

Genetic diversity of the novel coronavirus SARS-CoV-2 (COVID-19) in Portugal

More information at <https://insaflu.insa.pt/covid19>



Situation Report

September 1st, 2025

The National Institute of Health Doutor Ricardo Jorge, I.P. (INSA) has analysed **51221** SARS-CoV-2 genome sequences so far.

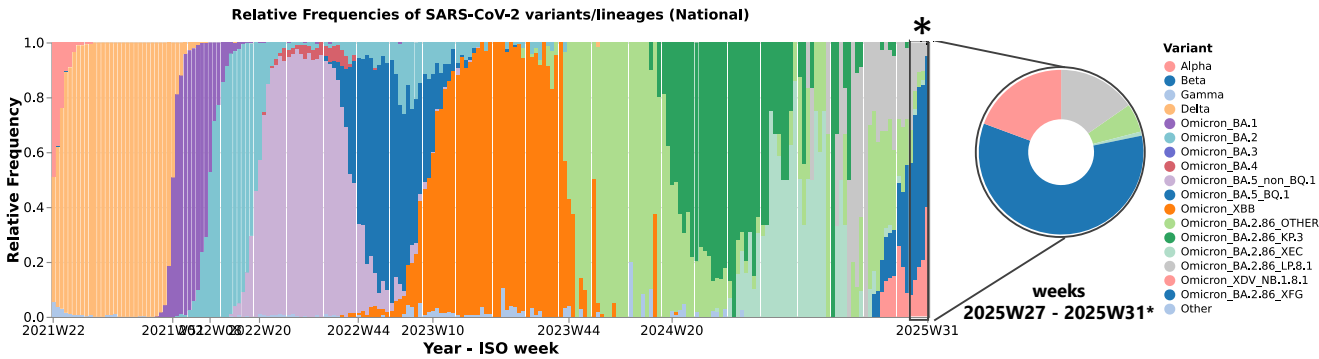


Figure 1: Evolution of the weekly relative frequency of the SARS-CoV-2 variants circulating in Portugal between ISO weeks 22/2021 (31/05/21 - 06/06/21) and 31/2025 (28/07/25 - 03/08/25), with emphasis on the latest weeks. *The presented relative frequencies refer to the period of ISO weeks 27/2025 to 31/2025. *This and other graphs can be explored interactively on the website.*

Main highlights

Summary of the circulation status in Portugal of the main SARS-CoV-2 lineages/variants of interest (VOI) or under monitoring (VUM) according to the ECDC (<https://www.ecdc.europa.eu/en/covid-19/variants-concern>):

- **LP.8.1 lineage (VUM) of the Omicron BA.2.86 variant:** its relative frequency shows a decreasing trend, representing approximately **15.32%** of the sequences analyzed in the latest sampling period (**weeks 27/2025 to 31/2025**) (**Figure 1**). Its most prevalent sub-lineage during this period was PF.2.2.1 (**Figure 2**).
- **NB.1.8.1 lineage (VUM) of the Omicron XDV recombinant variant:** recently detected in Portugal (week 20 of 2025), this VUM shows a **potentially increasing trend** in relative frequency, accounting for around **19.35%** of the sequences analyzed in the most recent sampling period (**weeks 27/2025 to 31/2025**) (**Figure 1**). Its sub-lineage with higher circulation during this period was NB.1.8.1 (**Figure 2**).
- **XFG lineage XFG (VUM) of the Omicron BA.2.86 variant:** recently detected in Portugal (week 18 of 2025), this VUM shows an **increasing trend** in relative frequency, accounting for around **58.9%** of the sequences analyzed in the most recent sampling period (**weeks 27/2025 to 31/2025**) (**Figure 1**). Its sub-lineages with likely higher circulation during this period include XFG and XFG.3 (**Figure 2**).
- In addition to the VOIs and VUMs highlighted above, the latest sampling (weeks 27/2025 to 31/2025) also identified the **circulation of other sub-lineages of the Omicron BA.2.86 variant (VOI)**, which together accounted for approximately **5.65%** of the sequences analyzed during this period (**Figure 1**).
- In summary, **there is a co-circulation of several lineages/variants of interest (VOI) or under monitoring (VUM) according to the ECDC** (<https://www.ecdc.europa.eu/en/covid-19/variants-concern>), **with the recombinant lineage XFG being now predominant (recently classified as a VUM).**

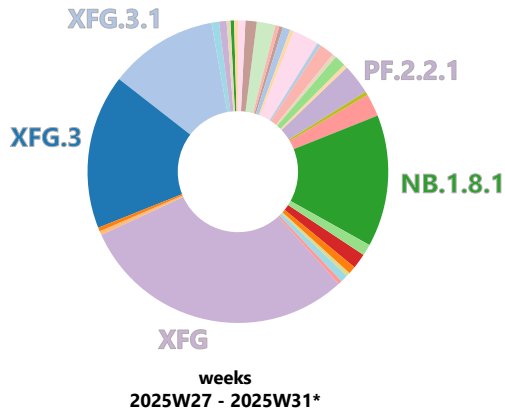


Figure 2: Distribution of the relative frequency of the most prevalent SARS-CoV-2 sub-lineages during the period from week 27/2025 to week 31/2025 (between June 30 and August 3, 2025). *Visit the website to explore additional interactive charts.*

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Recommended citation

National Institute of Health (INSA) Doutor Ricardo Jorge. Genetic diversity of the novel coronavirus SARS-CoV-2 (COVID-19) in Portugal. Lisbon, Portugal INSA; 2025. Available at: <https://insaflu.insa.pt/covid19>

Useful links

<https://www.ecdc.europa.eu/en/covid-19/situation-updates/variants-dashboard>
<https://www.who.int/activities/tracking-SARS-CoV-2-variants>
https://cov-lineages.org/lineage_list.html
<https://outbreak.info/>
<https://www.gisaid.org/>