

Variants on top of variants: COVID continues to mutate in Brazil, posing more perils to country already crushed by the pandemic

The unchecked spread of the more contagious SARS-CoV-2 variants in Brazil appears to have created even more dangerous versions of the virus that causes COVID-19.

The changes are documented by a team of researchers from FIOCRUZ, a large public health research lab run by Brazil's Ministry of Health.

The findings were recently posted [in a preprint](#) on Virological.org, ahead of peer review.

The study describes 11 SARS-CoV-2 sequences from five different Brazilian states. Each had telltale changes to the receptor binding domain, making it one of the known variants of concern or variants of interest. Each one also had additional changes to another important region on the virus: the N-terminal domain (NTD).

The NTD changes were deletions of important antibody-binding sites. Many of these were key deletions around Y144, a mutation that has arisen independently in other circulating variants and has been documented in viral mutations in convalescent patients with cancer, suggesting that it conveys an important advantage to the virus.

Follow the latest news and policy debates on sustainable agriculture, biomedicine, and other 'disruptive' innovations. Subscribe to our newsletter.

[SIGN UP](#)

"There are many antibodies that are generated for this NTD region. So these mutations are very likely to make the virus even more resistant to being neutralized," study author Felipe Naveca.

[Read the original post](#)