Previous Epi Week: July 26th – August 1st 2020

Over 17.6 million cases confirmed and reported, with over 680 thousand deaths reported to date (unofficially over 18.2 million cases and over 692 thousand deaths, over 6 million active cases and over 11.4 million recovered). Mexico, India and Brazil are reporting the highest daily increases in deaths, India, the United States, Brazil, and Colombia are reporting the highest daily increases in new cases. Global incidence continues to rise.

Weekly cases per 1 million population (WHO), IFRC Membership Operational updates available on the Go platform

News/ Political Context

- Daily confirmed deaths increasing most rapidly in Zimbabwe, Lesotho, Costa Rica, Gambia, Namibia, Kazakhstan, Eswazi.
- Cases doubling rapidly in Papua New Guinea (7 days), Gambia (8 days), The Bahamas (9 days), Zimbabwe (11 days), Zambia (13 days).
- North Korea announced the country’s first suspected case, someone theoretically returning from South Korea with symptoms.
- Resurgence in COVID-19 cases being reported in Australia, Belgium, China, Japan, the Netherlands, and Spain. However, no country currently reporting more than 250 new cases per day per 1 million population.

1 Official numbers and WHO visualizations available here
2 https://ourworldindata.org/coronavirus
3 Reference to ECDC data using https://ourworldindata.org/coronavirus
• First reports of locally acquired COVID-19 reported in Vietnam in 100 days, primarily seeing some transmission among domestic tourists.
• South Africa daily incidence appears to have leveled off this week, causing the number of confirmed cases in the region to decrease, while reports from local hospitals across Africa are reporting of hospitals reaching capacity with patients.
• Amazon river in Brazil especially hard hit by the coronavirus, cities and towns along the river reporting the highest deaths per capita in the country, taking an especially high toll among indigenous populations (Indigenous people are 6x more likely to be infected by SARS-CoV-2 than white people)
• India’s incidence almost doubled since beginning of July and is increasing rapidly
• United States daily deaths continue to be over 1,000. Hotspots in the US continue to be in California, Florida, New York and Texas.
  o Call for reporting of COVID-19 cases to return to CDC (recently White House order to switch reporting directly to executive task force for COVID-19)
• WHO established Help Desks for countries seeking guidance on how to set up new screening, quarantine and treatment centers for COVID-19

Modeling
• Simulation model to examine the effects of different quarantine strategies to reduce onwards transmission of COVID-19 from travelers (to UK based model):
  o Quarantine period of 8 days on arrival with negative PCR on day 7 found to have a similar effect as 14 day quarantine period (reduction of introduction to community of COVID-19 by 94% compared to no actions).
  o All scenarios where people spent at least 5 days in quarantine with 1 negative PCR test show reduction in transmission potential (88%)
  o On arrival, transmission risk is highest among asymptomatic infections
• Projections for the reproductive number and deaths [ICL weekly projections] Assuming the underlying CFR 1.38% forecasting for the upcoming week (from 19th July) based on 53 countries are below:

Current estimates for the effective reproductive number ($R_t$) shown above.

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4 New York Times 25 July 2020
5 Johns Hopkins Center for Health Security
6 WHO Sit Rep #192
7 BMJ 31 July 2020
Countries to watch this week: Kosovo, Romania, Ukraine, India, Indonesia, Iran, Isreal, Morocco, Kenya, South Africa, Senegal, Mexico, Honduras, Argentina, Colombia, and Brazil (no particular order).

- Modeling for US timelines and policy changes by state available [here](#).

### Recent Research/ Evidence

- Several studies have demonstrated that increases in SARS-CoV-2 RNA can be detected in **environmental samples** several days before detection of COVID-19 through clinical surveillance. Due to the challenge of high sampling requirements, it is suggested to consider pool sampling for at risk populations or mass gatherings. More research is needed virus shedding dynamics.⁸
- Recent evidence shows antibody loss for SARS-CoV-2 is quicker than reported for SARS-CoV-1, raising concerns about immunity for SARS-CoV-2 among infected with mild illness may not be long-lasting. This also raises questions of the validity of ‘immunity passports,’ herd immunity and potentially vaccine durability.⁹
- **COVID-19** can result in prolonged illness, even among young adults without underlying chronic medical conditions, 26% of interviewees aged 18–34 years, 32% aged 35–49 years, and 47% aged ≥50 years reported not having returned to their usual state of health within 14–21 days after receiving a positive test result.¹⁰
- Investigation of an **outbreak of 260 positive COVID-19 at a summer camp** in Georgia USA showed an overall attack rate of COVID-19 infection at the camp was 44% (out of the 58% of attendees where test results were available, 76% tested positive for COVID-19). The median camper age was 12 years old, and median staff age was 17; by age attack rates were reported as follows: 51% among campers 6-10 years old, 33% for 11-17 years, 33% for 18-21 year-olds, increasing with length of stay at the camp.
  - For those where symptoms were available (only 136 of the 260 who tested positive), 26% reported no symptoms, among the 100 who reported symptoms, fever was the most common (65%), headache (61%), and sore throat (46%).
  - Asymptomatic spread likely played an important role in transmission
  - Camp precautions included staff wearing masks (campers did not) and cohort-ing among cabins of 10-15 campers. Windows were not kept open in all spaces.¹¹
- In a prospective observational cohort study in the US and UK found that **risk of COVID-19 infection is elevated among frontline health care workers**. Adequacy of PPE, clinical setting and ethnic backgrounds were all important risk factors.¹²
- Evidence compiled by Johns Hopkins (monthly) on evidence related to Maternal and Child Health and Nutrition in relation to COVID-19. Resources can be found [here](#).

### Humanitarian Impacts

- Call for action to prevent high levels of childhood malnutrition which is threatened downstream of the COVID-19 pandemic. 5 steps have been listed¹³:
  - Safeguard and promote access to nutritious, safe, and affordable diets
  - Invest in improving maternal and child nutrition through pregnancy, infancy, and early childhood
  - Re-activate and scale up services for the early detection and treatment of child wasting
  - Maintain the provision of nutritious and safe school meals for vulnerable children
  - Expand social protection to safeguard access to nutritious diets and essential services

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⁸ [WHO: Status of environmental surveillance for SARS-CoV-2 virus](#)
¹¹ [MMWR 31 July 2020](#)
¹² [Lancet Public Health 31 July 2020](#)
¹³ [The Lancet 27 July 2020](#)
- Routine vaccination rates have plummeted in Somalia, by end of June 108,000 children under one year of age estimated to miss their first vaccine dose for measles\textsuperscript{14}

**Clinical Trials**
- A 2-dose candidate SARS-CoV-2 vaccine developed by Moderna, Inc. and the US National Institute of Allergy and Infectious Diseases (NIAID), mRNA-1273, will begin Phase 3 clinical trials this week.\textsuperscript{15}

**Guidance Launched or Highlighted This week**
- Weekly update (official) based on locations with highest case increases – last updated: WHO SitRep \#193
  - WHO: Considerations for implementing mass treatment, active case-finding and population-based surveys for neglected tropical diseases in the context of the COVID-19 pandemic
  - WHO: Safe Eid al Adha practices in the context of COVID-19: Interim guidance
  - Resources and tools on the re-opening of schools developed by CDC for US
  - WHO: Water, sanitation, hygiene, and waste management for SARS-CoV-2, the virus that causes COVID-19
  - WHO: Public health considerations while resuming international travel
  - Target products profiles for COVID-19 therapeutics for hospitalized patients outlined by WHO

**Useful Sources**
- Some additional sources – such as specific journal articles are shared as a foot note and saved to the “Evidence” folder in Teams.
- ALNAP launched COVID-19 response portal
- BMJ COVID-19 resources
- European Centre for Disease Prevention and Control
- End Coronavirus Visualizations
- Global Health 5050 Sex desegregated data
- Health Map
- Imperial College of London
- ISARIC COVID-19 resources
- Johns Hopkins Center for Health Security and CSSE
- Humanitarian platform for COVID-19
- The Lancet
- LSHTM COVID-19 mapping tool
- New England Journal of Medicine
- Next Strain (Phylogeny of SARS-CoV-2)
- Our world in Data
- PLOS COVID-19
- ProMed
- WHO
- WHO Technical Guidance for COVID-19
- MobLabs
- MobLabs Domestic and international risk of importing a case
- World Meters

\textsuperscript{14} WHO
\textsuperscript{15} Johns Hopkins Center for Global Health Security