COVID-19 Update: Weeks 1-2

+CIFRC

3-16 January 2022

Bi-weekly COVID-19 updates from IFRC focusing on the epidemiological trends and updated evidence are shared through the <u>Health Help Desk</u>. 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 <u>IFRC Go page for the</u> <u>COVID-19 pandemic</u> (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 318 million cumulative cases and 5.5 million cumulative deaths of COVID-19 reported worldwide.
- An estimated 59.9% of the global population has received at least one dose of the COVID-19 vaccine, with an estimated 49.7% fully vaccinated.
- Only 9.5% of those living in low-income countries have had at least one dose of the COVID-19 vaccine

Situation update



For the past two weeks COVID-19 cases have surged globally, increasing by 71% the first week compared to previous weeks, and by 55% in the past week. The incredible surge in COVID-19 cases has been driven by the rapid spread of Omicron variant world-wide, which has continued to outpace other variants. While the European region continues to report the highest number of new cases (47% of global reported cases), the Asia Pacific region is currently reporting the highest increasing trends in reported cases, while Africa Region continues to report high increases in new COVID-19 deaths for over a month, most recently reporting over 84% increase in deaths compared to the previous week. Notably, the Africa region is also reporting the overall lowest vaccine coverage. While medical professionals are reporting lower incidence of severity among those who are infected with Omicron compared to the Delta variant, the sheer number of people becoming infected has significantly overwhelmed health system capacities worldwide.

Emerging Evidence Review

Secondary Impacts

• The <u>World Bank</u> estimates that the COVID-19 pandemic will have a continued impact on the global economy, with rates of growth in emerging markets reducing from 6.3% in 2021 to 4.4% in 2023, an estimated 4% below pre-pandemic trends.

Long-COVID

A recent <u>pre-print study</u> has found similarities between neuropathophysiology after cancer therapy and after SARS-CoV-2 infection, revealing cellular deficits that may contribute to lasting neurological symptoms following even mild SARS-CoV-2 infection. The study and others once peer-reviewed has important implications for the 70% of people who experience one or more symptom more than 2 months post COVID-19 infection, with cognitive issues reported among 25% of recovered respondents – including those who reported very mind COVID-19 symptoms initially. Those with more severe symptoms (such as those hospitalized) still showed a higher risk than those who were not, but even those with mild symptoms appear to be at risk. The impact of Omicron remains to be studied.

Variants of Concern or of Interest & Implications

<u>The WHO classified</u> "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.



64% of all sequenced and recorded variants of SARS-CoV-2 have been identified as Omicron worldwide. In the red to the left, you can see how quickly Omicron was able to outpace the Delta surge the world was currently experiencing. In many countries where Omicron has become the predominant variant, sequencing seems to remain around 90%, meaning that even in those countries the Delta variant also continues to spread. It took 3 months for Omicron to become the dominant variant worldwide.



- Researchers in Denmark estimated the Omicron effective reproduction number was 3.19 times greater than the Delta under the same epidemiological conditions. As Delta was already estimated to have a reproduction number of 5-6, the new estimates from Denmark would put Omicron's reproductive rate on par with some of the most transmissible human diseases such as Measles (<u>Journal of Medical Virology</u>).
- <u>Pre-print research</u> continues to suggest reduced clinical severity of Omicron infection compared to Delta
- Trends in several locations have shown that Omicron transmission, while rapidly excelling has also fallen rapidly in most locations. Alternative sampling methods, such as waste water detection can provide a useful way to track the true burden and when peaks have been reached within city or shared housing populations (WBUR)

Summary impacts of Variants of Concern designated by WHO (referenced from <u>WHO Situation Report</u> #74)

Name/ Label	Alpha	Beta	Gama	Delta Now accounting for 34% of sequenced SARS-CoV-2 variants	Omicron Now representing 65% of sequenced SARS-CoV-2 variants
Transmissibility	Increased 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	Possible reduced risk of hospitalization and severe disease
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	increased risk of reinfection
Impact on Diagnostics	Limited impact – S gene target failure (SGTF), no impact on overall result from multiple target RT- PCR; No impact on Ag RDTs observed	No impact observed	No impact reported	No impact reported	PCR continues to detect Omicron. Impact on Ag-RDTs is under investigation as early studies are mixed.
Impact of vaccine efficacy	Protection retained against all outcomes	Protection maintained against severe disease, limited evidence for reduced efficacy against	Unclear, limited evidence at this time	Protection retained against severe disease, limited evidence for possible reduced infection against	Reduced protection against infection and symptomatic disease; possible reduced protection against



(for those with	symptomatic	disease	symptomatic disease	severe	disease;
WHO EUL) ¹	(limited evidence)		and infection	limited evide	nce

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

An analysis of portrayal of the concept of 'natural herd immunity' published in <u>PLOS ONE Global Public Health</u> demonstrated that an uneven balance within the media to create "alternative viewpoints" created an environment that allowed the theory of natural herd immunity to appear to have more prominent support that the reality. The author argues that the false balanced reporting may have played a role in public confusion on messaging, vaccine hesitance and created controversies that influenced behaviour. The assessment was conducted for the time period of March 2020 – March 2021 in the UK and US, and intended to highlight the importance public media plays in the public response during health emergencies and need for public health officials to engage more with journalists to address concerns and ensure these false dichotomies that create controversy are not promoted.

Surveillance

A short assessment from <u>ACAPS on COVID-19 in Yemen</u> and varying reasons for vaccine hesitancy highlights the importance of understanding the limited capacity of surveillance of case data from Yemen (and many other countries with ongoing conflict). In Yemen, regardless of the COVID-19 pandemic, only 50% of health facilities are functioning – for surveillance this means that the population who would be served by those health facilities are not included in COVID-19 surveillance and care, let along other essential health services. Additionally, COVID-19 testing and vaccination is only available to the southern 20% of the population. The assessments lists vaccine availability and access (including culturally appropriate vaccination centres & linking vaccine access to women's groups to target many of the community caregivers) as well as hesitancy as major reasons against vaccination in country compared to the compelling reason to get vaccinated (work in Saudi Arabia). The assessment highlights the importance of contextual and cultural considerations as vaccination campaigns continue in many conflict affected areas.

Implications for Public Health in the future

 As much of the world continues to battle an Omicron surge in COVID-19 infections, researchers in South Africa shared, in a <u>pre-print</u> still undergoing peerreview that those who had been infected by Omicron increased their ability to neutralize future Omicron infections by 14.4 times after two weeks, and increased their ability to fight off Delta by 4.4 times, suggesting antibodies developed during Omicron infection may help provide some protection against future infection. However, the researchers did not find a similar result among those previously infected with the Delta variant. More research is needed in this area to understand how this may impact future transmission patterns of COVID-19.

¹ Resources and detailed list of vaccine efficacy studies can be found here: <u>VIEW-hub (IVAC)</u>



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 <u>COVID-19 Updates</u> (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



WHO Epidemiological Situation Reports

