2018, researchers from the University of Tokyo examined antibiotic use for ARTI or gastroenteritis among outpatients 6 years and older. To determine whether guidelines issued by the Japanese government in 2017 on clinical management of ARTI and gastroenteritis had any impact on antibiotic prescribing for those conditions, they conducted an interrupted time series analysis to calculate the season-adjusted changes in the rate of antibiotic prescriptions in the year before and the year after the guidelines were issued.

Previous studies had found that more than 70% of oral antibiotics prescribed in Japan in 2012 and 2013 were for those two conditions, often unnecessarily.
A total of 13,177,735 patients with ARTI and 300,565 patients with gastroenteritis were evaluated in the 2-year study period. Among patients with ARTI, there was a significant downward trend in antibiotic use during the 2-year study period (−0.06% per week; 95% confidence interval [CI], −0.07% to −0.04%), but there was no significant change in trends of antibiotic use between the pre-issue period and post-issue period (trend difference, −0.01% per week; 95% CI, −0.10% to 0.07%).

Similarly, for patients with gastroenteritis, there was no significant change in the trends of antibiotic use between the pre-issue period and post-issue period (trend difference, −0.02% per week; 95% CI, −0.04% to 0.01%). Similar associations were observed in analyses for broad-spectrum antibiotic use.
"Our findings indicate that the issue of national guidelines may not be an immediately effective intervention to change the prescribing behaviors of general practitioners, and they suggest the importance of further multifaceted strategies to promote optimal antimicrobial use," the authors of the study wrote. They suggest that financial incentives, prescribing restrictions, and clinician and patient education are strategies that should be explored.
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