COVID-19 Weekly Update December 6-12

The weekly COVID-19 updates will be becoming **bi-weekly updates next week, December 13-26**th (Epi weeks 52 & 53 of 2020) and will continue as **bi-weekly into the 2021** year. The updates will contain epidemic trends over a two-week period as well as emerging evidence released through that period. In 2021 the COVID-19 updates will also be complemented with a more extensive list of external resources and links for epidemic trends analysis, risk, and evidence to use on the Health Help Desk (many of which are located at the end of this document).

Please reach out to <u>Rachel.goodermote@ifrc.org</u> if you have any questions or concerns.

Over 70.2 million cases confirmed and reported, with over 1.5 million deaths reported to date (unofficially over 72.2 million cases and over 1.6 million deaths, over 19.9 million active cases and over 50.6 million recovered). The US, Italy, Mexico, are reporting the highest daily incidences in death in the last 24 hours. The United States, Brazil, Turkey, India, Germany, Russia, the UK, Italy, France, Poland, Ukraine, Mexico, reporting the highest daily increases, all reporting above 10,000 newly confirmed cases in the past 24 hours.¹ Global acceleration of new cases has slowed, but new deaths continues to rise (by 3.6%) for the seventh week in a row. The region of the Americas accounts for nearly ½ of all new cases globally, with the region seeing the highest percent increase in both cases and deaths of all regions in the last week. Africa is also reporting an increase I newly reported cases. Situation by WHO Region



Above: Confirmed weekly deaths by region (WHO)

Geographic distribution of 14-day cumulative number of reported COVID-19 cases per 100 000 population, worldwide, as of 13 December 2020



Note: Upper left (ECDC) map changed scale for shading compared to the previous week to give more definition to the many countries reporting exceptionally high caseloads.

News / Political Context

- Countries with **highest reported new cases**
 - per 1 million daily increases (Dec 12th)²:
 - 1. Lithuania: 1,213
 - 2. Croatia: 1,007
 - 3. Georgia: 979
 - 4. Cyprus: 944
 - 5. Slovenia: 839

- Countries with highest reported new deaths per 1 million (Dec 12th)
 - 1. San Marino: 29.5
 - 2. Slovenia: 20.7
 - 3. Croatia: 19.0
 - 4. Belize: 17.6
 - 5. Hungary: 16.8
- Test positivity is highest in North Macedonia (39%), Bulgaria (38%), Argentina (38%), Serbia (37%), Oman (36%).
- Daily confirmed deaths doubling most rapidly in Greece, Lithuania, Latvia, Lichtenstein.³
- Cases doubling rapidly in Turkey, Serbia, Lithuania, Uruguay, Latvia.⁴
- US CDC like several other countries have <u>adjusted quarantine time</u> depending on a number of factors, including if no symptoms are experienced after exposure quarantine can be reduced to 10 days (rather than 14) and reduced to 7 days if a negative test is returned within 48 hours.
- **Zoonosis:** USDA National Veterinary laboratory services has confirmed SARS-CoV-2 sequence from a nasal swab collected from a free-ranging, wild mink sampled in Utah state. This is the first free-range wild animal confirmed with SARS-CoV-2. There is currently no further evidence (following further sampling)

 $^{^{\}rm 1}$ Official numbers and WHO visualizations available $\underline{\rm here}$

² Our World in Data Incidence

³ <u>https://ourworldindata.org/coronavirus</u>

⁴ Reference to ECDC data using <u>https://ourworldindata.org/coronavirus</u>

that the virus has spread among animal populations surrounding the free-range farm (the strain identified has been the same as what has been found in farms, i.e., no change).

• Africa Region

- Africa experienced a 9% increase in new cases from the previous week. South Africa represents the majority of new cases in the region (48%). The highest number of new cases has been South Africa, Kenya, Ethiopia, and Uganda.
- Over the past month Kenya has reported the highest incidence and deaths to COVID-19 with a slight decrease in the past week.
- Nigeria has seen a 46% increase in incidence in the past week, and an increase in test positivity among in-bound international travel.

Americas Region

- The region experienced a 12% increase in cases and 18% increase in deaths compared to the previous week. The highest number of new cases in the region are in USA, Brazil, Mexico, Colombia, and Argentina.
- \circ ~ The US represents the highest number of new cases (68%) in the region:
 - Reported 219,187 new cases on December 3rd, and now reporting an average of 200,000 new cases per day
 - The US represents One third of all global COVID-19 cases and One Fifth of global deaths, with an anticipated 1 death per 1,000 people in the upcoming week.

Increasing incidence in the US

- 1 million to 5 million- 200 days
- 5 to 10 million- 44 days
- 10 to 15 million- 29 days
- Brazil has seen an increased incidence of 35% in the past week
- Mexico is seeing the highest number of cases since the beginning of the pandemic
- Canada has seen a 13% increase in cases compared to the previous week and a 7% increase in deaths

MENA Region

- New cases and deaths have declined for two weeks in a row (by 2% and 12% respectively). The highest number of cases were reported from Iran, Morocco, Jordan, Pakistan, and Iraq.
- \circ $\;$ Egypt has reported over a 13% increase in cases compared to the previous week
- Lebanon has experienced a slight decrease in cases over the past week, notably since it's peak in November ICU beds have decreased from 80-90% to 65-70% following the implementation of public health measures.

• European Region:

- While the region saw a 10% decrease in new cases compared to the previous week it still accounts for the second highest number of new cases and deaths worldwide (37% and 48% respectively). Russia, Italy, Germany and the UK accounted for the majority of new cases region wide.
- Pooled data from 18 countries in the region show 1.7 patients per 100,000 population were in ICU due to COVID-19
- New deaths have increased by 26% in Germany compared to the previous week, with deaths highest in the Bavaria region. Incidence of new cases in older age groups continues to increase while younger age groups remain stable.
- Switzerland (<u>14-day incidence available here</u>) has a 7-day incidence of 315.2 new cases per 100,000 population, with 782 hospitalizations and 484 deaths in the past 7 days. Current test positivity rate (the proportion of tests that are positive) is 17.8% (test positivity above 5 is considered high).
- Asia Pacific Region:
 - Overall the South East Asia region has seen a decline by 10% compared to the previous week with a 2% increase in incidence of deaths, with India accounting for 76% of all reported cases. The highest number of new cases were in India, Indonesia, and Bangladesh.
 - The Western Pacific region reported a 1% decrease in incidence of cases and 4% increase in incidence of deaths. The highest new cases and deaths were reported in Japan, Philippines, and Malaysia.
 - Nepal reported a decrease by 24% in new cases in the past 7 days and decrease of new reported deaths by 17%
 - Bangladesh has reported a relatively stable incidence of cases and deaths reported over the past week. The country rolled-out a new testing strategy in 10 of the 64 districts, with the testing positivity reporting 26.5% of those tested using Antigen-RDT.
 - Malaysia continues to report high levels of COVID-19 however there was a 14% decrease in incidence compared to the previous week. Increased cases reported from clusters in prisons, temporary detention centers in Kedah, Selangor, Negeri Sembilan, Sabah and Penang states. Clusters have also been identified in construction sites and workplaces.
 - China reported 831 new cases and 3 deaths in the past 7 days

Recent Research/ Evidence

- Recently published paper in <u>Nature</u> found Males significantly more likely to suffer from severe disease and death from COVID-19, while there was no statistical difference in infection rates among males and females (analyzing more than 3.1 million COVID-19 cases).
- Study in <u>Nature</u> has identified potential genetic signals that **host-generated inflammatory response** may be associated with critically severe COVID-19 patients, and that some existing medical treatments may be able to target these responses.
- Study in <u>Lancet Healthy Longevity</u> found use of **metformin** drug among **women with Type II diabetes** was associated with **reduced mortality** among women with COVID-19. <u>Others</u> note it is too soon and early to rely on the study results without further research.
- WHO solidarity trial on the effects of remdesivier, hydroxychloroquine, lopinavir published after peer review in <u>NEJM</u>. The study results found the treatments had little or no effect on hospitalized patients with Covid-19, as indicated by overall mortality, initiation of ventilation, and duration of hospital stay.

Clinical Trails

- Vaccination Authorizations
 - UK began vaccination on December 8th for 400,000 individuals beginning with residents in longterm care facilities, people 80 and older and frontline healthcare and social workers (free of charge)
 - <u>2 healthcare workers</u> reportedly experienced severe allergic reactions to the vaccine, both had previous reactions to other vaccines in their medical history as well.
 - **Russia** began vaccination of essential workers and those at elevated risk of severe disease in 70 clinics across Moscow with the Sputnik V vaccine for 1 million people
 - Indonesia has received 1.2 millions doses from Chinese manufacturer Sinovac. Sinovac has also shipped raw materials to produce the vaccine so that Indonesia can manufacture 45 million doses on their own. EUA consideration is underway in Indonesia, while Sinovac is still undergoing Phase 3 clinical trials.
 - **US** FDA approved the Pfizer-BioNTech vaccine for EUA, with an initial 6.4 million doses available for 3.2 million people in the US
 - Canada approved interim authorization of the <u>Pfizer/BioNTech SARS-CoV-2 vaccine</u> to be delivered through a multi-phase roll-out similar to other countries (with preference to those in long term care facilities, older age groups and frontline healthcare workers, additional tiers
- AstraZenica/ Oxford University vaccine published results of Phase 3 trials finding 62% efficacy for all who received 2 doses, along with confirmation of early data showing over 90% efficacy for those who received a half dose first. Results published in the <u>Lancet</u>.
 - Limitations include the majority of the participants were under the age of 55, and 83% of the participants are white. Additionally it is unclear how effective the vaccine is on asymptomatic cases.
- Johnson and Johnson <u>announced</u> that given the current incidence in the US, they can reduce the study size of their vaccine trials and still meet the required number of COVID-19 positive cases.
- Preliminary results of BioTech and Pfizer clinical trials showing 95% efficacy in preventing COVID-19 in participants 16 years or older (<u>NEJM</u>).

Modeling & Forecasting

• Estimated current effective reproductive rate (Lancet database) as of 11 December 2020



Projections for the reproductive number (ICL weekly projections)⁵

⁵ **Map**: Estimates of transmissibility in countries with active transmission for the week. A country is defined to be in the declining phase if the 97.5th quantile of the effective reproduction number is below 1. It is defined to be in the growing phase if the 2.5th quantile of the effective reproduction number is above 1 and the width of the 95% CrI is less than 1. If the 2.5th quantile of the effective reproduction number is below 1 and the width of the 95% CrI is less than 1. If the 2.5th quantile of the effective reproduction number is below 1 and the width of the 95% CrI is less than 1, we define the phase as stable/growing slowly. If the width of the 95% CrI is more than 1, the phase is defined as uncertain. Note that estimates of transmissibility rely on a constant rate of reporting of deaths. This assumption does not always hold. ICL short term forecast

Declining Stable/Growing Slowly Growing Unclear Trend



As of December 7th estimates for the effective reproductive number:

- Europe: Average of about 1, Highest: Slovenia: estimated around 1.5
- Asia: Average of about 1, Highest: South Korea, Japan 1.5
- Africa: Average about 1, Highest: South Africa 1-1.5
- MENA (not included): Highest: *Palestine, Egypt* (1.5)
- North & Central America: Average of about 1, Highest: Belize 1.5
- South America: Average of about 1, Highest: *Brazil*: 1-1.5
- <u>IHME projections</u> show the US is expecting to see 539,000 deaths⁶ even after vaccination roll-out from COVID-19 by April 10th due to an expected winter surge on an already very high incidence.

Humanitarian Impacts

- COVID-19 restrictions in Colombia has made competition for resources even more intense with some criminal groups taking advantage of lock-downs to recruit new members and many small business owners forced to migrate. More discussion available in the <u>New Humanitarian</u>.
- <u>Mapping of COVID in Humanitarian settings available here depicted below showing COVID-19 cases</u> <u>compared to where vaccination campaigns have been postponed</u>
- <u>Updated repository of Maternal and Child health and Nutrition relating to COVID-19 can be found here.</u>

Guidance Launched or Highlighted This week

Weekly update from WHO available here (last updated Epi 8 Dec)

- WHO: Updated Interim Guidance on Mask use as well as videos and images
- <u>Updated Mask Guidance</u>
- WHO: <u>Health workforce policy and management in the context of the COVID-19 pandemic response</u>
- US CDC Quarantine Guidance

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

Atlantic COVID-19 Tracker (US focus)

BMJ COVID-19 resources

BMJ living Guidance on clincal treatment for COVID-19 (from WHO, including visuals)

European Centre for Disease Prevention and Control

End Coronavirus Visualizations

Evidence Aid COVID-19 Evidence

Center for Humanitarian Health: COVID-19 Maternal and Child Health, Nutrition Literature Reviews

The COVID tracking project (US focus)

Global Health 5050 Sex desegregated data

⁶ IHME 3 December 2020

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** Switzerland Specific data and charts **WHO** WHO Technical Guidance for COVID-19 MobLabs MobLabs Domestic and international risk of importing a case World Meters