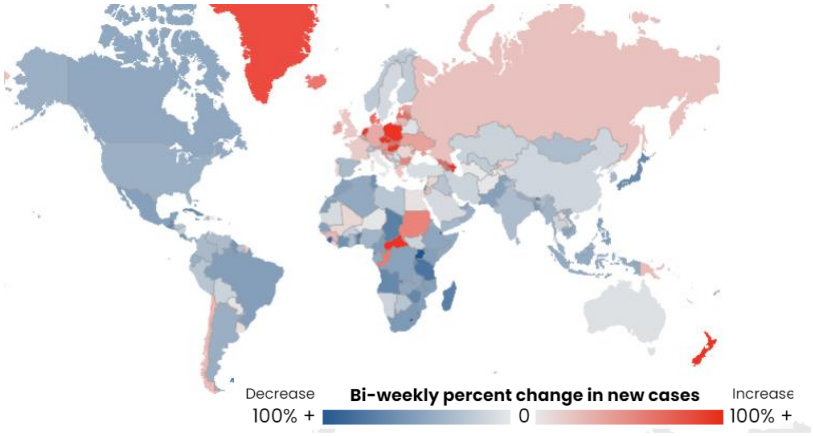
COVID-19 Update: Weeks 41-42

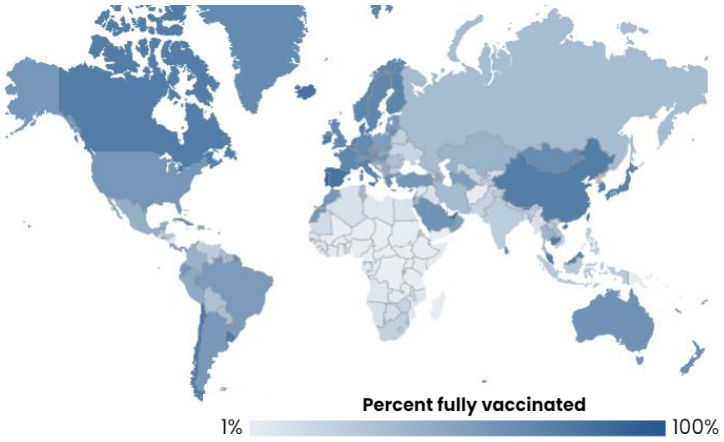
10 October – 23 October 2021

Bi-weekly COVID-19 updates from IFRC focusing on the epidemiological trends and updated evidence are shared through the Health Help Desk. Additional external resources for deeper weekly or monthly subject-area analysis have also been added to the public access page on the Health Help Desk. Internal reports from the IFRC are available on IFRC Go page for the COVID-19 pandemic (including operational updates, immunization updates and updated figures by IFRC region).

Bi-weekly percent change in new cases

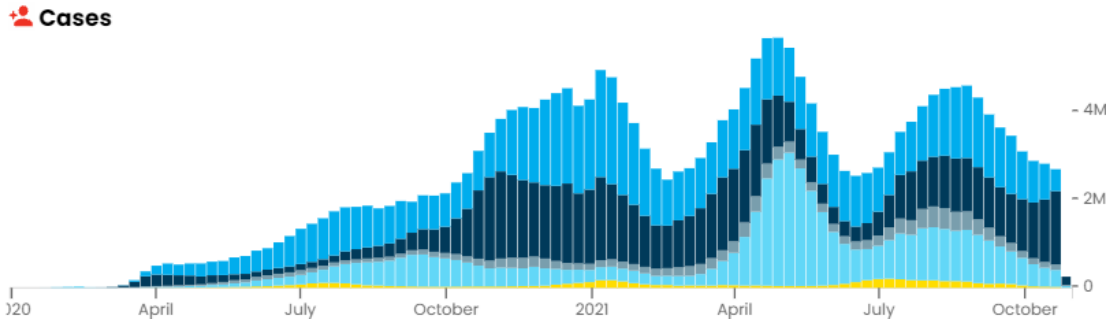


Percentage of population fully vaccinated



- **Globally there have been over 243 million cumulative cases and 4.9 million cumulative of COVID-19 reported worldwide. New reported cases continue to decrease slowly globally.**
- An estimated 48.7% of the global population has received at least one dose of the COVID-19 vaccine, with an estimated 36.6% fully vaccinated.
- **Only 3% of those living in low-income countries have had at least one dose of the COVID-19 vaccine**

Situation update & Risk Assessment



Globally, COVID-19 cases and deaths continued to decline following over a month-long trend. ***All regions except for the European Region reported declining trends***, with the Africa region reporting the largest declines, and the European region reporting an increasing trends in both cases and deaths for the third week in a row. While the world is reporting declining trends overall, reported deaths from COVID-19 on a weekly basis remain considerably high in absolute numbers. Overall, the valleys following each COVID-19 peak have become higher and higher with around 2,4-2.5 million new cases reported per week (currently around 2.7 new COVID-19 cases are reported per week). The United States, the United Kingdom, Russia, Turkey, and India continue to report the highest number of new cases in absolute numbers. The Russian Federation continues to report the highest new cases and deaths per week since the beginning of the pandemic.

For further information or feedback please contact: Rachel Goodermote, with the Health and Care Department, IFRC

Secondary Impacts

- For the first time in over a decade, global TB deaths rose compared to the previous year, and fewer people were diagnosed with TB or received treatment, reversing years of progress. The uptick in TB deaths, treatments and diagnostics (and likely increase in the coming year) was driven by a shifting of resources from TB screening and treatment to COVID-19 response, as well as challenges for people to access services due to lock-downs, and fear of traveling to a hospital during COVID-19. The full report and online pages can by found here from WHO.

Transmission and Children

- In an ecological study in the US of school counties where mask mandates were in place compared to counties where mask mandates did not exist in school, the increase in new paediatric cases was lower, demonstrating the efficacy of masks as one of the public health strategies to lower transmission of COVID-19, especially as vaccination is not yet available to younger children (CDC MMWR)

Vaccine Equity

- While vaccine production worldwide continues to increase, it is not leading to improved vaccine equity, with many wealthy nations beginning booster shot campaigns and bilateral contracts with vaccine manufacturers often going to those who can pay. India has put another delay in committing supplies to the COVAX facility.

Vaccine Safety and Efficacy

- Pfizer has released results from a Phase 3 clinical trial seeing relative vaccine efficacy of 95/6% among those who received a booster dose 6 months following initial vaccination
- US FDA has supported Johnson & Johnson's application for a booster, starting 2 months after the initial dose. The booster is estimated to increase efficacy from around 71% to 94%.

Vaccine Mixing

- A pre-print of a large US-based study examining the mixing and matching of COVID-19 vaccines, found that those who received J&J the first time, may benefit from a stronger immune response when given a booster of mRNA vaccine compared to a booster of another J&J vaccine. Recipients who received an mRNA vaccine (through the two-shot regimen), were found to produce a similar immune response when given a booster of either [Pfizer or Moderna] vaccine.
- The US FDA has approved the use of mix and matching for all approved vaccines in the US (Pfizer, Moderna, and J&J) for a booster dose if the regular regiment was followed for the initial dosing (i.e. two doses of Moderna, or two doses of Pfizer, or one dose of Johnson & Johnson)

Variants of Concern or of Interest & Implications

- The UK Health Security Agency has released a technical briefing with more details on the newly designated "Delta Plus" (AY4.2) which has been expanding throughout the UK as the UK reports a new surge in cases. The new sub-lineage of the Delta variant is now accounting for 6% of SARS-CoV-2 samples sequenced in the UK. More research is ongoing into the importance of this sub-lineage to the epidemiological situation in the UK.

Summary impacts of Variants of Concern designated by WHO (referenced from WHO Situation Report #62)

Name/ Label	Alpha Detected in 196 countries	Beta Detected in 145 countries	Gama Detected in 99 countries	Delta Detected in 193 countries
Transmissibility	Increased transmissibility	Increased transmissibility	Increased transmissibility	Increased transmissibility
Disease Severity	Possible increased risk of hospitalization, possible increased risk of severity and mortality	Possible increased risk of hospitalization, possible increased risk of in-hospital mortality	Possible increased risk of hospitalization and/or risk of severe disease	Possible increased risk of hospitalization
Risk of reinfection	Neutralizing activity retained, risk of reinfection remains similar	Reduction in neutralizing activity reported; T cell response elicited by D614G virus remains effective	Moderate reduction in neutralizing activity reported	Reduction in neutralizing activity reported
Impact on Diagnostics	Limited impact	No impact observed	No impact reported	No impact reported
Impact of vaccine efficacy (for those with WHO EUL)[1]	Protection retained against all outcomes	Protection maintained against severe disease, limited evidence for reduced efficacy against symptomatic disease (AstraZenica, Pfizer)	Unclear, limited evidence at this time	Protection retained against severe disease, limited evidence for possible reduced infection against symptomatic disease and infection

Practical Tools/ implications for COVID-19 preparedness & Response strategies

- A recent study published in PLoS One retrospectively followed a cohort of over 74,000 patients found that flu shots could have protective effects against COVID-19 severe outcomes such as sepsis, stroke, and ER visits related to COVID-19. This is particularly important as the flu vaccine has been approved in many countries for those over the age of 6 months (COVID-19 vaccines have only been approved thus far for children 12+ years) and given low flu circulation last year due in part to COVID-19 infections and lock-down measures, there is a potential for less immunity in 2022, with more people at risk for flu infection.

[1] Resources and detailed list of vaccine efficacy studies can be found here: VIEW-hub (IVAC)

- In a statement regarding an effort to increase community-based screening in many countries, the WHO Regional Director of Africa reported it is likely that six out of seven COVID-19 cases on the continent go undetected. This is estimated given demographic characteristics, case fatality ratios, and likelihood of asymptomatic cases (the majority of cases reported in the region are symptomatic cases reporting to health facilities through facility-based surveillance). This highlights the importance of activities such as community-based surveillance, screening and testing strategies to reduce the undocumented spread of COVID-19 in communities (WHO regional statement, ReliefWeb).

Clinical Trials and Treatments

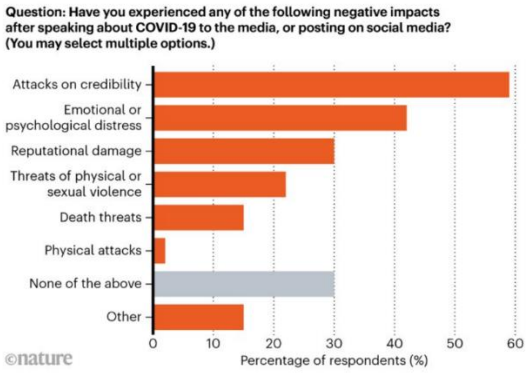
- Following clinical trials (still in peer review) that showed molnupiravir, when prescribed post COVID-19 infection reduced risk of hospitalization and severe disease, Merck has applied for US FDA emergency use authorization (EUA). Following this move, the Gates Foundation has earmarked 120 million USD to increase generic production of the drug once approved, for low and middle-income countries.

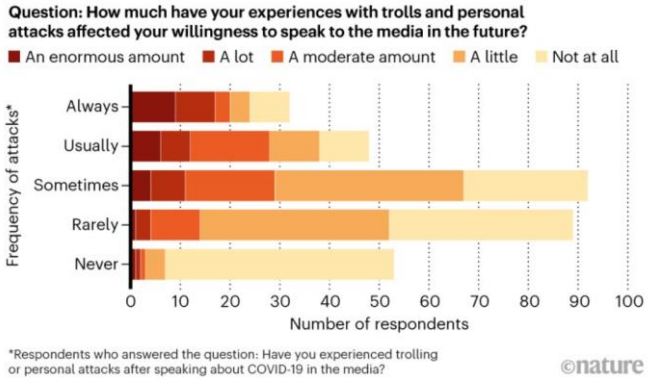
Investigations into the Origins of SARS-CoV-2

- WHO announced a 26-member team to develop a global framework to define the investigations into emerging and re-emerging infectious disease outbreaks with epidemic and pandemic potentials (WHO). All possibilities will continue to be considered in the investigation into the origins of SARS-CoV-2, with the SAGO members to be approved by China government following 2 weeks of public consultation (Science).
- China plans to test up to 200,000 blood donations from two years ago in the city of Wuhan to better identify potential "when and where" the virus may have first jumped to humans (CNN News)

Implications for Public Health in the future

- A recent study conducted by Nature of 300 scientists who gave interviews or were active on social media about COVID-19 show very disturbing trends, with 15% of all respondents reporting they received death threats, and 60% of those surveyed saying that they faced other forms of harassment and abuse. Those who reported the highest frequency of attacks also stated that they were less likely to give interview or speak out in the future, having serious implications for the public to have access to scientific evidence and perspectives.





- The WHO released a brief emphasizing the 7 recommendations to improve health system resilience during COVID-19 and for future health emergencies. The seven recommendations include:
    - Leverage the current response to strengthen both pandemic preparedness and health systems
    - Invest in essential public health functions including those needed for all-hazards emergency risk management
    - Build a strong primary health care foundation
    - Invest in institutionalized mechanisms for whole-of-society engagement
    - Create and promote enabling environments for research, innovation and learning
    - Increase domestic and global investment in health system foundations and all-hazards emergency risk management
    - Address pre-existing inequities and the disproportionate impact of COVID-19 on marginalized and vulnerable populations

References

Internal

IFRC Go COVID-19 response

- Dashboards and operational reports
- Monthly vaccine updates and highlights

IFRC Health Help Desk

- Webinars
- Operational Guidance related to the health response to COVID-19

External

ALNAP COVID-19 Response Portal

British Medical Journal Coronavirus Hub

Centers for Disease Control (CDC) Morbidity and Mortality Weekly Report (MMWR)- COVID-19 Reports

Johns Hopkins Center for Health Security

- Particularly the COVID-19 Updates (weekly)

Johns Hopkins Center for Communication Programs COVID-19 Behavior Dashboards

Journal for American Medical Association COVID-19 focus (JAMA)

Nature SARS-COV-2 Review

New England Journal of Medicine COVID-19 page (NEJM)

Our World in Data

Prevent Epidemics In-Depth Science Reviews

UNDP Vaccine Affordability

WHO COVID-19 Dashboards

WHO Epidemiological Situation Reports