

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

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



Situation Report

June 25th, 2025

The National Institute of Health Doutor Ricardo Jorge, I.P. (INSA) has analysed **50787** SARS-CoV-2 genome sequences so far.

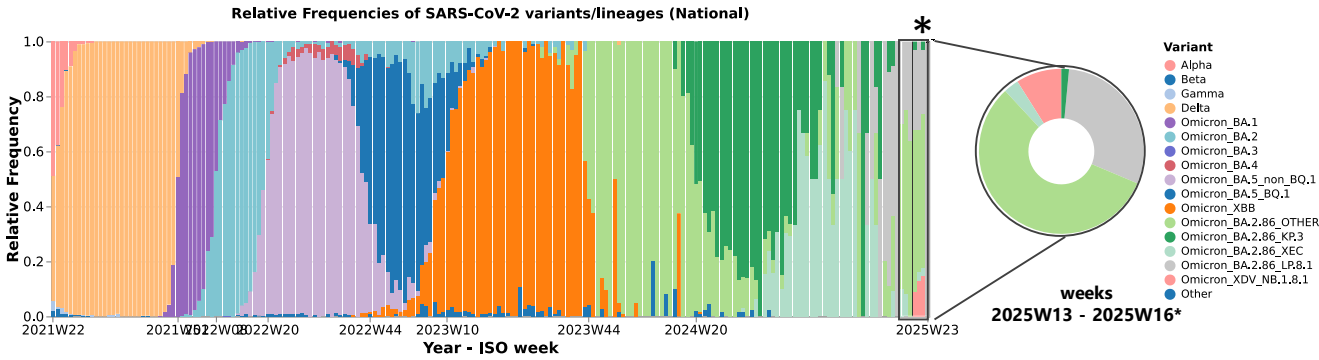


Figure 1: Evolution of the weekly relative frequency of the SARS-CoV-2 variants circulating in Portugal between ISO weeks 22/2021 (31/05/21 - 06/06/21) and 23/2025 (02/06/25 - 08/06/25), with emphasis on the latest weeks. *The presented relative frequencies refer to the period of ISO weeks 17/2025 to 23/2025. *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>):

- **KP.3 lineage (VOI) of the Omicron BA.2.86 variant:** its relative frequency has shown a decreasing trend since week 35 of 2024, representing **1.5%** of the sequences analyzed in the most recent sampling period (**weeks 17/2025 to 23/2025**) (**Figure 1**).
- **XEC recombinant lineage (VUM) of the Omicron BA.2.86 variant:** its relative frequency has also shown a decreasing trend since week 51 of 2024, accounting for **3.0%** of the sequences analyzed in the most recent sampling period (**weeks 17/2025 to 23/2025**) (**Figure 1**).
- **LP.8.1 lineage (VUM) of the Omicron BA.2.86 variant:** its relative frequency remains stable, representing approximately **30%** of the sequences analyzed in the latest sampling period (**weeks 17/2025 to 23/2025**) (**Figure 1**). Its most prevalent sub-lineages during this period include LP.8.1, LP.8.1.4, NY.1, NY.13, and 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 **9%** of the sequences analyzed in the most recent sampling period (**weeks 17/2025 to 23/2025**) (**Figure 1**). Its sub-lineages with likely higher circulation during this period include NB.1.8.1 and PQ.1 (**Figure 2**).
- In addition to the VOIs and VUMs highlighted above, the latest sampling (weeks 17/2025 to 23/2025) also identified the **circulation of other sub-lineages of the Omicron BA.2.86 variant (VOI)**, which **together** accounted for approximately **56.5%** of the sequences analyzed during this period (**Figure 1**). Notable among these are the sub-lineages PY.1 and the recombinant XFG (**Figure 2**).

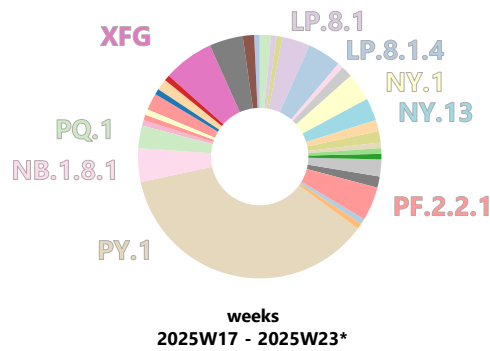


Figure 2: Distribution of the relative frequency of the most prevalent SARS-CoV-2 sub-lineages during the period from week 17/2025 to week 23/2025 (between April 21 and June 8, 2025). *Visit the website to explore additional interactive charts.*