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

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



Situation Report July 30th, 2025

The National Institute of Health Doutor Ricardo Jorge, I.P. (INSA) has analysed 50977 SARS-CoV-2 genome sequences so far.

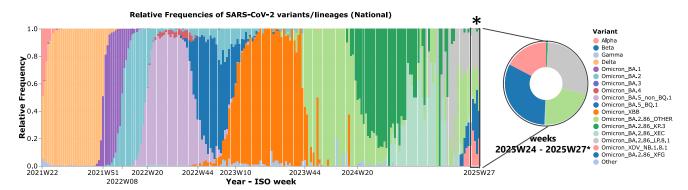


Figure 1: Evolution of the weekly relative frequency of the SARS-CoV-2 variants circulating in Portugal between ISO weeks 22/2021 (31/05/21 - 06/06/21) and 27/2025 (30/06/25 - 06/07/25), with emphasis on the latest weeks. *The presented relative frequencies refer to the period of ISO weeks 24/2025 to 27/2025. 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):

- <u>LP.8.1</u> lineage (VUM) of the Omicron BA.2.86 variant: its relative frequency remains stable, representing approximately 28.7% of the sequences analyzed in the latest sampling period (weeks 24/2025 to 27/2025) (Figure 1). Its most prevalent sub-lineage during this period is 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 17.3% of the sequences analyzed in the most recent sampling period (weeks 24/2025 to 27/2025) (Figure 1). Its sub-lineages with likely higher circulation during this period include NB.1.8.1 and PQ.1 (Figure 2).

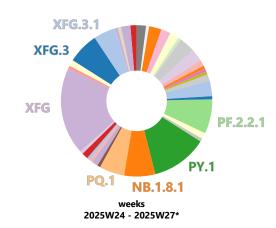


Figure 2: Distribution of the relative frequency of the most prevalent SARS-CoV-2 sub-lineages during the period from week 24/2025 to week 27/2025 (between June 9 and July 6, 2025). Visit the website to explore additional interactive charts.

- XFG lineage XFG (VUM) of the Omicron BA.2.86 variant: recently detected in Portugal (week 18 of 2025), this VUM shows a potentially increasing trend in relative frequency, accounting for around 32% of the sequences analyzed in the most recent sampling period (weeks 24/2025 to 27/2025) (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 24/2025 to 27/2025) also identified the **circulation of other sub-lineages of the Omicron BA.2.86 variant (VOI)**, which **together** accounted for approximately **20.7%** of the sequences analyzed during this period (Figure 1). Notable among these is the sub-lineage PY.1 (Figure 2).
- 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 no clear dominance of any particular one. Of notice, we highlight the recent detection and potential emergence of the recombinant lineage XFG (recently classified as a VUM).

Autorship

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Useful links

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





