GPHIN Daily Report for 2020-10-27

Special section on Coronavirus

Canada

Areas in Canada with cases of COVID-19 as of 26 October 2020 at 19:00 EDT

Source: Government of Canada

Province, territory or other	Number of confirmed cases	Number of active cases	Number of deaths
Canada	220,213	25,934	9,973
Newfoundland and Labrador	291	5	4
Prince Edward Island	64	1	0
Nova Scotia	1,101	5	65
New Brunswick	331	60	6
Quebec	100,922	8,947	6,153
Ontario	71,224	7,286	3,099
Manitoba	4,349	2,117	55
Saskatchewan	2,783	650	25
Alberta	25,733	4,477	307
British Columbia	13,371	2,378	259
Yukon	22	7	0
Northwest Territories	9	4	0
Nunavut	0	0	0
Repatriated travellers	13	0	0

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

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

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

Statement from the Chief Public Health Officer of Canada on October 26, 2020 From: <u>Public Health Agency of Canada</u> Statement

On October 26, 2020, Dr. Theresa Tam, Canada's, issued the following statement on COVID-19.

October 26, 2020 - Ottawa, ON - Public Health Agency of Canada

In lieu of an in-person update to the media, Dr. Theresa Tam, Canada's Chief Public Health Officer, issued the following statement today:

"As the resurgence of COVID-19 activity continues in Canada, <u>we are tracking a range of epidemiological</u> <u>indicators</u> to monitor where the disease is most active, where it is spreading and how it is impacting the health of Canadians and public health, laboratory and healthcare capacity. The following is the latest summary on national numbers and trends, and the actions we all need to be taking to maintain COVID-19 at manageable levels across the country.

Since the first cases were reported in March 2020, there have been 216,104 cases of COVID-19, including 9,946 deaths reported in Canada; these cumulative numbers tell us about the overall burden of COVID-19 illness to date. Though the cumulative number is high and continues to increase, it is important to remember that the vast majority of Canadians remain susceptible to COVID-19. This is why it is important for everyone to continue with <u>individual precautions</u> that will keep ourselves, our families and our communities safer.

At this time, there are 24,729 active cases across the country. The latest national-level data indicate daily averages of 2,488 new cases (Oct 16-22) and 74,719 people tested, with 3.1% testing positive (Oct 11-17). Outbreaks continue to contribute to COVID-19 spread in Canada. These vary in size from just a few cases to larger clusters occurring in a range of settings including long term care and assisted living facilities, schools, congregate living settings, industrial work settings and large social gatherings. Larger clusters tell us that closed and crowded settings and/or not sufficiently maintaining public health practises, such as physical distancing and mask wearing, can amplify spread of the virus.

The number of people experiencing severe illness continues to increase. Provincial and territorial data, indicate that an average of 1,010 people with COVID-19 were being treated in Canadian hospitals each day during the most recent 7-day period (Oct 16-22), including 209 of whom were being treated in intensive care units. During the same period, there were an average of 23 COVID-19-related deaths reported daily.

As hospitalisations and deaths tend to lag behind increased disease activity by one to several weeks, the concern is that we have yet to see the extent of severe impacts associated with the ongoing increase in COVID-19 disease activity. As well, influenza and respiratory infections typically increase during the Fall and Winter, placing increased demands on hospitals. This is why it is so important for people of all ages to maintain public health practises that keep respiratory infection rates low.

Canada needs a collective effort to sustain the public health response through to the end of the pandemic, while balancing the health, social and economic consequences. We can all do our part by keeping our number of in-person close contacts low and committing to proven effective public health practises; <u>stay home/self-isolate</u> if you have any <u>symptoms</u>, maintain <u>physical distancing</u>, <u>wear a face</u> <u>mask as appropriate</u>, and keep up with <u>hand</u>, <u>cough</u> and <u>surface</u> hygiene. Canadians can also go the extra mile by sharing **credible** information on <u>COVID-19</u> risks and prevention practises and <u>measures to</u> reduce COVID-19 in communities and by downloading the <u>COVID Alert</u> app to help limit the spread of COVID-19.

This week marks Media Literacy Week, an annual event promoting digital and media literacy across Canada. False or misleading information can spread as fast as a virus. Just as we must be vigilant in keeping up proven, effective public health measures to slow the spread of COVID-19, we must also be vigilant in our efforts to stop the spread of misinformation. You can find resources on how to spot false information online on Canada.ca, and more resources on digital and media literacy.

Read my backgrounder to access more <u>COVID-19 Information and Resources</u> on ways to reduce the risks and protect yourself and others."

https://www.canada.ca/en/public-health/news/2020/10/statement-from-the-chief-public-health-officer-ofcanada-on-october-26-2020.html

New Brunswick

N.B. company says its rapid-test technology for sewage can help detect COVID-19 early Source: CTV News Atlantic - Public RSS

ID: 1008125825

FREDERICTON -- A Fredericton-based company has filed a patent for a technology it says can help provide rapid, early detection of COVID-19 in a community by testing its sewage.

LuminUltra and researchers at Dalhousie University say their system for rapid, on-site wastewater testing is portable and less costly than traditional laboratory testing.

CEO Pat Whalen said in a recent interview his company's detection tool can make COVID-19 testing accessible to communities with limited or no access to testing facilities.

Whalen says his company's 4.5-kilogram device can produce on-site results within 90 minutes to two hours.

Lab testing of wastewater has been conducted in several countries as a way to detect early signs of COVID-19 flare-ups in communities.

The Netherlands and France used such testing in the early days of the pandemic, and according to nonpeer reviewed studies, both countries were able to detect traces of the virus in wastewater before widespread outbreaks were confirmed.

This report by The Canadian Press was first published Oct. 26, 2020.

https://atlantic.ctvnews.ca/n-b-company-says-its-rapid-test-technology-for-sewage-can-help-detect-covid-19-early-1.5161508

British Columbia

COVID-19: Two schools closed, three deaths and record 817 cases over past three days in B.C. Source : Vancouver Sun

ID: 1008126392

British Columbia has endured a "sobering" weekend for COVID-19 – with a record 817 cases, two complete school closures, three deaths and an outbreak at the Surrey pretrial centre. Provincial health officer Dr. Bonnie Henry said there were now 2,325 active cases of the disease in B.C., of which 77 were being treated in hospital including 26 in intensive care.

"This has been a sobering weekend for us in B.C.," said Henry, adding the province was heading into a "difficult and challenging time over the next few months."

Henry said there were 317 cases between noon Friday and noon Saturday, 293 between noon Saturday and noon Sunday and 207 between noon Sunday and noon Monday.

She said the three deaths had occurred in long-term care facilities in the Fraser Health and Vancouver Coastal Health regions.

There are now 21 active outbreaks in health care facilities, including 19 long-term care facilities. The deadly Point Grey Hospital outbreak has ended. The community outbreak at the Fedex facility in Kelowna is over, while a fresh outbreak has appeared at the Surrey pre-trial centre – which houses prisoners

awaiting trial.

Henry said house parties, particularly in the Fraser Health region, were leading to the large growth in cases.

To deal with this, Henry has issued a public health order that mandates a house party to have no more than six guests, beyond the number of people who usually reside in the home.

She said it was also now an expectation that people wear masks in all indoor public spaces, though this will not be mandated.

Henry said there should not be large Halloween parties anywhere this year. She said she expected also to have no large family gatherings over the holiday season.

She said that the recent and large rise in cases was linked to events over the Thanksgiving weekend, including family gatherings and weddings.

"The rise is clearly associated with events over the Thanksgiving weekend," she said.

Henry said she was hopeful that a COVID-19 vaccine would be available early in the new year, but that it will take longer before it becomes widely available.

Also, B.C. has not yet struck an agreement with Health Canada to introduce the federal COVID Alert smartphone app.

B.C. and Alberta are the only provinces that have not signed on.

Meanwhile, Alberta posted 1,440 new cases of COVID-19 over past three days and seven additional deaths. There are now 4,477 active cases Alberta-wide.

This has led to Alberta chief medical officer of health Dr. Deena Hinshaw announced a new mandatory limit in Calgary and Edmonton of 15 people in social gatherings where "people are mixing and mingling," including wedding and funeral receptions (but not ceremonies), dinner parties, birthday parties, and social events.

It does not apply to "structured" social gatherings such as worship services, wedding and funeral ceremonies, restaurants or theatres.

More to come.

Is there more to this story? We'd like to hear from you about this or any other stories you think we should know about. Email vantips@postmedia.com.

https://vancouversun.com/news/local-news/covid-19-two-schools-closed-three-deaths-and-record-817-cases-over-past-three-days-in-b-c

Canada

Quebec gym, yoga and dance business owners vow to reopen despite COVID-19 measures Source: Global News

Unique ID: 1008125188

Some Quebec gym, yoga, dance and martial arts business owners say they intend to reopen their doors on Thursday in defiance of provincial health rules.

A coalition of fitness businesses is calling on Quebec Premier François Legault to lift restrictions that forced their facilities to close this month amid a second COVID-19 wave.

They urged Legault to consider their plight ahead of an expected announcement Monday and said that without evidence they are contributing to outbreaks, they should be allowed to reopen.

When Legault announced the measures affecting the province's high-alert red zones, including Montreal and Quebec City, they were scheduled to come to an end after Oct. 28, but he has recently hinted that some of the restrictions will have to remain in place.

"For the moment, we are ready to open on the 29th, because there hasn't been any recommendations to the contrary," said Christian Menard, vice-president of ProGym in east-end Montreal.

"We want the premier to take into consideration the opinion and the lives of those on the ground and those who use these facilities."

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

While some the coalition's 253 members have vowed to reopen their doors on Thursday even if the lockdown is extended, not all have committed to doing so.

Menard said above all, the group wants the government and public health officials to consider them as an asset to the health system and acknowledge their facilities contribute to the population's overall physical and mental well-being.

"There's a part of the population in distress that needs these services, and as the winter months inch closer, these services will become essential," Menard said.

On Monday, Quebec reported 808 new COVID-19 cases as well as 10 further deaths linked to the virus. The province has a seven-day average of 940 cases daily, roughly 110 people per million population.

The number of hospitalizations dropped by eight from one day earlier to 543. Of those, the number of intensive care cases dropped by four to 93.

Since Quebec announced a 28-day partial lockdown in Montreal and Quebec City beginning Oct. 1, several other regions have been declared COVID-19 red zones. The measures closed bars, restaurant dining rooms and theatres, among other venues, and a week later gyms were added to the list.

The coalition of fitness company owners said in a statement the lockdown measures will force them out of business after they made significant investments to comply with health measures during the pandemic.

READ MORE: Seniors' minister 'hopeful' coronavirus will be watershed for better treatment for seniors Menard said his own gym has a key card system that acts as a registry, and as a precaution he's installed a temperature-screening device at the entrance.

While some of the facilities across the province intend to reopen, the statement suggested they would back down if health authorities can demonstrate by Thursday that their operations have led to outbreaks. "If they want to close us, they have to give us the facts," Menard said.

"We were open for four months, they kept tabs on us more than most, and we showed an ability to stay safe, so they have to tell us why we're more dangerous than others."

https://globalnews.ca/news/7422291/quebec-gyms-coronavirus-restrictions-lift-demand/

Canada

COVID-19 outbreak declared at Ottawa jail Source: CBC Unique ID: 1008125173

OPH reporting 76 new cases, 1 additional death Monday CBC News · Posted: Oct 26, 2020 1:21 PM ET | Last Updated: 28 minutes ago

Public health officials have declared a COVID-19 outbreak at the Ottawa-Carleton Detention Centre, where one person has tested positive for the illness.

Ottawa Public Health (OPH) said the person who tested positive is not a staff member at the Innes Road jail, but did not confirm whether the person is an inmate.

Meanwhile another outbreak at the Royal Ottawa Mental Health Centre on Carling Avenue is over. Outbreaks at École secondaire catholique Franco-Cité, which closed earlier this month, All Saints High School and St. Peter High School in Ottawa have also been declared over, leaving active outbreaks at five Ottawa schools.

76 new cases Monday

OPH reported 76 new COVID-19 cases Monday, while 64 more are considered resolved. There has been one additional death, bringing the city's death toll since the pandemic began to 317.

A total of 6,636 people have now tested positive for COVID-19 in Ottawa, including 713 active cases and 5,606 resolved cases.

More than half of Monday's new cases are people over the age of 40.

COVID-19 cases are surging among young people, and older adults could be next The rolling seven-day average of newly confirmed cases in Ottawa now sits in the seventies, higher than during the first wave but below the second wave's peak about two weeks ago. Forty-three COVID-19 patients remain in hospital in Ottawa, four of them in intensive care.

Currently, 2.5 per cent of COVID-19 tests carried out in Ottawa are coming back positive, and OPH is learning of positive tests within 48 hours 78 per cent of the time, continuing its slow improvement.

The wider Ottawa-Gatineau region surpassed 10,000 positive tests for COVID-19 this week.

Western Quebec's public health authority reported two more deaths from COVID-19 on Monday, for a total of 40 in that region.

More than 95 per cent of the known active cases are in Ottawa, western Quebec or within the jurisdiction of the Eastern Ontario Health Unit, which just tightened restrictions in restaurants, halls and fitness centres.

The health units covering the Kingston, Ont., and Belleville, Ont., areas are the only ones in the region without a single COVID-19 patient in hospital.

https://www.cbc.ca/news/canada/ottawa/covid19-ottawa-cases-news-today-1.5776817

Canada

COVID-19 outbreak sparks community closures in South Bruce Peninsula Source: CTV Unique ID: 1008124910

LONDON, ONT. -- Eight cases of COVID-19 in the past week in South Bruce Peninsula is sparking swift action.

South Bruce Peninsula council has closed down the Wiarton Arena and Sauble Beach Community Centre for the next two weeks to try to stop community spread of the virus.

The Town Hall in Wiarton has also been closed to the public.

Four cases of COVID-19 were detected in the South Bruce Peninsula last week. Four more have been found over the past few days. A presumptive case has also been found in the nearby Chippewas of Nawash Unceded First Nation.

Grey Bruce Public Health says the South Bruce Peninsula outbreak can be traced back to two dinner parties.

South Bruce Peninsula Mayor Janice Jackson adds the municipality has been "incredibly cautious" throughout the pandemic, and aren't leaving anything to chance during this most recent outbreak. <u>https://london.ctvnews.ca/covid-19-outbreak-sparks-community-closures-in-south-bruce-peninsula-1.5161236</u>

Canada

Private COVID-19 tests with expedited results offered to essential travellers in Alberta Source: Calgary CTV News ID: 1008123747

CALGARY -- The Government of Alberta has launched a new "fee for service" COVID-19 testing option Monday for Albertans who are leaving the country for essential travel.

People who purchase the testing will receive their results 72 hours before their departure so they are able to provide proof they've tested negative when they arrive at their destination.

The tests, which cost \$150, are being provided by Edmonton-based Dynalife Medical Labs. Appointments may be booked online through Dynalife Travel.

Other private companies like Ichor Services offer tests for a fee of \$120 and a turnaround time on results that varies between 48 and 72 hours.

Premier Jason Kenney says this new initiative will help travellers get to where they're going in safer ways while minimizing the risk of anyone transmitting or acquiring COVID-19.

"These new tests will support faster turnaround times for travel testing in Alberta," said Kenney. "They'll also allow Alberta Health Services to focus on testing symptomatic Albertans staying in the province,

along with those who are involved in outbreaks with the close contact events."

Beginning next week, a new pilot project will also commence at Calgary International Airport and the Coutts border crossing that offers international travellers access to rapid COVID-19 testing. People entering Alberta from outside the country will be able to volunteer to get a rapid test once they arrive and will receive results as quickly as 48 hours.

If that test comes back negative, the traveller would then be able to leave quarantine but would be required to undergo a second test at a participating pharmacy six or seven days later. Those that receive rapid tests are also required to stay in Alberta for a minimum of 14 days.

The new initiative hopes to boost visitor spending in the province. According to the province, visitor spending in Alberta in 2020 is estimated at \$3.5 billion, down 63 per cent compared to 2019.

The Calgary International Airport has also been hit hard during the pandemic with a 68 per cent drop in passengers from 18 million in 2019 to a forecasted 5.8 million by the end of 2020.

If the rapid testing pilot project goes well, there are plans to expand the program to the Edmonton International Airport and other airports across the country.

https://calgary.ctvnews.ca/private-covid-19-tests-with-expedited-results-offered-to-essential-travellers-inalberta-1.5160742

Canada

Pfizer raises concerns ahead of Commons vote on probe of Ottawa's pandemic response Source: CTV News

ID: 1008122760

Pfizer raises concerns ahead of Commons vote on probe of Ottawa's pandemic response Contact

Published Monday, October 26, 2020 4:30AM EDT

In this file photo from Jan. 31, 2011, people walk past the Pfizer logo at the drug company's world headquarters in New York. (AP/Mark Lennihan)

SHARE

OTTAWA -- Opposition parties are poised to approve a parliamentary probe of the Trudeau government's handling of the COVID-19 pandemic despite growing objections from industry and experts.

Pharmaceutical giant Pfizer Canada is the latest to express concerns about the probe, which is the subject of a Conservative motion that will be voted on in the House of Commons today.

The Conservative motion would order the government to turn over to the House of Commons health committee all records on a raft of issues related to the government's handling of the pandemic. Newsletter sign-up: Get The COVID-19 Brief sent to your inbox

That includes the purchase of personal protective equipment, medical devices and pharmaceuticals, and in a letter to Health Canada, Pfizer says it wants to know how its commercial secrets will be protected. The motion is expected to pass with support from the federal New Democrats and Bloc Quebecois, who have insisted there is sufficient protection for industry while accusing the Liberals of stirring fears. Unlike a similar Conservative motion defeated last week that would have created a committee to look into the WE controversy, the government has said the health committee motion will not be a confidence vote. In a letter to a senior Health Canada official obtained by The Canadian Press, Pfizer Canada president Cole Pinnow says his company is concerned about the "likely unintended consequences" of such a review.

Pinnow specifically mentions a requirement in the motion that the government produce documents related to the production and purchase of a vaccine for COVID-19.

He goes on to say that while the company is seeking legal advice, it wants to hear from Health Canada what process will be used to vet sensitive information before it is released to the committee.

"We are deeply concerned with the implications and likely unintended consequences should this motion receive the support of enough parliamentarians," Pinnow wrote to Health Canada assistant deputy minister Pierre Sabourin.

"As we seek legal counsel, we would like to understand what vetting process Health Canada intends to use and how would third parties, like Pfizer, be consulted prior to the release of any information." In a followup email answering questions from The Canadian Press, Pfizer's director of corporate affairs Christina Antoniou wrote that the company would like to see stronger language in the motion on protecting corporate secrets, especially regarding its vaccine-development efforts.

"The release of technically or commercially sensitive information may have deeply damaging and unpredictable effects on Pfizer and for the development program," she wrote.

Protections for scientific and commercial secrets, and a promise to consult companies affected by the probe, "would provide manufacturers like Pfizer the confidentiality assurances we should expect from the government."

Pfizer's concerns about the proposed probe reflect those raised in recent days by other industry players, including Canadian Manufacturers and Exporters, which represents thousands of companies in Canada. CME on Friday wrote to federal procurement minister Anita Anand raising concerns about "the risk of

proprietary, sensitive or confidential business information suddenly being disclosed to the public." The co-chair of the federal government's COVID-19 immunity task force has also spoken out against the motion, telling The Canadian Press such a wide-ranging investigation now could do more harm than good.

Dr. David Naylor said the proposed study is too expansive and will ultimately create more work and distractions for the federal public service at a time when it is already working full out.

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

https://www.ctvnews.ca/politics/pfizer-raises-concerns-ahead-of-commons-vote-on-probe-of-ottawa-s-pandemic-response-1.5160622

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

FDA NEWS RELEASE

Coronavirus (COVID-19) Update: Daily Roundup October 26, 2020

For Immediate Release: October 26, 2020

The U.S. Food and Drug Administration today announced the following actions taken in its ongoing response effort to the COVID-19 pandemic:

- The FDA updated the <u>Antigen Template for Test Developers</u>. This template provides the FDA's current recommendations concerning data and information that should be submitted to the FDA in support of an EUA request for a SARS-CoV-2 antigen test. Today's update adds recommendations regarding studies to support claims for screening asymptomatic individuals and multiplexed antigen tests. The template reflects the FDA's current thinking on the topic and should be viewed only as recommendations, unless specific regulatory or statutory requirements are cited. The FDA is open to alternative approaches.
- Testing updates:
- As of today, 284 tests are authorized by FDA under EUAs; these include 221 molecular tests, 56 antibody tests, and 7 antigen tests.

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

https://www.fda.gov/news-events/press-announcements/coronavirus-covid-19-update-daily-roundupoctober-26-2020

Webinar Series - Respirators and Other Personal Protective Equipment (PPE) for Health Care Personnel Use During the COVID-19 Pandemic OCTOBER 27, 2020

- Date: October 27, 2020 Time: 12:00 PM - 1:00 PM ET On This Page
- <u>Summary</u>
- Background
- Stakeholder Call Details
- Previous Webinars From This Series

Summary

On Tuesday, October 27, 12:00 p.m.-1:00 p.m. ET, the U.S. Food and Drug Administration (FDA) will host a webinar on Recommendations for Surgical Mask Premarket Notifications, or 510(k)s, as part of the series on Respirators and Other Personal Protective Equipment (PPE) for Health Care Personnel Use during the COVID-19 Pandemic.

During this webinar, the FDA will share information about surgical mask 510(k)s and representatives from the FDA and from the Centers for Disease Control and Prevention's (CDC) National Institute for Occupational Safety and Health (NIOSH) will be available to answer your questions. We encourage all interested stakeholders to join. Registration is not necessary.

Outlook users: Click link, select Open, then click Save & Close Save the Date

The FDA hosts a webinar every two weeks typically to share information and answer your questions about respirators and other personal protective equipment (PPE). Based on the upcoming holidays, the FDA will be hosting webinars on a monthly basis for the remainder of the year. Save the date for the next webinar:

November 17, 2020, from 12:00 pm-1:00 pm ET
Background

Background

Personal protective equipment (PPE) refers to protective clothing, helmets, gloves, face shields, goggles, surgical masks, respirators or other equipment designed to protect the wearer from injury or the spread of microorganisms.

The FDA has held webinars on topics including respirators, surgical masks, protective barrier enclosures, gowns, and other apparel used by health care personnel during the COVID-19 pandemic. See <u>previous</u> webinars from this series.

https://www.fda.gov/medical-devices/workshops-conferences-medical-devices/webinar-series-respiratorsand-other-personal-protective-equipment-ppe-health-care-personnel-use

ECDC

Key aspects regarding the introduction and prioritisation of COVID-19 vaccination in the EU/EEA and the UK

Source: ECDC

Technical report 26 Oct 2020

This document provides an overview of the key aspects related to the initial phases following the introduction of one or more COVID-19 vaccines in the European Union and European Economic Area (EU/EEA) and the United Kingdom (UK). The aim is to support but not define EU policy on COVID-19 vaccination.

The key components for a successful national and EU-level COVID-19 vaccine deployment are:

•a robust COVID-19 disease surveillance system; post-marketing studies on effectiveness and impact: active and passive monitoring of adverse events following immunisation: •robust and timely vaccination coverage data; •evidence-based decision-making: •legal and regulatory frameworks for vaccines deployment; vaccine delivery infrastructure and supply chain management; •monitoring of vaccine acceptability and behavioural research; communication plans;

•ethical and equitable access to vaccination.

These components are those usually adopted when a new vaccine is available on the market and integrated into national vaccination schedules.

COVID-19, caused by the virus SARS-CoV-2, is a new disease, and no vaccine is yet available for it, posing great challenges to the early development of national vaccination strategies. Patterns of exposure to SARS-CoV-2, as well as the incidence, burden and geographical distribution of COVID-19, will influence choices about vaccine deployment. There is currently a lack of certainty and knowledge about the characteristics of COVID-19 vaccines that could become available in the EU/EEA and the UK, as well as remaining gaps in the scientific knowledge of the virus and the disease. Vaccination plans and strategies will therefore need to be adapted as more information becomes available.

Once vaccines against COVID-19 are available, their supply is likely to be limited, at least initially. Supply capacity, both initially and over time, will thus determine vaccine usage and delivery prioritisation. Deployment will need to be adjusted accordingly to promptly optimise vaccine allocation and ensure vaccine availability to those most in need.

The following non-mutually exclusive approaches for vaccine deployment can be considered when building vaccination strategies, taking into account different levels of vaccine supply and stages of the pandemic:

•focusing on selected groups (e.g. individuals at risk of severe COVID-19, essential workers, vulnerable groups);

•vaccinating according to age strata (e.g. all individuals above a certain age);

•targeting groups with an increased risk of exposure and onward transmission of SARS-CoV-2 (e.g. exposure in professional settings, younger adults);

•prioritising geographical regions with high incidence of COVID-19:

deploying the vaccine to control active outbreaks;

performing adaptative approaches to be modulated according to circumstances;

conducting a universal vaccination strategy.

Given the anticipated initial shortage, countries will need to identify priority groups for vaccination. A broader characterisation of these groups will need to further categorise them into different priority tiers. The identification of the priority groups, and of the tiers within them, will depend on several factors, including the disease's epidemiology at the time of vaccine deployment, the evidence of risk of severe disease and of exposure to COVID-19, the preservation of essential societal services and equity principles, among others. In the process of developing an iterative approach for vaccine deployment with varving supply, mathematical modelling may aid public health experts in identifying priority groups for vaccination and in assessing different scenarios and the impact of alternative vaccination strategies. Lessons learned from the 2009 H1N1 influenza pandemic should also be considered.

https://www.ecdc.europa.eu/en/publications-data/key-aspects-regarding-introduction-and-prioritisationcovid-19-vaccination

https://www.ecdc.europa.eu/sites/default/files/documents/Key-aspects-regarding-introduction-andprioritisation-of-COVID-19-vaccination.pdf

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

United States Eli Lilly said its antibody treatment does not work on patients hospitalized with Covid-19. Source: NYTimes ID: 1008126726

Summary Government officials said at the time that an independent board of scientific experts had found that after five days of treatment, the group of patients who had received the antibodies showed a different "clinical status" than the group who had received a saline placebo — a difference that crossed a predetermined threshold for safety. The company said that other trials of the treatment, in people who are not as sick or who have been exposed to the virus, would continue, and that it remained optimistic that the treatment could work if given early in the course of the disease. Eli Lilly's trial of hospitalized patients was being run by the National Institute of Allergy and Infectious Diseases, part of the National Institutes of Health, and was paused two weeks ago after an outside safety panel flagged a "potential safety concern."

The drug maker Eli Lillysaid on Monday that its antibody treatment was ineffective on patients hospitalized with advanced Covid-19 and that a government-sponsored trial would not administer the drug to new participants.

The company said that other trials of the treatment, in people who are not as sick or who have been exposed to the virus, would continue, and that it remained optimistic that the treatment could work if given early in the course of the disease.

Earlier this month, Chris Christie, the former governor of New Jersey, said he had received the experimental treatment shortly after he was diagnosed with Covid-19. President Trump received a similar therapy, made by Regeneron, soon after he was infected. Both companies have applied to the Food and Drug Administration for emergency use of the treatment in outpatients.

Eli Lilly's trial of hospitalized patients was being run by the National Institute of Allergy and Infectious Diseases, part of the National Institutes of Health, and was paused two weeks ago after an outside safety panel flagged a "potential safety concern."

Government officials said at the time that an independent board of scientific experts had found that after five days of treatment, the group of patients who had received the antibodies showed a different "clinical status" than the group who had received a saline placebo — a difference that crossed a predetermined threshold for safety.

On Monday, Eli Lilly said the recommendation to discontinue use of the antibody treatment, called bamlanivimab, "was based on trial data suggesting that bamlanivimab is unlikely to help hospitalized Covid-19 patients recover from this advanced stage of their disease." The company also said "differences in safety outcomes between the groups were not significant."

Dr. Eric Topol, a clinical trial expert at the Scripps Research Institute who has been following the treatment's development, said the news "tells us they stopped the trial due to futility, as suspected," and that it "suggests that the timing of monoclonal antibody administration — early — will be important." Other trials of the antibody treatment have shown early promise in people who were newly infected with the virus, showing that it can lower viral levels in patients and reduce visits to the emergency room and hospital.

https://www.nytimes.com/live/2020/10/26/world/covid-19-coronavirus-updates

United Kingdom

Boots to offer 12-minute Covid nasal swab test Source: BBC ID: 1008123998

Boots to offer 12-minute turnaround on Covid nasal swab test Published Coronavirus pandemic image copyrightMATTHEW HOWELL A Covid test that can provide a result in 12 minutes will be made available at high street pharmacy Boots. The nasal swab test, which will cost £120, will be available in selected stores in the UK to people who are not showing symptoms.

The company says the aim is to offer customers peace of mind.

Anyone in the UK who thinks they have symptoms should stay at home and contact the NHS to book a Covid test in the usual way.

The technology has been developed by LumiraDx, which has also struck a deal to provide supplies to the The Lumira tests, due to lauch at 50 Boots stores in November, take minutes to give a result, analysing a nose swab sample on the spot, via a small, portable machine.

Anyone who tests positive should then isolate to avoid spreading the infection to others.

Other rapid tests, which give results within 90 minutes, are also being trialled by the NHS.

Prof Paul Hunter from the University of East Anglia said while the test could give peace of mind at the time it was taken: "A negative test today tells you nothing really about whether you are going to be positive a day or two later."

Target missed

Speedy and comprehensive testing is thought vital to efforts to contain the second wave of the virus while the world waits for an effective vaccine.

But figures released last week showed that just 15.1% of people are currently receiving results within 24 hours through the official system in place in the UK.

https://www.bbc.com/news/health-54684985

India

Rare post Covid complication usually seen in kids now strikes adults in city Source: The Times of India ID: 1008120844

A post Covid-19 complication, multisystem inflammatory syndrome (MIS-C), that was typically seen in kids is now being reported among adults. A 52-year-old woman treated at Andheri's Kokilaben Hospital is likely to be the first confirmed case of the syndrome in the city that can potentially be life-threatening if not identified and treated on time. Since then the hospital has seen five cases of this syndrome, which has been dubbed as MIS-A in adults. Of the five patients, all above 50 years, two are critical.

MIS-C is rare and appears 2-5 weeks after the infection and may not come with any typical signs of Covid. In this syndrome, organs and tissues, including heart, liver, kidneys, blood vessels, digestive system, can become hyper inflamed. The patients may not test positive for Covid but can have positive antibody reports, showing Covid exposure in the immediate past. In Mumbai, where over 24 children have been affected by MIS-C, most presented with Kawasakilike symptoms of red eyes, rashes and fever.

The woman came to the Andheri hospital around two weeks ago with no previous illnesses but a 10-day history of fever, abdominal pain, headache, nausea and jaundice. She had been hospitalised twice and tested negative for Covid before coming to Kokilaben. Here, doctors found her heart and respiratory rates elevated and blood pressure low.

With an oxygen saturation level of 90% and other deteriorating parameters, doctors shifted her to ICU, where she was put on oxygen support."She again tested negative and even a CT scan of the chest showed no abnormalities. But an echocardiogram showed cardiac dysfunction," said Dr Sharad Sheth, head of nephrology. The patient's white cell count too was very high, along with other inflammatory markers like D-dimer and C-reactive protein. Meanwhile, investigations for dengue, malaria, leptospirosis, typhoid, urinary tract infection all returned negative, leaving the doctors baffled.

As her condition continued to deteriorate, infectious disease expert Dr Tanu Singhal, who also treats paediatric cases, was roped in. Having treated 10 MIS-C cases, Dr Singhal suspected that the woman was struck by the rare syndrome. An antibody test came positive, confirming their suspicion. "Medical literature in the US and Europe have mentioned several confirmed cases in adults," said Dr Singhal, adding that as they started treating her with high dose steroids and intravenous immunoglobulins, her condition significantly improved within 48 hours. The woman is likely to be discharged on Monday."When doctors see such abnormal markers, deranged organ functions and a Covid exposure which is a few weeks old, they should think of multisystem inflammatory syndrome. But the key is to rule out all other causes," said Dr Sheth. Dr Singhal added that unlike kids, only one of the five patients had Kawasaki-like symptoms. A few MIS-A cases have been seen in Bengaluru and Chennai too.

https://timesofindia.indiatimes.com/city/mumbai/rare-post-covid-complication-usually-seen-in-kids-nowstrikes-adults-in-mumbai/articleshow/78864265.cms

China

China is testing millions of people in Xinjiang for Covid-19 after one asymptomatic case found Source: CNN

ID: 1008126102

Mon October 26, 2020

(CNN)China has rolled out mass coronavirus testing for nearly 5 million people and imposed lockdown measures in the prefecture of Kashgar in the far western region of Xinjiang, after a single asymptomatic coronavirus case was reported on Saturday.

The testing drive has so far identified 137 additional cases -- and all are asymptomatic, according to Xinjiang's regional health commission. This is the highest daily number of asymptomatic Covid-19 cases reported in China in nearly seven months.

As of Sunday afternoon, some 2.8 million people have been tested. The government expects to finish testing all of Kashgar's 4.7 million population by Tuesday.

The outbreak is Xinjiang's second since China's initial wave of coronavirus infections was brought under control in March.

Home to 11 million Uyghurs, a predominantly Muslim ethnic minority, the region has been subjected to a sweeping security and religious crackdown in recent years. The US State Department estimates that up to 2 million Uyghurs and other Muslim minorities could have been detained in internment camps.

During China's initial outbreak, Xinjiang was subjected to strict lockdown measures on par with those imposed in the city of Wuhan -- the original epicenter of the virus, despite having reported only some 70 cases and three deaths.

In July and August, a cluster of fresh cases in the regional capital of Urumqi brought Xinjiang into a prolonged, stringent lockdown of more than 40 days, drawing backlash from residents on social media. Many complained that the restrictions were too strict and unnecessarily wide in scope -- covering cities without any reported cases hundreds of miles away from Urumqi. The lockdown was finally lifted at the end of August, only after no locally transmitted cases had been reported for two weeks.

New Kashgar cluster

The first new case in Kashgar -- a 17-year-old village girl working in a garment factory -- tested positive during a routine screening on Saturday, according to authorities. More than 800 of her fellow workers at the garment factory all tested negative, so did her parents and brother.

All of the 137 additional cases were linked to a factory where her parents worked. Authorities said the girl visited her parents' factory to dine with them in their dormitory on October 17, but did not explain how she got infected or how infections had broken out in that factory.

Kashgar authorities said on Sunday that all schools in the region would be closed until Friday, while shopping malls and supermarkets would remain open.

A resident in Shufu county, where the latest outbreak occurred, told the state-run Health Times that she was ordered by local officials to get tested for coronavirus and not to leave her home on Saturday morning.

"We had no idea what was happening," she was quoted as saying. "News (of the new asymptomatic case) was not announced until the evening, so many of us were very nervous throughout the day."

By Saturday afternoon, word had spread on Chinese social media that the Kashgar airport had been closed. According to Flight Master, a China-based aviation data provider, 33 flights arriving and departing Kashgar were canceled on Saturday, accounting for nearly half of all scheduled flights.

On Sunday, authorities said the airport had resumed operation, but anyone departing Kashgar must present a negative test result for the coronavirus. On Monday, however, Kashgar airport still saw 69 flights canceled, or more than half the total number of flights scheduled, according to Chinese flight tracker VariFlight.

Stringent measures

Swift and drastic measures such as mass testing, extensive contact tracing and strict lockdown have defined China's response to sporadic local outbreaks since it largely contained the coronavirus midway through this year.

Earlier this month, the eastern port city of Qingdao tested more than 10 million people in just four days over a dozen locally transmitted cases.

China to test 9 million people as coronavirus cluster detected in city of Qingdao But some public health experts have questioned the effectiveness of citywide testing, given that patients are usually identified over a range of time. An infected patient might test negative, then days later test positive -- so hidden cases can't all be caught at once.

"This is just a snapshot, so it definitely will miss a lot of positive individuals," Dr. Jin Dongyan, a virology professor at the University of Hong Kong, told CNN.

Even the chief epidemiologist at the Chinese Center for Disease Control and Prevention has questioned the necessity of such an exhaustive approach.

"From the scientific perspective of the spread of the infectious disease, there is indeed no need to conduct citywide testing," Wu Zunyou told the state-run news magazine China Newsweek Saturday. He advised cities to focus testing on the source of the outbreak and radiate to a certain area around it. "When no more cases can be detected, (the testing drive) can be terminated. There is no need to cover the whole city," he said

https://www.cnn.com/2020/10/26/asia/xinjiang-kashgar-coronavirus-intl-hnk/index.html

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

United States

Statement—NIH-Sponsored ACTIV-3 Trial Closes LY-CoV555 Sub-Study

Source: National Institute of Allergy and Infectious Diseases

News Releases: October 26, 2020

The ACTIV-3 clinical trial evaluating the investigational monoclonal antibody LY-CoV555 in hospitalized patients with COVID-19 will not enroll more participants into this sub-study following a recommendation from the independent Data and Safety Monitoring Board (DSMB). The trial is sponsored by the National Institute of Allergy and Infectious Diseases (NIAID), part of the National Institutes of Health.

ACTIV-3 is a master protocol designed to allow for the study of multiple investigational agents compared to placebo in adults hospitalized with COVID-19. Participants in the trial are randomly assigned to receive either an experimental agent or a matched placebo. All participants also receive standard care for patients hospitalized with COVID-19, including the antiviral remdesivir. After five days, participants'

clinical status is assessed based on an ordinal scale. If the investigational agent appears to be safe and effective based on an evaluation of the first 300 participants (stage 1), an additional 700 participants are randomized and followed for 90 days to assess sustained recovery, defined as being discharged, alive and home for 14 days (stage 2).

The first agent evaluated in the Phase 3, randomized, controlled trial was LY-CoV555. The monoclonal antibody was discovered by AbCellera Biologics based in Vancouver, in collaboration with NIAID's Vaccine Research Center. Subsequently, it was developed and manufactured by Indianapolis-based Lilly Research Laboratories, Eli Lilly and Company, in partnership with AbCellera.

The DSMB reviewed data from the ACTIV-3 trial on Oct. 26, 2020 and recommended no further participants be randomized to receive LY-CoV555 and that the investigators be unblinded to the data.

This recommendation was based on a low likelihood that the intervention would be of clinical value in this hospitalized patient population. This follows the Oct. 13, 2020 DSMB recommendation to pause enrollment out of an abundance of caution. While the DSMB noted on Oct. 13 that a pre-defined boundary for safety was reached at day 5, differences in safety outcomes between the groups were not significant in the updated data set and the Oct. 26 decision was driven by lack of clinical benefit for LY-CoV555 in a hospitalized population.

Enrollment into the LY-CoV555 sub-study closed with 326 total participants. Those participants will continue to be followed until day 90. NIAID and trial coordinating investigators are in the process of analyzing the data and will provide more information in a forthcoming report. ACTIV-3 is an adaptive master protocol, and NIAID will provide information on additional investigational agents being planned for evaluation and any potential changes to the trial design as testing of new agents begins.

The DSMB that oversees ACTIV-3 also oversees ACTIV-2, another adaptive trial evaluating LY-CoV555 in the outpatient population. The DSMB does not recommend any changes to ACTIV-2, and this study continues to enroll participants.

https://www.niaid.nih.gov/news-events/statement-nih-sponsored-activ-3-trial-closes-ly-cov555-sub-study

United States

New York City's coronavirus outbreak spread from more European sources than first reported Source: ScienceDaily

ID: 1008126000

Summary The COVID-19 pandemic started earlier than previously thought in New York City and Long Island by dozens of people infected mostly with strains from Europe. A new analysis also shows that most of the spread was within the community, as opposed to coming from people who had traveled. Led by NYU Grossman School of Medicine researchers, the new study used gene testing to trace the origins of SARS-CoV-2, the pandemic virus, throughout the New York City region in the spring.

New York City's coronavirus outbreak spread from more European sources than first reported Date:

NYU Langone Health / NYU School of Medicine Summary:

The COVID-19 pandemic started earlier than previously thought in New York City and Long Island by dozens of people infected mostly with strains from Europe. A new analysis also shows that most of the spread was within the community, as opposed to coming from people who had traveled. Share:

FULL STORY

The COVID-19 pandemic started earlier than previously thought in New York City and Long Island by dozens of people infected mostly with strains from Europe. A new analysis also shows that most of the spread was within the community, as opposed to coming from people who had traveled.

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Previous testing had detected the first case of the virus on March 3 before infections exploded throughout the metropolitan area, leading to 260,600 positive cases by mid-May.

Led by NYU Grossman School of Medicine researchers, the new study used gene testing to trace the origins of SARS-CoV-2, the pandemic virus, throughout the New York City region in the spring. It showed that the virus first took root in late February, seeded by at least 109 different sources that burst into chains of infection, rather than from a single "patient zero."

Notably, the study authors say, more than 40 percent of people who tested positive had no known contact with another infected person before they contracted the virus.

"Our findings show that New York's early screening test methods missed the onset and roots of the outbreak by several days at the minimum," says study co-lead author Matthew Maurano, PhD, an assistant professor in the Department of Pathology at NYU Langone Health. "The work strongly suggests that to nip future outbreaks in the bud, we need a system of rapid, plentiful real-time genetic surveillance as well as traditional epidemiologic indicators."

The investigators also found that more than 95 percent of New Yorkers with COVID-19 had a strain of the virus with a mutation that may make it easier to transmit to others. This finding, Maurano says, helps explain why the virus spread so aggressively in New York, even when accounting for the city's high population density.

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In gene sequencing, researchers compare small snips of genetic code to identify mutations that are only found in a particular strain of the virus. These "flags," Maurano says, can then be used to track how the strain has spread over time, similarly to tests used to trace ancestry in people. Experts have previously used this technique to follow outbreaks of influenza, methicillin-resistant Staphylococcus aureus (MRSA), and Ebola, among other infections.

The new study, published online Oct. 22 in the journal Genome Research, is the largest effort to date to trace the COVID-19 pandemic using gene sequencing, according to Maurano.

For the study, the researchers collected viral genetic information on 864 nasal swabs taken from New Yorkers who had tested positive for COVID-19 between March 12 and May 10. Most of the people were from Manhattan, Brooklyn, and Nassau County on Long Island. Then, the investigators compared the gene sequences of the virus from these samples to those seen in the original strain isolated last winter from patients in Wuhan, China, where the pandemic is believed to have begun.

The study revealed that the genetic codes of the virus in New York more closely matched those of strains from Europe or other U.S. states rather than those from China, where the virus originated. In addition, some of the early chains of infection from person to person ran at least 50 people long.

"Our gene sequencing techniques allowed us to evaluate the precision of our screening tests," says senior study author Adriana Heguy, PhD, a professor in the Department of Pathology at NYU Langone. "Based on these results, it is clear that we need a system of plentiful testing that provides rapid results." She notes that the sequences analyzed in the study accounted for just 10 percent of COVID-19 patients within a single hospital system in New York. The true scale of the community infection was therefore likely much higher, and the original introduction of the virus to New York City was possibly earlier.

Heguy says the team next plans to investigate whether the mutations uncovered by genetic testing could affect the coronavirus in other ways, such as causing new or more severe symptoms of COVID-19.

Funding for the study was provided by National Institutes of Health grants R35 GM119703, P50 CA016087, P30 CA016087, and UM1 AI148574. Additional support was provided by MRC Centre for Global Infectious Disease Analysis grant MR/R015600/1.

In addition to Maurano and Heguy, other NYU Langone researchers involved in the study are Sitharam Ramaswami, PhD; Paul Zappile; Dacia Dimartino, PhD; Ludovic Boytard, PhD; Andre? Ribeiro-dos-Santos, PhD; Nicholas Vulpescu; Gael Westby; Guomiao Shen; Xiaojun Feng, PhD; Megan Hogan, PhD; Christian Marier; Peter Meyn; Yutong Zhang; John Cadley; Raquel Ordon?ez, PhD; Raven Luther; Emily Huang; Emily Guzman; Carolina Arguelles-Grande; Kimon Argyropoulos, MD; Margaret Black, MD; Antonio Serrano, MD; Melissa Call, XX; Min Jae Kim, XX; Brendan Belovarac, MD; Tatyana Gindin, MD; Andrew Lytle, MD, PhD; Jared Pinnell, XX; Theodore Vougiouklakis, MD; John Chen, PhD; Lawrence Lin, MD, PhD; Amy Rapkiewicz, MD; Vanessa Raabe, MD; Marie I. Samanovic, PhD; George Jour, MD; Iman Osman, MD; Maria Aguero-Rosenfeld, MD; Mark Mulligan, MD; and Paolo Cotzia, MD. Matija Snuderl, MD, was a co-lead author on the study. Other research support was provided by Manon Ragonnet-Cronin, PhD; Lily Geidelberg, XX; and Erik Volz, PhD, at Imperial College London. make a difference: sponsored opportunity

https://www.sciencedaily.com/releases/2020/10/201026081449.htm

United States

Study suggests stay-at-home orders reduced COVID-19 infections and deaths Source: Medicalxpress. ID: 1008123728

New research on the impact of COVID-19 suggests that, in the complete absence of stay-at-home orders, the United States could have seen 220 percent higher rates of infection and a 22 percent higher fatality rate than if stay-at-home orders had been implemented nationwide.

The study, from researchers at the University of Alabama at Birmingham and published today in JAMA Network Open, analyzed daily state-level positive case rates against the presence or absence of statewide stay-at-home orders, or SAHOs. The team looked at the time period of March 1 to May 4, 2020, as SAHOs began to be implemented.

"During March and April, most states in the United States imposed shutdowns and enacted SAHOs in an effort to control the disease," said senior author Bisakha Sen, Ph.D., Blue Cross Blue Shield Endowed Chair in Health Economics, Department of Health Care Organization and Policy in the School of Public Health. "However, mixed messages from political authorities on the usefulness of SAHOs, popular pressure and concerns about the economic fallout led some states to lift the restrictions before public health experts considered it advisable."

Sen's team used data collected from the COVID Tracking Project, which was initiated by the magazine The Atlantic in partnership with Related Sciences. The project collates data from state health agencies and makes it publicly available. The sample included 3,023 data observations.

"Our results indicate that a scenario of no SAHOs over this time period would have resulted in 220 percent higher cumulative case rates and 22 percent higher cumulative fatality rates compared to if there had been full imposition of SAHOs," said Sangeetha Padalabalanarayanan, Department of Health Services Administration, School of Health Professions and co-first author of the study.

For purposes of the study, SAHOs were considered to be in effect when a state's governor issued an order for residents of the entire state to leave home only for essential activities, and when schools and nonessential businesses were closed. Seven states never imposed SAHOs, and 12 states lifted their SAHOs before the May 4 study cut off.

A second aim of the study was to see if the proportion of African Americans in a state was associated with the number of positive cases of COVID-19 in that state.

"Previous attempts to understand the extent of COVID-19 cases within the African American population had been done at a county level," said co-first author Vidya Sagar Hanumanthu, Department of Health Services Administration. "Our state-level analysis showed that there was an association between the African American population and COVID-19 cases statewide. This finding adds to evidence from existing studies using county-level data on racial disparities in COVID-19 infection rates and underlines the urgency of better understanding and addressing these disparities."

The findings underscore the importance of stay-at-home orders in addressing the COVID-19 pandemic and the need to address racial disparities in rates of infection.

"While the high economic cost makes SAHOs unsustainable as a long-term policy, our findings could help inform federal, state and local policymakers in weighing the costs and benefits of different short-term options to combat the pandemic," Sen said. "Our findings also emphasize the importance of understanding and addressing the drivers of racial disparities in COVID-19 outcomes as part of the overarching goal of improving health equity in the United States." Provided by University of Alabama at Birmingham

More information: Sangeetha Padalabalanarayanan et al. Association of State Stay-at-Home Orders and State-Level African American Population With COVID-19 Case Rates, JAMA Network Open (2020). DOI:

10.1001/jamanetworkopen.2020.26010 Journal information: JAMA Network Open https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2772155 https://medicalxpress.com/news/2020-10-stay-at-home-covid-infections-deaths.html

United Kingdom

Rule of six and pub curfew having 'zero effect' on slowing spread of Covid, study finds Source: mirror.co.uk ID: 1008126257

Summary A study conducted by the London School for Hygiene and Tropical Medicine found that a quarter of those asked had seen more people daily on average than before the rule of six was introduced Two thirds of the thousands of people they spoke to said the rule of six - designed to slow the spread of the coronavirus - had limited their social movements. Overall the rule of six had "zero effect" on the number of social contacts for the group as a whole, the study found.

26 OCT 2020

A study conducted by the London School for Hygiene and Tropical Medicine found that a quarter of those asked had seen more people daily on average than before the rule of six was introduced

Only one in three people have stopped meeting up with friends and family because of the rule of six.

An extensive study by scientists at the London School for Hygiene and Tropical Medicine unearthed widespread disregard for the government rules.

Two thirds of the thousands of people they spoke to said the rule of six - designed to slow the spread of the coronavirus - had limited their social movements.

A quarter admitted that they had actually seen more people on average every day since the rule came into force.

Overall the rule of six had "zero effect" on the number of social contacts for the group as a whole, the study found.

The 10pm curfew was also judged to be largely redundant by the scientists.

While it had made some people reduce their contacts, their efforts had been cancelled out by others increasing theirs.

If neither policy is stopping house-to-household mixing, then they are likely failing to slow the pace of the disease's spread.

Contrastingly, local lockdowns do seem to have had an impact on people's socialising.

On average measures introduced regionally, such as pub closures, have led people to reduce their social contacts by less than one each per day.

However, the full national lockdown which began in March reduced the average daily contacts from about 10.8 to 2.8.

We determine that the 'rule of six' and encouraging people to work from home has seen the average person reduce contacts but these reductions are likely small," part of the paper reads.

"There was little suggestion that the 10pm closure has affected the number of contacts that participants make outside home, work and school.

"In contrast to national restrictions, there was a strong suggestion that local restrictions reduced the number of contacts individuals make outside of work and school, though again, this effect was small in comparison to the national lockdown."

The rule of six was introduced in September in a bid to slow the rate of infections following the warmer summer months.

Anyone meeting up with more than five friends or family members anywhere, indoors or outdoors, can be dispersed by police or face a £100 fine.

The rules were met with scepticism from some scientists when they were introduced, with many suggesting they would not stop people socialising in a meaningful way. https://www.mirror.co.uk/news/uk-news/rule-six-pub-curfew-having-22910165

United Kingdom Studies show long-term COVID-19 immune response Source: cidrap.umn.edu ID: 1008126256

Oct 26, 2020

The durability of the immune response to SARS-CoV-2, the virus that causes COVID-19 is critical for understanding community outbreaks and serologic testing data, and to predict the longevity of vaccine protection. Two new studies demonstrate how severity of disease is predictive of longer-lasting antibody production and detail how immunity wanes over time but may exist for up to 7 months.

Severe disease and longer-lasting immune response

A UK study in Nature Microbiology today examined 65 individuals with polymerase chain reaction (PCR)confirmed SARS-CoV-2 infection and 31 seropositive healthcare workers (HCWs).

The study authors sampled patients—with symptoms ranging from asymptomatic to critical—for antibody responses in serum collected up to 94 days after symptom onset using enzyme-linked immunoassay.

More than 95% of patients showed seroconversion—the presence of detectable SARS-CoV-2 antibodies—and neutralizing antibodies in samples 8 days after symptom onset, but the magnitude of the neutralizing antibody response appears to depend on disease severity, with lower peak antibody levels in individuals exhibiting milder disease.

The researchers found that SARS-CoV-2 antibody response is typical of other acute viral infections, with an initial peak antibody response followed by declining levels. Immunoglobulin (Ig) A and IgM antibodies approached baseline levels in some patients by 60 days after symptom onset, with IgG remaining high in most patients up to 94 days after onset.

In some individuals with low initial levels of peak neutralizing antibodies (mean infectious dose [ID50], 100 to 300), antibodies were undetectable after 50 days, while some patients with high initial levels (ID50, 1,000 to 3,500) maintained neutralizing antibodies for more than 60 days after initial symptoms.

"In some individuals, SARS-CoV-2 infection generates only a transient neutralizing antibody response that rapidly wanes," the authors suggest. In contrast, antibody levels in patients with high initial levels (ID50 > 4,000) declined but remained in the 1,000 to 3,500 range through the end of the study period.

Antibodies up to 7 months after infection

Similar findings emerged from a Portuguese study last week in the European Journal of Immunology that examined antibody levels in more than 500 hospitalized patients, healthcare workers, and volunteers who had recovered from COVID-19. The researchers found that 90% of SARS-CoV-2–positive individuals had detectable antibodies from 40 days up to 7 months post-infection, with higher levels in patients with more severe disease.

The study also identified a rapid increase in antibody levels in the first 3 weeks after symptoms appeared. Although IgA and IgM antibody levels declined over time, the researchers found virus neutralizing activity and detectable IgG antibodies for at least 6 months after SARS-CoV-2 infection.

Men had higher antibody levels in the acute phase, but levels equilibrated between the sexes in the months following infection. No significant age-group differences were identified for antibody production.

"Although we observed a reduction in the levels of antibodies over time, the results of our neutralizing assays have shown a robust neutralisation activity for up to the seventh month post-infection in a large proportion of previously virus-positive screened subjects," explained lead author Marc Veldhoen, PhD, in an Instituto de Medicina Molecular, Lisbon, news release.

Most people infected with SARS-CoV-2 will have protective immunity against circulating viruses for many months after initial infection, the authors conclude.

https://www.cidrap.umn.edu/news-perspective/2020/10/studies-show-long-term-covid-19-immuneresponse

United Kingdom

Vaccine hopes rise as Oxford jab prompts immune response among old as well as young adults Source: Reuters

ID: 1008124035

LONDON (Reuters) - One of the world's leading COVID-19 experimental vaccines produces an immune response in both young and old adults, raising hopes of a path out of the gloom and economic destruction wrought by the novel coronavirus.

The vaccine, developed by the University of Oxford, also triggers lower adverse responses among the elderly, British drug maker AstraZeneca Plc, which is helping manufacture the vaccine, said on Monday.

A vaccine that works is seen as a game-changer in the battle against the novel coronavirus, which has killed more than 1.15 million people, shuttered swathes of the global economy and turned normal life upside down for billions of people.

"It is encouraging to see immunogenicity responses were similar between older and younger adults and that reactogenicity was lower in older adults, where the COVID-19 disease severity is higher," an AstraZeneca spokesman said.

"The results further build the body of evidence for the safety and immunogenicity of AZD1222," the spokesman said, referring to the technical name of the vaccine.

The Oxford/AstraZeneca vaccine is expected to be one of the first from big pharma to secure regulatory approval, along with Pfizer and BioNTech's candidate, as the world tries to plot a path out of the COVID-19 pandemic.

The news that older people get an immune response from the vaccine is positive because the immune system weakens with age and older people are those most at risk of dying from the virus.

If it works, a vaccine would allow the world to return to some measure of normality after the tumult of the pandemic.

British Health Secretary Matt Hancock said a vaccine was not yet ready but he was preparing logistics for a possible roll out mostly in the first half of 2021.

Asked if some people could receive a vaccine this year he told the BBC: "I don't rule that out but that is not my central expectation."

"The programme is progressing well, (but) we're not there yet," Hancock said.

COMMON COLD VIRUS

Work began on the Oxford vaccine in January. Called AZD1222 or ChAdOx1 nCoV-19, the viral vector vaccine is made from a weakened version of a common cold virus that causes infections in chimpanzees.

The chimpanzee cold virus has been genetically changed to include the genetic sequence of the so-called spike protein which the coronavirus uses to gain entry to human cells. The hope is that the human body will then attack the novel coronavirus if it sees it again.

Immunogenicity blood tests carried out on a subset of older participants echo data released in July which showed the vaccine generated "robust immune responses" in a group of healthy adults aged between 18 and 55, the Financial Times reported earlier.

Details of the finding are expected to be published shortly in a clinical journal, the FT said. It did not name the publication.

People aware of the results from so-called immunogenicity blood tests carried out on a subset of older participants say the findings echo data released in July that showed the vaccine generated "robust immune responses" in a group of healthy adults aged between 18 and 55.

AstraZeneca has signed several supply and manufacturing deals with companies and governments around the world as it gets closer to reporting early results of a late-stage clinical trial.

It resumed the U.S. trial of the experimental vaccine after approval by U.S. regulators, the company said on Friday.

Staff at a London hospital trust have been told to be ready to receive the first batches of the Oxford/AstraZeneca vaccine, The Sun newspaper reported on Monday.

https://www.reuters.com/article/us-health-coronavirus-astrazeneca-vaccin/vaccine-hopes-rise-as-oxford-jab-prompts-immune-response-among-old-as-well-as-young-adults-idUSKBN27B0IV

Domestic Events of Interest

Nil

International Events of Interest

Singapore

Singapore temporarily halts use of two flu vaccines after South Korea deaths Source: BusinessLine Online ID: 1008121766

Singapore, October 26 World

Korea has reported 48 deaths following flu shots

Singapore has temporarily halted the use of two influenza vaccines as a precaution after some people who received them in South Korea died, becoming among the first countries to publicly announce a halt of the vaccines' usage.

South Korea reported that 48 have died as of Saturday after getting flu shots, but said it would carry on with the state-run vaccination programme as they found no direct link between the deaths and the shots.

Also read: Death toll in South Korea rises; authorities claim 'no connection' with flu vaccine

No deaths associated with influenza vaccination have been reported in Singapore to date, but the decision to halt the use of SKYCellflu Quadrivalent and VaxigripTetra was precautionary, the health ministry and the Health Sciences Authority (HAS) said in a statement late on Sunday.

The HSA is in touch with the South Korean authorities for further information as they investigate to determine if the deaths are related to influenza vaccinations.

SKYCellflu Quadrivalent is manufactured by South Korea's SK Bioscience and locally distributed by AJ Biologics, while VaxigripTetra is manufactured by Sanofi and locally distributed by Sanofi Aventis.

Two other influenza vaccines that have been brought into Singapore for the Northern Hemisphere 2020/21 influenza season may continue to be used, Singapore health authorities said. <u>https://www.thehindubusinessline.com/news/world/singapore-temporarily-halts-use-of-two-flu-vaccines-after-south-korea-deaths/article32941399.ece</u>

South Korea (Update)

S. Korea urges people to get flu shots, trust its steps on health Source: Reuters ID: 1008122633

By Sangmi Cha

SEOUL, Oct 26 (Reuters) - South Korea sought on Monday to dispel concerns over the safety of its seasonal influenza vaccine, urging it on citizens in a bid to avert stress on a health system that is already grappling with the coronavirus.

Public anxiety over the safety of flu vaccine has surged after at least 59 people died this month following vaccinations, while last month about 5 million doses had to be disposed of as they were not stored at recommended temperatures.

Authorities have said they found no direct link between the deaths and the vaccines against flu, which kills at least 3,000 South Koreans each year.

"Do trust the health authorities' conclusion...reached after a review with experts," President Moon Jae-in said.

"There is a need to expand the influenza vaccination this year not only to prevent the flu, but also to ward off concurrent infection and spread of flu and COVID-19," he told a meeting.

Last year, more than 1,500 elderly people died within seven days of receiving flu vaccines, but those deaths were not linked to the vaccinations, the government said.

South Korea, which began free inoculations for the last eligible group on Monday, has ordered 20% more flu vaccines this year to banish the prospect of concurrent major outbreaks of flu and coronavirus in winter, which would strain its health system.

It said more than 14.7 million people have been inoculated.

About 1,200 instances of adverse reactions have been reported among them, but no direct link with vaccinations has been established, though 13 deaths are still being investigated.

The benefits of vaccination far outweigh any side effects, the health ministry has said.

Severe adverse reactions to the flu vaccines are rare, with just one in 500,000 or a million people suffering anaphylactic shock, a life-threatening condition typically brought on within seconds to minutes in those with an allergy, a top health

official told Monday's briefing.

No such case has been reported, the government said.

The southeast Asian city state of Singapore became one of the first nations this week to call a temporary halt to the use of two influenza vaccines, as a precaution, despite no reports of any deaths that could be linked.

South Korea said influenza infections dropped to 1.2 per 1,000 people in the week of Oct. 11 to 17, from 4.6 in the corresponding week a year ago. (Interactive graphic tracking global spread of coronavirus: https://graphics.reuters.com/world-coronavirus-tracker-and-maps/) https://uk.reuters.com/article/uk-health-coronavirus-southkorea-flushot/south-korea-urges-people-to-getflu-shots-trust-its-steps-on-health-idUKKBN27B08S

Researches, Policies and Guidelines

Canada

Hepatitis B: Ontario should vaccinate newborns for hepatitis B, study suggests Source: health.economictimes.indiatimes ID: 1008124700

Ontario: Not all pregnant women are universally screened for hepatitis B virus (HBV) in Ontario, even though this screening is recommended, and the majority of those who test positive do not receive followup testing or interventions, leading to infections of newborns, found new research.

The results of the research were published in CMAJ (Canadian Medical Association Journal).

An estimated 257 million people worldwide are chronically infected with HBV, which is a risk for cirrhosis of the liver and liver cancer.

The World Health Organization recommends that countries such as Canada provide the first vaccine against HBV in newborns at birth. However, only 3 provinces and territories vaccinate at birth, 5 vaccinate starting at 2 months of age, and 5 provinces, including Ontario, vaccinate schoolchildren in grades 6 and 7.

"One rationale for not vaccinating at birth is that universal prenatal screening and related interventions prevent transmission from mother to baby," explains Dr Jordan Feld, a liver specialist at the Toronto Centre for Liver Disease, University Health Network, and the University of Toronto. "However, our study shows that screening is imperfect and that children born in Canada are becoming infected with hepatitis B before getting vaccinated as teenagers. That is why we should reconsider our current vaccination strategy in Ontario."

To understand the uptake of prenatal HBV screening in Ontario and determine the number of HBV infections in children before adolescent vaccination in the province, researchers analyzed data from ICES, Public Health Ontario and Better Outcomes & Registry Network (BORN) Ontario between 2003 and 2013. In children under 12 years of age, 139 Canadian-born children tested positive for HBV. This represents a minimum number of infections in Canadian-born children, because most children are never tested, and the infection has few or no symptoms early in life. These infections could have been prevented by vaccination at birth. Once the infection is established in a newborn, it is usually lifelong, requiring close follow-up, and puts people at risk of complications.

"Canadian guidelines recommend changes to provincial hepatitis B immunization strategies if women are not screened universally and/or children become infected. We have met this threshold, and a change is needed," explains Dr Mia Biondi, a primary care nurse practitioner in the community, and researcher at the Toronto Centre for Liver Disease. "Infant hepatitis B vaccination could be seamlessly integrated into primary care in line with well-baby visits and other vaccinations. It's a simple solution." The authors recommend that Ontario move to HBV vaccination at birth and improve existing systems to ensure that all women are screened for HBV during pregnancy. If the test is positive, they should receive follow-up to prevent spread and ensure they receive appropriate HPV care. https://health.economictimes.indiatimes.com/news/diagnostics/ontario-should-vaccinate-newborns-for-

https://health.economictimes.indiatimes.com/news/diagnostics/ontario-should-vaccinate-newborns-for hepatitis-b-study-suggests/78871189

Canada

Addressing the intersection between COVID-19 and young people vaping: timely resources needed | CMAJ

Source: CMAJ ID: 1008123816

Gagnon's article1 highlights the urgent need for resources to be created so that health care professionals can have discussions with their young patients about vaping. No validated screening tools exist to discuss vaping with young patients, and almost one-third of Canadian pediatricians find it challenging to discuss vaping with patients and their family members.1 Thus, it is clear that health care professionals lack sufficient knowledge and adequate resources when supporting young patients who vape. Also, there are no Canadian guidelines available to guide clinicians' clinical decision-making on vaping; the only available guideline recommendations concluded that "[t]here is no conclusive evidence on the potential harmful effects of e-cigarettes or whether they can be used in smoking cessation interventions for either adults or youth."

Recent research shows a strong association between coronavirus disease 2019 (COVID-19) diagnosis and a history of e-cigarette use in young people.3 Therefore, it is of utmost importance that clinical guidelines and evidence-based tools are created quickly to empower health care professionals and facilitate conversation in clinical encounters on the value of nicotine-free lifestyles for our younger generation, given that both COVID-19 and vaping affect the lungs. The most recent position paper on ecigarettes, published in the European Journal of Preventive Cardiology,4 encourages public campaigns to raise awareness of vaping's adverse effects and prevent initiation of vaping, and advises that health professionals inform their patients and the general public about the possible adverse health risks of ecigarette smoking.

Unsurprisingly, the e-cigarette industry appears to have taken advantage of the COVID-19 pandemic to aggressively market its products.5 Marketing strategies include providing pandemic-related discounts, asserting health claims and assuring consumers that e-cigarette products will not transmit severe acute respiratory syndrome coronavirus 2.5 Such marketing may appear attractive to young people and encourage them to vape.

Physicians urgently need to be educated about the risks of vaping, which requires investment in the creation of suitable Canadian clinical guideline resources. In the meantime, Canadian health care professionals should consider using the US National Institute of Drug Abuse Screening to Brief Intervention tool (S2BI) or the Brief Screener for Tobacco, Alcohol, and other Drugs (BSTAD) tool among adolescent patients.6 These tools take less than 2 minutes to administer and were validated with adolescent populations.6 These tools also offer guidance regarding next steps to support pediatric patients.6

Additionally, the Centers for Disease Control and Prevention has an excellent resource that supports health care professionals in starting conversations on vaping.7 This resource encourages practitioners to empathetically communicate in a nonjudgmental manner and ask all patients about vaping use, recommending that parents be asked to leave the room to facilitate discussions with minors.7 This tool provides guidance on asking questions on vaping using a "what, how and where" framework.7 https://www.cmaj.ca/content/192/43/E1310?rss=1

United States

Sustainability of antibiotic stewardship programs in nursing homes Source: cambridge.org ID: 1008126155

Summary Using a qualitative descriptive design, semistructured interviews with staff at 9 not-for-profit nursing homes with an established ASP were conducted and audio recorded. To describe nursing home

staff experiences and perceptions of the factors that impact the sustainability of an antibiotic stewardship program (ASP). De-identified transcriptions of the interviews were coded using a sustainability framework and were analyzed to identify themes.

Abstract

Objective:

To describe nursing home staff experiences and perceptions of the factors that impact the sustainability of an antibiotic stewardship program (ASP).

Methods:

Using a qualitative descriptive design, semistructured interviews with staff at 9 not-for-profit nursing homes with an established ASP were conducted and audio recorded. De-identified transcriptions of the interviews were coded using a sustainability framework and were analyzed to identify themes.

Results:

Interviews were conducted with 48 clinical and administrative staff to elicit their perceptions of the ASPs, and 7 themes were identified. ASPs were perceived to be resource intensive and "data driven," requiring access to and interpretation of data that are not readily available at many nursing homes. Though motivated and committed, ASP champions felt that they could not single-handedly sustain the program. Attending to daily clinical needs (ie, "fires") made it hard to progress beyond implementation and to reach step 2 of sustainability. Longstanding treatment habits by external prescribers and regulations were believed to impede ASP efforts. Partnerships with an external consultant with antibiotic stewardship expertise were considered important, as was the need for internal leadership support and collaboration across disciplinary boundaries. Participants felt that consistent and ongoing education on antibiotic stewardship at all staff levels was important.

Conclusions:

Although many interconnected factors impact the sustainability of an ASP, nursing homes may be able to sustain an ASP by focusing on 3 critical areas: (1) explicit support by nursing home leadership, (2) external partnerships with professionals with antibiotic stewardship expertise and internal interprofessional collaborations, and (3) consistent education and training for all staff. https://www.cambridge.org/core/journals/infection-control-and-hospital-epidemiology/article/there-is-no-one-to-pick-up-the-pieces-sustainability-of-antibiotic-stewardship-programs-in-nursing-homes/0DEBCCA57A5A7CC158D0C4BDBFEA0A50