



An update on the latest SARS-CoV-2 variant under monitoring – NB.1.8.1

June 2025

The newly identified SARS-CoV-2 variant, NB.1.8.1, is an Omicron-descendent lineage derived from the recombinant variant XDV.1.5.1. It was first detected in January 2025 in Asia, and was designated a variant under monitoring (VUM) by the World Health Organization (WHO) on 23 May 2025 [1]. The NB.1.8.1 variant is increasing in prevalence globally, from 2.5% of sequences submitted to the Global Initiative on Sharing All Influenza Data (GISAID) in epidemiological week 14 of 2025 (31 March to 6 April 2025) to 10.7% in epidemiological week 17 of 2025 (21 to 27 April 2025) [2]. As of 18 May 2025, it has been detected in 22 countries, and has been associated with an increase in SARS-CoV-2 infections in parts of Asia [1].

Preliminary data indicate that the NB.1.8.1 variant has mutations in the spike protein that may increase the variant's transmissibility and that result in marginal immune evasion compared to other currently circulating variants, such as LP.8.1 [3]. However, current data do not indicate that the NB.1.8.1 variant is associated with increased severity or different symptoms compared to other circulating lineages. As of 23 May 2025, the WHO considered the public health risk of NB.1.8.1 to be low [1]. Current COVID-19 vaccines are expected to provide protection against severe illness due to NB.1.8.1 infections.

As of 10 June 2025, the NB.1.8.1 variant has not been detected in South Africa, although SARS-CoV-2 testing throughout the country is limited and few specimens are being submitted for sequencing. Data from the NICD's respiratory illness syndromic surveillance programmes, which operate in selected public and private hospitals and outpatient facilities, show that the number of SARS-CoV-2 infections is currently low [4].

Currently, South Africa is seeing an increase in influenza cases due to the winter season. Individuals who are unwell with respiratory symptoms should practice regular hand washing, cover coughs and sneezes, and avoid contact with people who may be at high risk of severe respiratory illness. The public is reminded to practice hand and respiratory hygiene (cover coughs and sneezes). Monitoring of SARS-CoV-2 variants continues as part of national syndromic surveillance for respiratory illness and the Network for Genomic Surveillance in South Africa (NGS-SA).

References:

1. World Health Organization TAG-VE Risk Evaluation for SARS-CoV-2 Variant Under Monitoring: NB.1.8.1, 23 May 2025: https://cdn.who.int/media/docs/default-source/documents/epp/tracking-sars-cov-2/23052025_nb.1.8.1_ire.pdf
2. GISAID. Tracking of HCoV-19 Variants. Accessed 10 June 2025. Available from: <https://gisaid.org/hcov19-variants/>
3. Guo C., Yu Y., Liu J. et al. Antigenic and virological characteristics of SARS-CoV-2 variants BA.3.2, XFG, and NB.1.8.1. 2025. The Lancet Infectious Diseases. doi: 10.1016/S1473-3099(25)00308-1
4. National Institute for Communicable Diseases. Weekly Respiratory Pathogens Surveillance Report: <https://www.nicd.ac.za/diseases-a-z-index/disease-index-covid-19/surveillance-reports/weekly-respiratory-pathogens-surveillance-report-week/>