

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

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



Situation Report

July 19th, 2022

The National Institute of Health Doutor Ricardo Jorge, I.P. (INSA) has analysed **39193** SARS-CoV-2 genome sequences so far.

Relative Frequencies of SARS-CoV-2 variants/lineages (National)

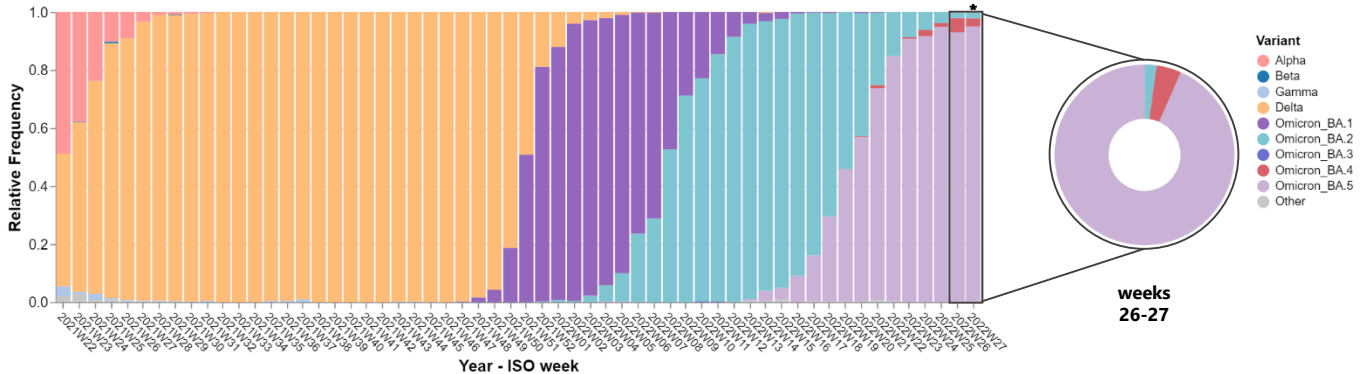


Figure 1: Evolution of the weekly relative frequency of the SARS-CoV-2 variants circulating in Portugal between ISO weeks 22 (31/05/21 - 06/06/21) and 27 (04/07/22 - 10/07/22). The frequencies presented for the last week under analysis (ISO week 27*) might change in the next report, given that some data from that period is still being processed. *This and other graphs can be explored interactively on the website.*

Main highlights

- **Lineage BA.5 of the variant Omicron is dominant in Portugal** since week 19 (09/05/22 - 15/05/22) and presents a **relative frequency of 95%** according to the most recent national sequencing survey on week 27 (04/07/22 - 10/07/22).
- **Lineage BA.4 of the variant Omicron** revealed an **increase in relative frequency** in the two latest sequencing surveys (weeks 26 and 27), when it represented of **4.5%** of the sequences.
- **Lineage BA.2 of the variant Omicron was dominant in Portugal between weeks 8 (21/02/22 - 27/02/22) and 19 (09/05/22 - 15/05/22).** Since then, its relative frequency has been continuously decreasing, representing **2.2% of the sequences in weeks 26 and 27.** We have been monitoring the circulation of BA.2 lineages with an additional mutation in position L452 of Spike protein (associated with resistance to neutralizing antibodies). Among those, it is highlighted the circulation of **BA.2.12.1**, which has been presenting fluctuating relative frequencies during the last weeks, with values **always <2%**. Of note, no sequences of the sub-lineage of interest BA.2.75 have been detected so far in Portugal.
- It is estimated that the circulation of **lineage BA.1 of the variant Omicron** (dominant between weeks 51/2021 and 7/2022) is currently residual, with no sequences detected since week 21 (23/05/22 - 29/05/22).

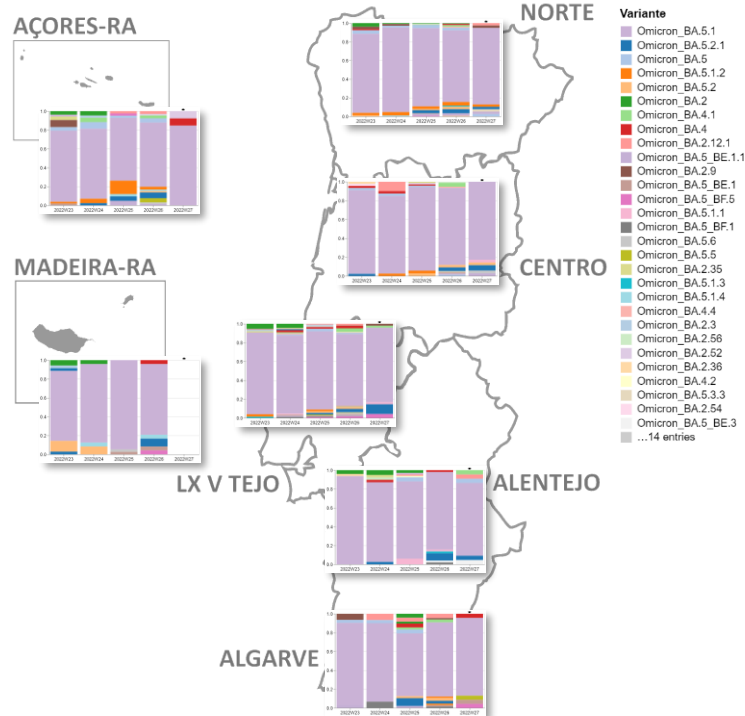


Figure 2: Evolution of the weekly relative frequency of SARS-CoV-2 lineages in each Health Region, between ISO weeks 23 (06/06/22 - 12/06/22) and 27 (04/10/22 - 10/07/22). It is expected that the frequencies presented for the last week under analysis (ISO week 27*) might change in the next report, given that some data from that period is still being processed. *This and other graphs can be explored interactively on the website.*

Autorship

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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/>