

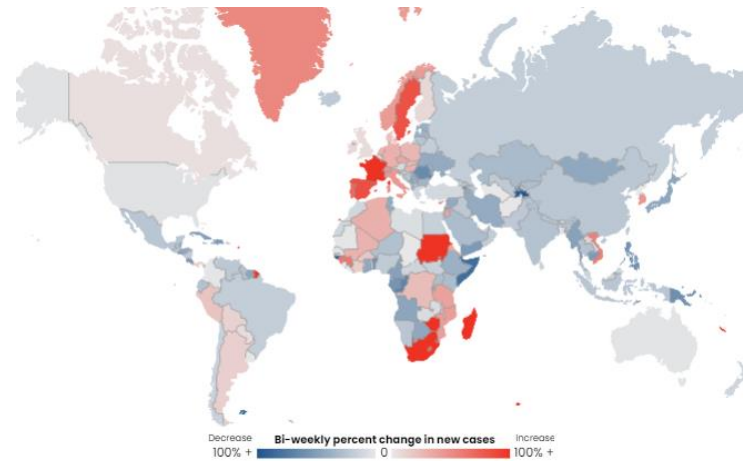
COVID-19 Update: Weeks 45-48



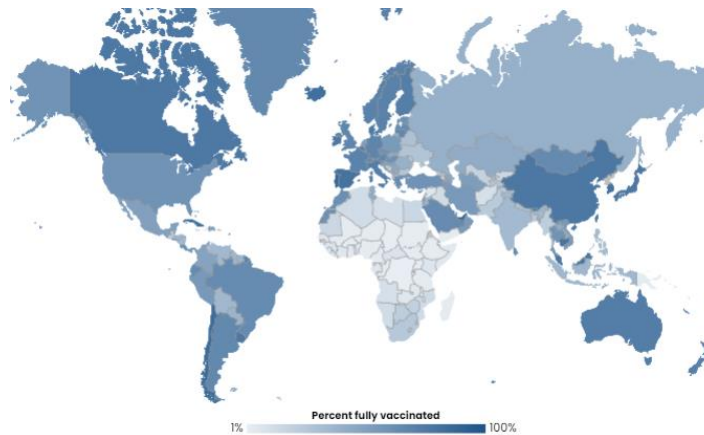
7 November – 5 December 2021

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). *The last two updates have been combined here, with the next update scheduled to be published on December 21st 2021.*

Bi-weekly percent change in new cases



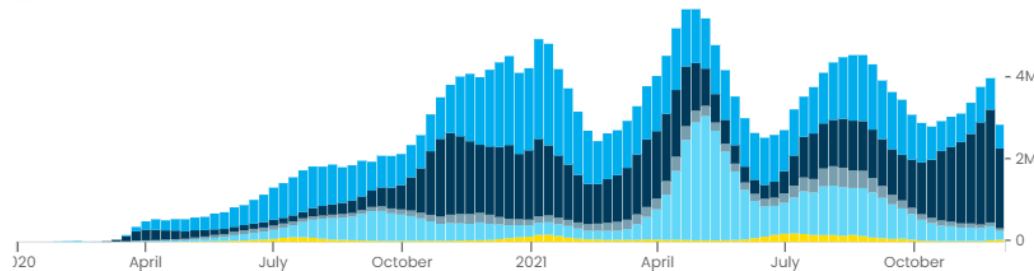
Percentage of population fully vaccinated



- **Globally there have been over 263 million cumulative cases and 5.2 million cumulative deaths of COVID-19 reported worldwide.**
- An estimated 55% of the global population has received at least one dose of the COVID-19 vaccine, with an estimated 43% fully vaccinated.
- **Only 6.2% of those living in low-income countries have had at least one dose of the COVID-19 vaccine**

Situation update & Risk Assessment

Cases



For about a month, global incidence of COVID-19 cases have continued to increase. There was a plateau in new cases (globally) in the past week (with different trends seen by different regions), while new deaths decreased by an estimated 10% worldwide. Europe continues to report the majority of new COVID-19 cases throughout the globe, representing 70% of new cases, while the Africa Region reported the greatest increase in new reported COVID-19 cases (by 93%) compared to the previous week. Due to unknown implications of the Omicron variant, and general rising total case numbers in many countries in the Northern Hemisphere (also expected due to previously reduced COVID-19 measures, the delta variant and increased indoor gatherings) many states have begun re-implementing stricter COVID-19 measures.

Emerging Evidence Review

Secondary Impacts

- Measles surveillance in all regions decreased in 2020 compared to previous years, while [WHO and US CDC](#) estimate that 22 million infants missed their first dose of measles vaccine worldwide (the largest reported increase in decades), and 70% of those who were supposed to get their second dose missed it in 2020.
- The [2021 WHO World Malaria Report](#) shows increases in malaria cases and deaths worldwide in 2020 in part due to disruption of services due to COVID-19. There were an estimated 14 million new cases compared to 2019, and 69,000 new deaths, but the [WHO](#) and partners state that the 'worst case scenario' was averted due to urgent actions to maintain services as much as possible.
- Warnings that the pandemic has stalled progress on antimicrobial resistance, with [PAHO reporting an increased](#) use of antibiotics to fight secondary infections in COVID-19 in the region, with reports of antibiotics distributed to an estimated 90% of hospitalized patients with COVID-19, while only an estimated 7% likely required the drugs.
- In the United States, overdose deaths rose an estimated 28.5% compared to the previous year, reaching a record high in drug-overdoses in the country influenced by a combination of social isolation, lack of access to treatment and a more deadly drug supply ([CDC Vital Statistics](#)).

Maternal & Child Health

- Pregnant women are at increased risk for severe disease due to COVID-19 and adverse reactions. In a recent study in the US, pregnant women with COVID-19 were also found to be at increased risk of still-birth than non-infected women – this was particularly true during the recent delta variant wave in the US. These results found in [CDC MMWR](#) highlight the importance of protection measures and vaccination prior to and during pregnancy to protect against adverse outcomes.

Vaccine & Treatment Equity

- African Vaccine Acquisition Trust (AVAT) and partners released a [joint statement](#) calling for more reliable and consistent supply chains for vaccine distribution than what has been observed thus far through donations (often ad hoc with little notice requiring massive planning efforts for the communication and distribution of the vaccines on short notice due to approaching expiration dates).

Vaccine Boosters

- A third dose of CoronaVac in adults administered 8 months after a second dose created a substantial immune response - even stronger than the first two doses, suggesting benefits to a third vaccination dose for most adults who received the CoronaVac. Adverse reactions to the vaccination also remained rare ([Lancet Infectious Diseases](#)).

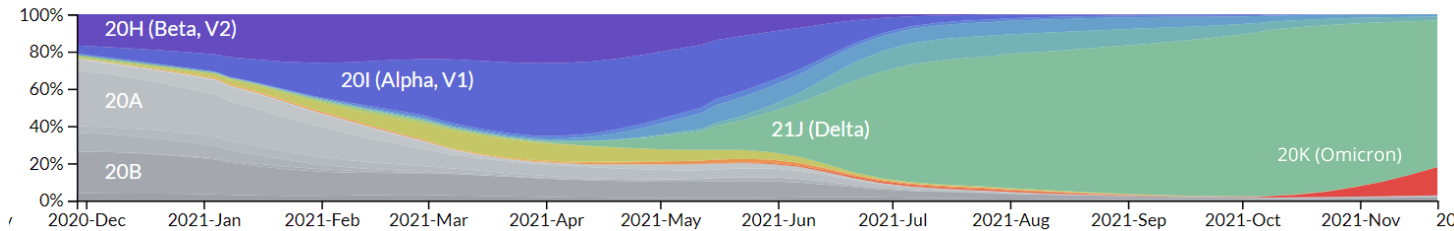
Long-COVID

- Concerning research out of a study in Florida, US found that patients who had severe illness due to COVID-19 were at significantly higher risk of death in the year following recovery compared to those with mild illness or a negative COVID-19 test. The risk of death was found to be more significant among those under the age of 65 ([Frontiers in Medicine](#))

Variants of Concern or of Interest & Implications

- [The WHO classified](#) "Omicron" (B.1.1.529) a variant of concern on November 26th due to a number of mutations in the SARS-CoV-2 virus that are concerning and increase prevalence and incidence within COVID-19 genetically sequenced (and positive) tests in Southern Africa. The Omicron variant has been detected in all areas of South Africa. Studies are ongoing, but preliminary research suggests there may be a risk of re-infection.

Frequencies (colored by Clade)



To show visually, the chart to the left shows the proportion of SARS-CoV-2 infections by variant over time that are genetically sequenced from the Africa Region. The red increase to the right of the chart shows an increasing trend of sequenced Omicron variant ([NextStrain/GISAID data](#)).

- In a pre-print study, researchers in South Africa found that the Omicron variant of SARS-CoV-2 is more likely to be able to evade immunity from prior infection (i.e. higher probability of reinfection compared to previous variants). However the authors also note that it is unclear at this point whether this same trend is observed in vaccine-derived immunity as well. More research is underway to understand this is underway ([pre-print study](#)).
- Additional [non-peer-reviewed evidence](#) suggests that Omicron variant does not cause as severe disease, however again – hospitalization and deaths tend to lag behind case reporting, so this will continue to be monitored.
- Additional details on the Omicron variant updated through December 6th [here](#)

Summary impacts of Variants of Concern designated by WHO (referenced from [WHO Situation Report #68](#))

Name/ Label	Alpha	Beta	Gama	Delta <i>Now accounting for over 99% of sequenced SARS-CoV-2 variants</i>	Omicron* <i>Newly declared November 26th</i>
Transmissibility	Increased transmissibility	Increased transmissibility	Increased transmissibility	Increased transmissibility	Still under investigation, no evidence at this time to support 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	Under investigation
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	Preliminary evidence suggests a possible increased risk of reinfection
Impact on Diagnostics	Limited impact	No impact observed	No impact reported	No impact reported	PCR continues to detect Omicron. Impact on Ag-RDTs is under investigation.
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	Under investigation

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

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

- A randomized trial on the impact of community masking in rural Bangladesh contributed to peer-reviewed literature on the impact of masking on transmission patterns of COVID-19. The study found that overall, mask distribution and promotion in low and middle-income settings increased mask-wearing behavior and decreased illness- most notably among at-risk groups ([Science](#)).
 - Masking did not lead to risk compensation activities (i.e. reduced physical distancing) as some experts worried early on, rather messaging on COVID-19 transmission in general and public health measures to take and general education campaigns may have even increased these complementary behaviours
 - The community mask-wearing intervention reduced the incidence of COVID-19 symptoms by an estimated 11.6%, with a greater reduction found in intervention areas with surgical masks.
 - While women were more likely to practice wearing masks, men responded more strongly to interventions to wear masks
 - The largest impact on symptomatic seroprevalence was seen in older age groups compared to the general population in mask intervention areas

Clinical Trials and Treatments

- Pfizer submitted emergency use authorization to the US FDA for use of PAXLOVID – a antiviral pill to be used by patients after contracting COVID-19 at home to reduce the likelihood of severe illness requiring hospitalization. Initial trials have demonstrated 89% reduced risk in COVID-19 related hospitalization or death among high-risk adults. The treatment must be administered within 3 days of symptom onset. This treatment would potentially allow many patients to recover at home, reducing the strain on the health system ([Pfizer](#)).
- Recent clinical trials have found that the drug molnupiravir may be less effective than initial studies, with a 30% reduction in relative risk of severe illness and death, lower than the 48% originally estimated in initial trials. The results were released just prior to the FDA's planned meeting ([Merk](#)).

Implications for Public Health in the future

- The World Health Assembly met and decided to establish an intergovernmental negotiating body (INB) to develop a pandemic treaty. This was only the second ever health assembly meeting since its inception in 1948. The only other convention adopted under article 19 was the convention on Tobacco control ([WHO](#)).

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)

[Nextstrain](#) (genomic data tracking for mRNA viruses)

[Our World in Data](#)

[Prevent Epidemics In-Depth Science Reviews](#)

[UNDP Vaccine Affordability](#)

[WHO COVID-19 Dashboards](#)

