Update on Omicron variant of SARS-CoV-2

as of 21 December 2021

Why was Omicron labelled a variant of concern?

- There were several mutations found on the SARS-CoV-2 variant now named "Omicron," many of which are concerning given the location of the mutations and increased risk of rapid transmission and/or reinfection which requires close observation (WHO)

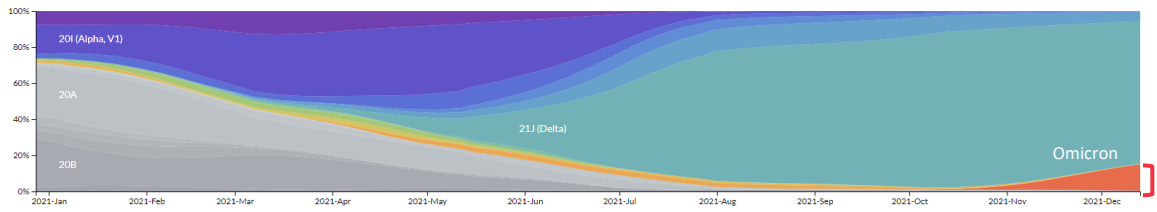
Existing Evidence

- Omicron has gained momentum in all regions, now found in 89 countries, out-pacing the Delta variant of SARS-CoV-2, and is now listed as the dominant variant in multiple countries (WHO)

Disribution of select variants worldwide over time *(source:* Nextstrain GISAID data)

Global Distribution of SARS-CoV-2 variants

- **Omicron** 14% of sequenced data (an increase of 10% of the global share within the past week)
- **Delta** over 79% of sequenced cases



- Omicron **appears to have a very fast doubling rate estimated at 1.5 – 3** days compared to the Delta variant (the doubling rate is the estimated number of days it takes to double the number of cases in a specified population) (WHO)
- There is some evidence that the Omicron variant are two times as likely to give rise to a secondary infection within the Household compared to Delta and other previously dominant variants (Public Health England)
- There is some evidence to support there is an **increased risk of reinfection** with Omicron following a previous infection of another SARS-CoV-2 variant[1]
- ***Limited preliminary data*** **show vaccine efficacy appears to be reduced in preventing** symptomatic infection from the Omicron variant of COVID-19 with preliminary studies suggesting reduction to 33% to 40% (depending on the vaccine) however, **protection against severe disease remains high** preliminary research estimating protection against severe disease remains at 70-80% for double-vaccinated (CDC; Meta-analysis pre-print, WHO).
    - **Preliminary research suggest booster shots can increase efficacy of vaccines** against the Omicron variant for both symptomatic infection (up to 86%) and severe disease (over 98%), (Meta-analysis pre-print; Public Health England).
- **Diagnostic accuracy & testing** using most common methods (PRC or antigen-based rapid diagnostics) appear to **remain effective** for detecting the Omicron variant (WHO)
- Most therapeutic interventions for the treatment appear to be effective except for some preliminary evidence suggesting monoclonal antibodies have decreased neutralization against Omicron (WHO, Nature, pre-print)

Best Practices to reduce risk

Get vaccinated

This is still the best way to prevent severe illness and death due to COVID-19 with the strongest evidence-base for protecting yourself and others. This includes boosters if they are available to you.

Improving vaccine equality throughout the world is essential to reducing the threat of COVID-19 variants

Get tested

- If you are feeling unwell get tested for COVID-19 and avoid meeting others until you received your results
- If you are attending gatherings or events and home-testing is available test yourself prior to attending, especially if masks will not be worn

Making testing simple, free and accessible and ensuring laboratory capacity for analysis is an essential aspect to COVID-19 response – not just during peaks

Wear a mask

Masking is one of the most effective ways to further reduce the transmission of COVID-19. While cloth, medical/ surgical and FFP2/N95 masks are all effective for reducing community transmission of COVID-19, surgical/medical masks and FFP2/ N95 masks have a greater impact and should be used when possible and available.

Improving access to proper masks to all medical professionals and essential workers is essential to reducing the spread of COVID-19 – for all variants.

Practice physical distancing

Try to keep distance of at least 1-2 metres, meet outdoors whenever possible and open windows to improve air circulation in the room when meeting people indoors. If meetings can be postponed during local surges in COVID-19 cases consider postponing them.

Practice good hand hygiene

Wash your hands regularly and avoid touching your face. Even if the majority of COVID-19 infections are transmitted through the air, it is also important to also reduce the burden due to other common respiratory illness such as the flu or common cold to maintain health system functions during waves of COVID-19.