Executive Summary: COVID-19
29 JULY 2020

Authors
Dr Doug Quarry
Professor Oxford is on vacation

The Executive Summary is produced weekly and contains in-depth analysis.

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WE CAN'T KEEP THE BORDERS SHUT FOREVER

Dr Tedros Adhanom Ghebreyesus (WHO Director General)

“Bans on international travel cannot stay in place indefinitely, and countries are going to have to do more to reduce the spread of the novel coronavirus within their borders.

“Only with strict adherence to health measures, from wearing masks to avoiding crowds, would the world manage to beat the COVID-19 pandemic.

"Where these measures are followed, cases go down. Where they are not, cases go up," he said, praising Canada, China, Germany and South Korea for controlling outbreaks.

Dr, Mike Ryan (Executive Director of the World Health Organization's Health Emergencies Programme)

"It is going to be almost impossible for individual countries to keep their borders shut for the foreseeable future. Economies have to open up, people have to work, trade has to resume.

"What is clear is pressure on the virus pushes the numbers down. Release that pressure and cases creep back up."

ONE BIG WAVE

Dr Margaret Harris has said that WHO officials have been at pains to avoid describing a resurgence of COVID-19 cases like those in Hong Kong as "waves" as this suggests the virus is behaving in ways beyond human control, when in fact concerted action can slow its spread.

"We are in the first wave. It's going to be one big wave. It's going to go up and down a bit. The best thing is to flatten it and turn it into just something lapping at your feet," she said.

Pointing to high case numbers at the height of the US summer, she urged vigilance in applying measures and warned against mass gatherings.

"People are still thinking about seasons. What we all need to get our heads around is this is a new virus and... this one is behaving differently," she said. "Summer is a problem. This virus likes all weather."
EASING UP IS HARD TO DO

Europe scrambles to avoid a second coronavirus wave, as infections rise

Several European countries that had their coronavirus outbreaks under control have begun to see a rise in cases.

Governments are urging their citizens to be more vigilant amid the lure of summer gatherings and vacations, while health officials warn that lax public attitudes are putting the continent on a dangerous trajectory.

Spain

<table>
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- Over the last 14 days, nearly 8,000 cases have been diagnosed in Catalonia (1/2 of Spanish total)
- Clusters traced to bars and clubs and seasonal fruit and vegetable pickers, whose poor living and working conditions often make social distancing difficult
- Some young people are holding botellones (drinking parties) in the streets

Comments and Restrictions

The Catalan Government has:
- Closed all nightclubs for two weeks
- Placed a midnight curfew on bars in and around Barcelona and Lleida
- Advised people in Barcelona to stay at home (but many are still going to the beach)

Masks must now be worn in Madrid

Britain has introduced a 14-day quarantine for travellers arriving from Spain
Belgium

Population: 11.5 million

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- 71% increase in the seven-day average number of infections in Belgium between 17 July and 23 July

Changes to restrictions:

- Government is warning of second complete lockdown
- Recommend no holiday travel to Barcelona and districts and beaches nearby
- In Antwerp, everyone over 12 must wear a mask in public
- Belgium is building 10-week supply of masks
- Prime Minister “very strongly” recommended return to work from home for those who can
- People must shop alone and limit time to 30 minutes in a shop
- Group outings limited to five people

France

Population: 65.2 million

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- French must wear masks when in indoor public spaces (supermarkets, banks, post offices, etc.)
- Fine: €135

Comments and Restrictions

The French Health Minister has urged young people to maintain coronavirus safety measures including keeping their distance, washing hands and wearing masks, particularly in Paris. He said that mass testing is showing many more young people positive than in the previous wave. The President of the French GPs Union said “There’s everything at risk in the next three weeks because we’re entering the dangerous period.”
Germany

Population: 83.7 million

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- “People are being infected everywhere,” said Ute Rexroth, head of surveillance at Germany’s Robert Koch Institute, “Weddings, meetings with friends, sadly, also nursing homes or health institutes.

Changes to restrictions:

- People “urged” to wear masks indoors and for the first time outdoors, to respect social distancing and hygiene rules.

Austria

Population: 9 million

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Changes to restrictions:

- Reintroduced:
  - Must wear masks when in indoor spaces in public spaces (supermarkets, banks, post offices)
- Continue:
  - Wearing masks on public transport, doctor’s appointments, hairdressers
  - Churches closed if +ve case
Hong Kong

Population: 7.5 million

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- Hong Kong has very strict restrictions despite only having 145 cases in the last 24 hours cases for its 7.5 million people

Comments and Restrictions

- Restaurants closed
- Group gatherings limited to two
- Pools and sports venues closed
- Mandatory mask wearing in public / including jogging
- Urging public to stay at home as much as possible

Japan

Population: 126.5 million

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- Recent surge in major prefectures

Comments and Restrictions

- The Governor of Tokyo is urging residents to stay at home and avoid all nonessential travel
- Debate beginning about asking businesses to close again
- A robot vaguely resembling a kangaroo will begin stacking sandwiches, drinks and ready-made meals on shelves at a Japanese convenience store in August!
Vietnam

Population: 97.5 million

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- 25 July: Four cases detected in Danang, a tourist hotspot
- They were the first cases detected in Vietnam for over three months
- 29 July: Eight more locally transmitted cases detected
- 29 July: one case has been identified in Hanoi

Comments and Restrictions

In Danang:
- All flights and train services to and from Danang suspended
- 80,000 people are being evacuated – many of them local tourists
- Social distancing reintroduced
- All religious, sporting and cultural events suspended
- Masks compulsory / outdoor social gatherings limited to 30 people
- Police are arresting and charging people with bringing people into the Vietnam illegally

Australia

Population: 25.5 million

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- In mid-June, all Australian states and territories had virtually suppressed transmission
- The vast majority of new cases in Australia are in the state of Victoria. A breach in the security of returned travellers in quarantine started the new outbreak, which is proving hard to control
- Many cases in aged-care facilities
- In Sydney, clusters related to the Melbourne outbreak are increasing

Comments and Restrictions

- Melbourne and adjacent Mitchell Shire are half-way through a six-week lockdown – cases may have plateaued
- On 19 July people in Melbourne told to wear masks when outside. Fine $200
- Victorians must not travel outside the state
- State of Emergency extended until 16 August
- 29 July: Queensland closes border to all travellers from the Sydney Metropolitan area
A BOOSTER ON THE COVID-19 VACCINE RACE

30,000 AMERICANS PARTICIPATE IN LATE-STAGE MODERNA VACCINE TRIAL

The study, a Phase 3 clinical trial, will enroll 30,000 healthy people at about 89 sites around the country this northern summer. Half will receive two shots of the vaccine, 28 days apart, and half will receive two shots of a saltwater placebo. Neither the volunteers nor the medical staff giving the injections will know who will get the real vaccine. The results may be available by November.

RUSSIA PREPARES FOR WORLD'S FIRST APPROVAL OF A COVID-19 VACCINE BY MID-AUGUST

Russia intends to approve a coronavirus vaccine created by the Moscow-based Gamaleya Institute by 10 August. Frontline healthcare workers will receive the vaccine first.

"It's a Sputnik moment," said Kirill Dmitriev, head of Russia's sovereign wealth fund, which is financing Russian vaccine research, referring to the successful 1957 launch of the world's first satellite by the Soviet Union. "Americans were surprised when they heard Sputnik's beeping. It's the same with this vaccine. Russia will have got there first," he added.

Russia has released no scientific data on its vaccine testing. Apparently it has been in Phase II trials using volunteer soldiers.

PHASE III TESTING HAS BEGUN IN BRAZIL

Vaccine leaders Oxford/AstraZenica and Sinovac have begun Phase III testing in Sao Paulo. Pfizer/BioNTech plans to do so soon.

MODERNA LOSES CHALLENGE TO ARBUTUS PATENT ON VACCINE TECHNOLOGY

Reuters reports that Moderna has lost a bid to invalidate a U.S. patent owned by Arbutus Biopharma that poses a potential obstacle to Moderna's efforts to develop a coronavirus vaccine.

“The 1969 patent relates to lipid nanoparticle (LNP) technology that allows the human body to make its own therapeutic proteins.

“LNP technology is crucial to Moderna's vaccine development efforts, and the patent ruling could increase pressure on the Cambridge, Massachusetts-based firm to pay for a license to Arbutus' patent portfolio, said Zachary Silbersher, a patent lawyer in New York not involved in the case.”

MODERNA VACCINE PROTECTS 16 MONKEYS FROM VIRUS

Moderna has reported in the New England Journal of Medicine that its vaccine candidate (mRNA-1273) protected against the virus in a trial that inoculated 16 monkeys. Two injections of the vaccine protected against heavy exposure to the virus at two different levels of dosage. The vaccine induced robust SARS-CoV-2 neutralizing activity, rapid protection in the upper and lower airways, and no pathologic changes in the lung.

VACCINE THAT CAN BE PRODUCED USING INFLUENZA VACCINE PRODUCTION INFRASTRUCTURE

A non-peer reviewed paper has just been posted on the pre-print server bioRxiv describing a SARS-CoV-2 vaccine that can use the existing egg-based influenza virus vaccine manufactures in the U.S. and worldwide. It would have the capacity to rapidly produce hundreds of millions of doses. Funding and partners are still needed.
INDIA BEGINS FIRST HUMAN VACCINE TRIALS

India has begun its first human trials of a novel coronavirus vaccine candidate. The All India Institute of Medical Sciences, a premier teaching hospital in the capital of New Delhi, says it has administered the first doses of a trial COVID-19 vaccine, “Covaxin”, last week. AIIMS is among the 12 sites selected by the Indian Council for Medical Research for conducting the two-phase randomised, double-blind, placebo-controlled clinical trials of Covaxin.

OTHER OUTBREAKS

TAIWAN INVESTIGATES FIRST LOCAL CORONAVIRUS CASE IN A MONTH

On 28 July Taiwan was investigating its first possible local coronavirus infection in more than a month. The possible case was a Thai man who tested positive last week. The migrant worker arrived on the island in January and tested positive on 25 July, shortly after returning to Thailand. More than 180 people who had contact with him in Taiwan have undergone health screenings.

Taiwan’s early and proactive response to the pandemic has limited their infections to 467 infections and seven deaths. Most of the cases have been imported and have recovered.

Taiwan also reported five new coronavirus cases on Tuesday, all imported and marking the biggest daily rise in infections since mid-April. The new cases were people who had returned to Taiwan from the Philippines and Hong Kong.

CHINA: OUTBREAKS IN DALIAN AND FUJAN PROVINCES

China reported 101 new COVID-19 cases on 28 July, the highest since April.

Of the 101 new cases, 89 were reported from Urumqi, the capital of the Xinjiang Uyghur Autonomous Region, and three were imported. Three cases have been reported in Beijing, which had had 20 days of zero infections since the June cluster.

An outbreak in the northeastern city of Dalian, capital of the Liaoning province, has spilt over to eight cities in four provinces. The outbreak in Dalian was initially linked to a seafood processing centre.

ROMANIA

Romania has recorded more than 1,000 new cases for the seventh day in a row.
KOSOVO

Kosovo reported a record rise of almost 300 new infections on Tuesday, and its public health officials have warned that hospitals and health workers are overwhelmed by the number of cases.

SERBIA, ALBANIA, NORTH MACEDONIA & BULGARIA are also struggling to contain outbreaks.

WHAT’S HAPPENING IN TEXAS, FLORIDA AND ARIZONA, AND THE US GENERALLY?

Coronavirus outbreaks in Arizona, Florida and Texas appear to be slowing as more people practice social distancing, start to wear masks, and the states halt reopening plans.
The number of new COVID-19 cases across the U.S. has fallen slightly.
DISINFORMATION

SCIENCE ALONE CANNOT BEAT THE PANDEMIC. WE NEED OUTREACH ABOUT A COVID-19 VACCINE

Statnews.com - 27 July 2020: “Americans anxiously await two key benefits that a COVID-19 vaccine will deliver: freedom from fear and a return to normal.

“No single vaccine is likely to offer a panacea for this pandemic. And even if it did, it might not accomplish its job if we don’t deal with hesitance to get vaccinated and counter vaccine disinformation. By failing to do these things, we risk a perpetual cycle of infectious disease coupled with persistent economic decline.

“Now is the time to make sure that all residents of the U.S. understand the value of a COVID-19 vaccine and the necessity of getting one.”

TWO RECENT (AND FAMOUS) VIDEOS FEATURING U.S PHYSICIANS WORTH WATCHING

Dr. Stella Immanuel from Texas

American doctors address COVID-19 misinformation at a press conference

ARTICLE / JOURNAL / TWITTER ROUNDUP

DR. FAUCI WARNS THE CORONAVIRUS WON’T EVER BE ERADICATED

“I think with a combination of good public health measures, a degree of global herd immunity and a good vaccine, which I do hope and feel cautiously optimistic that we will get, I think when we put all three of those together, we will get control of this, whether it’s this year or next year. I’m not certain,” he said. But, “I don’t really see us eradicating it.”

CRP TEST PINPOINTS WHICH COVID PATIENTS SHOULD GET STEROIDS

Journal of Hospital Medicine: In patients with high levels of inflammation — at least 20 mg/dL — steroid treatment was associated with a 77% reduction in the risk of needing mechanical ventilation or dying (odds ratio [OR], 0.23).

Importantly, treating with steroids when CRP levels were less than 10 mg/dL was associated with an almost threefold increased risk of going on mechanical ventilation or dying (OR, 2.64).

THE US AND INDIA – ONLY COUNTRIES WITH SIGNIFICANT ASCENDING FATALITY CURVES
CYPRUS TESTING CONUNDRUM

Four new cases announced on Sunday relate to two returning travellers who "had tests carried at the airport which were negative. They later took a test through a private lab, both of which came back positive."

PPIs APPEAR TO INCREASE THE RISK OF CONTRACTING COVID-19

Patients taking PPIs are more likely to be diagnosed with COVID-19 than the general population, a study of 90,000 Americans has found. The study, based on an online survey conducted from May to June, found once-daily PPI treatment was associated with a 115% increased risk of a COVID-19 diagnosis. Patients on twice-daily PPIs had a threefold increased risk of having COVID-19.

SWISS OUTBREAK AND FACE SHIELDS

Health officials in Graubünden studying an outbreak among staff at a hotel found all of those who were infected wore plastic face shields, while those who avoided infection wore face masks. Makes sense.

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