

At the end of May 2021, the **World Health Organization (WHO) assigned letters of the Greek alphabet** to COVID-19 virus variants currently in circulation around the world to make them easier for us to talk about and understand. These are all variants of the SARS-CoV-2 virus that causes COVID 19 disease:

- 01 | The **Alpha** variant was first detected in the United Kingdom (UK) in September 2020.
- 02 | The **Beta** variant was first detected in South Africa in May 2020.
- 03 | The **Gamma** variant was first detected in Brazil in November 2020.
- 04 | The **Delta** variant was first detected in India in October 2020.

The WHO currently identifies the above four COVID-19 variants as 'variants of concern' (VOC). This means there is evidence that these variants are more transmissible than prior forms of the virus that causes COVID-19, or more virulent, so possibly cause more severe disease (not always the case).

■ The Delta Plus variant, also known as B.1.617.2.1 or AY.1, is considered a sub-variant of the Delta variant. It's a VOC in India and some other countries but hasn't been labelled as such by the CDC and WHO.

The WHO also lists four 'variants of interest' (VOI) which means they're being carefully monitored:

- **B.1.525 (Eta)**: First identified in multiple countries
- **B.1.526 (lota)**: First identified in USA
- **B.1.617.1 (Kappa)**: First identified in India
- C.37 (Lambda): First identified in Peru





THE LOWDOWN ON DELTA

The **WHO** has called Delta the most transmissible of the variants identified so far. Delta is rapidly becoming the dominant SARS-CoV-2 variant globally and is highly prevalent in South Africa, according to Professor Tulio de Oliveira, co-director: KwaZulu-Natal Research Innovation and Sequencing Platform (KRISP).

'Preliminary estimates from genomic data and epidemiological studies suggest that Delta may be significantly more transmissible than other current VOCs, including Beta (30-60% more transmissible),' he says.

'A fast increase in the prevalence of the Delta variant means fast increase of severe illness, hospitalisation and deaths in low vaccine coverage countries such as ours.' Prof de Oliveira continues that 'this is exactly what we are seeing in our Third Wave of COVID-19 infection which is predominantly driven by the Delta variant.'



HOW ARE OUR VACCINES HOLDING UP TO DELTA?

New evidence confirms that Delta is well neutralised by vaccines, says Prof de Oliveira. The good news is that both vaccines currently being used in South Africa are offering good protection.

New data on **Johnson & Johnson's** single-dose COVID-19 vaccine shows that it is 85% effective against severe or critical disease and has demonstrated protection against hospitalisation and death. Indications are also that it may fare even better at protecting against Delta than against the Beta variant - which until recently was the most dominant variant in South Africa.

The **Pfizer** vaccine is also highly effective against Delta despite a recent 'hiccup'. The **Israeli government** announced that the vaccine's efficacy dropped from 95.3% (in May when the Alpha strain was dominant) to 64% (now that Delta is the most prevalent variant in Israel). But this just refers to protection against infection. When it comes to preventing severe disease, hospitalisation and death, the vaccine remains 93% effective, compared to 97% that was originally reported in The Lancet.

Right now, there's much talk **about booster jabs**, with scientists closely following emerging data to determine whether they'll be needed or not.



