# **COVID-19 Update: Weeks 1-2**

# +CIFRC

17-30 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 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 364 million cumulative cases and 5.6 million cumulative deaths of COVID-19 reported worldwide.

- An estimated 61% of the global population has received at least one dose of the COVID-19 vaccine, with an estimated 52.3% fully vaccinated.
- Only 10% of those living in low-income countries have had at least one dose of the COVID-19 vaccine

### Situation update



Last week marked the highest number of new COVID-19 cases globally since the COVID-19 pandemic began, with over 21 million new cases reported worldwide. As a reference, during the surges the number of new cases reported per week were between 4 and 6 million new cases. The global incidence of COVID-19 continued to increase for the past two weeks, with new global deaths remaining relatively stable for the same time period. Notably, several regions appear to be seeing a slower trend in increasing cases, although the trend is mixed in most regions with many countries struggling to adequately register confirmed case, hospitalizations and deaths due to the high burden on the system.

#### Risk Assessment & What to watch

Due to the overall large number of people infected worldwide by COVID-19 (predominantly now the Omicron variant of SARS-CoV-2), the incidence of new COVID-19 cases continues to rise globally, although at a reduced rate. Notably, the number of new cases and deaths continue to be driven by locations where data exists and is share at regular intervals. The availability of this information thus heavily relies on testing trends, reporting trends (of test positivity), and influences the ways in which the public react and interpret COVID-19 trends. Unsurprisingly, locations where reporting frequency is highest are high-income countries. The charts to the right show frequency of reporting COVID-19 data by month and the chart below shows globally the proportion of tests performed for COVID-19 in comparison to the population. While some regions appear to have been 'affected' by higher case loads during the pandemic, the true picture is hard to visualize with the data available given the significantly lower COVID-10 testing across much of the global population and lower reporting frequencies across many countries. This also has led to some apparent "spikes" in COVID-19 related cases and deaths over time as some countries have delayed updates.

Additional trends to watch is the proportion of individuals who trust authorities during the COVID-19 response. Several recent studies have shown that trust in political decision making and authorities to make decisions in the population best interest has been an important under-estimated aspect to epidemic and pandemic preparedness and response. The Collective Service, a compendium of multiple organizations has worked to compile recent evidence on the status of trust globally (shown to the right).

To the Right: Percentage of individuals who trust authorities & Partners leading the COVID-19 response. Source: <u>Collective Service</u>

#### World view on reporting frequency for COVID-19 tests

Average frequency of reporting testing data [days/month]





Percentage of performed tests and percentage of population across income groups worldwide





## Emerging Evidence Review

#### **Secondary Impacts**

In addition to the impact of acute COVID-19 and epidemic surges within countries to the labour market, <u>Brookings</u> recently published an article suggesting that in the United States, long-covid, or the impacts of post-acute COVID-19 symptoms (physical, mental and cognitive) may be contributing to as much as 15% of the 10.6 million unfilled jobs in the US. The authors note that the impact of long-covid on the employment market is likely a combination of traditional out of work due to symptoms as well as reduced working hours for some recovering. This will likely pose a significant challenge as employers examine how to improve business continuity planning post the acute-pandemic phase.

#### Vaccine Safety and Efficacy

- Recent peer review studies have found decreasing vaccine efficacy against the Omicron variant compared to the Delta variant following two doses of mRNA vaccine (Moderna reduced by 40% a month after the second dose, and Pfizer reduced by 30%). However, vaccine efficacy was reduced to an estimated 0% following six months following the second dose (JAMA). However, vaccine efficacy remained high against hospitalization. Overall vaccine efficacy increased after a third shot against both Delta and Omicron with a smaller impact on Omicron.
- A <u>pre-print study</u> found that a third dose of vaccination increased efficacy against Delta infection hospitalization and emergency department admissions (back to 88-93%) while it also increased efficacy against Omicron hospital and emergency department admissions by an estimated 89%. Waning immunity was recorded for the Delta variant, but not for the Omicron variant (partially because of the timeframe which the effects could be observed for the Omicron variant).

#### Long-COVID

- A recent study from Israel found that those vaccinated who contract SARS-CoV-2, were less likely to report the most common post-acute symptoms associated following a COVID-19 infection compared to those who those who were unvaccinated. Those who received two doses of the vaccination were 64% less likely to report fatigue, 54% less likely to report headache, 57% less likely to report weakness, and 68% less likely to report muscle pain. While <u>the study</u> is still in the peer-review process, it indicates as others have in the past, the long-term benefits of vaccination even if COVID-19 is contracted.
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- Additional research published in <u>Cell</u> tried to identify factors that have a greater association with the likelihood of a recovered individual experiencing long-covid. Contributing factors include reactivation of existing Epstein-Barr virus within the body (otherwise known as human herpes virus 4 which is estimated to be prevalent in 90% of the global population), viral load of the SARS-CoV-2 infection, and Type 2 diabetes. Since one of the contributing factors appears to be viral load, the authors of the paper suggest that antivirals may play a contributing role to reducing the likelihood of individuals to experience long covid symptoms (although access to this treatment remains a challenge still), along side the observed reduced potential for experiencing long covid following vaccination.



#### Variants of Concern or of Interest & Implications

• <u>The WHO classified</u> "Omicron" (B.1.1.529) a variant of concern on November 26<sup>th</sup> 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)

- The Omicron variant continues to be classified as high risk due to its increased ability to rapidly spread within communities due to significant growth advantage compared to other variants and increased capacity to evade immune response. Thus far, the variant appears to have a reduced impact on disease severity, however the sheer number of people who have been infected means that many health care systems continue to face a high burden in hospital admissions.
- The Omicron variant includes four lineages (B.1.1.529, BA.1, BA.2 and BA.3). Originally the BA.1 lineage was the most common worldwide, while recent trends have shown increasing transmission of the BA.2 lineage in the United Kingdom, Denmark, India and South Africa which has led to more investigation to the potential for increased transmission capacity of BA.2 lineage (WHO Enhancing response to Omicron SARS-CoV-2 variant).
- Thus far, traditional therapeutic methods for COVID-19 such as corticosteroids and interleukin-6 receptor blockers are expected to remain effective, while some research (still under peer-review) show that monoclonal antibodies may not be as effective and will need to be tested individually.

disease

**Alpha** Beta Gama Delta Omicron Name/ Label Dominant variant worldwide Increased transmissibility Increased transmissibility Increased Increased Increased Transmissibility transmissibility transmissibility transmissibility Possible increased risk of Possible increased risk of Possible increased risk Possible increased risk Reduced hospitalization, possible hospitalization, possible of hospitalization of hospitalization hospitalization and Disease increased risk of severity increased risk of in-hospital and/or risk of severe severe disease Severity

Summary impacts of Variants of Concern designated by WHO (referenced from <u>WHO Situation Report</u> #76)

mortality



and mortality

Risk of	Neutralizing activity retained risk of	Reduction in neutralizing	Moderate reduction in	Reduction in	increased risk of reinfection
reinfection	reinfection remains similar	response elicited by D614G virus remains effective	reported	reported	
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 also appear not to be impacted
Impact of vaccine efficacy (for those with WHO EUL) <sup>1</sup>	Protection retained against all outcomes	Protection maintained against severe disease, limited evidence for reduced efficacy against symptomatic disease (limited evidence)	Unclear, limited evidence at this time	Protection retained against severe disease, limited evidence for possible reduced infection against symptomatic disease and infection	Reduced protection against infection and symptomatic disease; possible reduced protection against severe disease

### 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

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



#### 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

