

An official EU website



European Centre for Disease Prevention and Control

ECDC releases new dashboard on SARS-CoV-2 variants

News

19 May 2021

A new dashboard released by ECDC now provides an overview of the proportion of SARS-CoV-2 variants of concern and variants of interest among sequenced samples in European Union (EU) and European Economic Area (EEA) countries, as well as sequencing volumes. It complements the data published in ECDC's weekly country overview report.

Data are sourced from The European Surveillance System (TESSy) (weekly reports submitted to ECDC by countries) and the GISAID EpiCoV database (extracted weekly). The maps within the dashboard will be updated every Thursday afternoon, and the data behind the dashboard are available to download.

How to read and interpret the data

Where data for a country are available from more than one source, the default source used is the one with the highest number of sequences in the last two weeks.

Data for the most recent reporting week have been excluded, as they may be incomplete.

Categories used for sequencing volume are based on the sample selection guidance provided in ECDC's technical guidance for sequencing of SARS-CoV-2 (<https://www.ecdc.europa.eu/en/publications-data/sequencing-sars-cov-2>) and its guidance for representative and targeted genomic SARS-CoV-2 monitoring (<https://www.ecdc.europa.eu/en/publications-data/guidance-representative-and-targeted-genomic-sars-cov-2-monitoring>):

- 1. ≥ 500 or $\geq 10\%$ of cases:** 500 or more, or at least 10% of all samples sequenced, by week; if samples are randomly selected, it is possible to follow trends and to estimate the distribution of variants. Higher numbers would increase the accuracy and allow the detection of variants accounting for a smaller proportion of circulating viruses.
- 2. 60-499:** Above 60 but below 500 sequenced samples by week. If samples are randomly selected, it is possible to detect a variant accounting for more than 2.5% of all circulating variants and to follow trends, but estimating variants distribution would be inaccurate.
- 3. < 60 :** Under 60 selected samples by week, a specific variant would have to account for at least 5% of all circulating viruses to be detected, if sampling is performed in a random and representative manner. This means that the system will have a poor ability to detect circulating variants of concern before they have an impact on the overall epidemiological situation.

How to use the dashboard:

Select the week number to filter maps and the variant distribution graph.

Select the country to filter both graphs.

The whole dashboard can be filtered to show only data when sequencing volumes were above those recommended by ECDC (≥ 500 sequences or $\geq 10\%$ of cases sequenced in a specific week) by clicking on "configure sources manually" and using the "source" filter (top-right) to switch sources.

Limitations:

As not all generated sequences are reported, underestimates of the sequencing activities in some countries might occur. Please see the country overview report (https://covid19-country-overviews.ecdc.europa.eu/#4_Variants_of_concern) for additional limitations.

The proportion of variants is only reliable when sequencing capacity is adequate (≥ 500 or $\geq 10\%$ of total samples). Even then, estimates must be treated with caution since they may be biased if the sequenced viruses are not representative of all cases in the country. For TESSy data, no proportion of variants has been estimated where there is no reliable denominator available.



Background information

Since the discovery of SARS-CoV-2, three variants of concern, first identified in the United Kingdom (B.1.1.7), South Africa (B.1.351), and Brazil (P.1), have been associated with higher transmissibility and severity of disease, with potential implications for acquired immunity or the effectiveness of current vaccines. In addition, SARS-CoV-2 lineages B.1.617.1, B.1.617.2, and B.1.617.3, first reported in India in December 2020, have been increasingly detected in other countries.

See the dashboard

[\(/en/covid-19/situation-updates/variants-dashboard\)](/en/covid-19/situation-updates/variants-dashboard)

SARS-CoV-2 variants dashboard

 [Coronavirus \(/en/search?f%5B0%5D=diseases%3A2943\)](/en/search?f%5B0%5D=diseases%3A2943) | [COVID-19 \(/en/search?f%5B0%5D=diseases%3A2942\)](/en/search?f%5B0%5D=diseases%3A2942) | [Public health threat \(/en/search?f%5B0%5D=public_health_areas%3A1583\)](/en/search?f%5B0%5D=public_health_areas%3A1583) | 



Download the data

[\(/en/publications-data/data-virus-variants-covid-19-eueea\)](/en/publications-data/data-virus-variants-covid-19-eueea)
Data

Data on SARS-CoV-2 variants in the EU/EEA

Data - 20 May 2021



Read more

[\(/en/covid-19/variants-concern\)](/en/covid-19/variants-concern)

SARS-CoV-2 variants of concern as of 21 May 2021

(/en/covid-19/country-overviews)

Weekly COVID-19 country overview



(/en/publications-data/european-surveillance-system-tessy)

Data

The European Surveillance System (TESSy)

Tool



(https://www.gisaid.org/)

GISAID



Related reports

(/en/publications-data/public-health-impact-sars-cov-2-variants-concern-scoping-review-protocol)
Publication

Public health impact of SARS-CoV-2 variants of concern: scoping review protocol



Technical report - 18 May 2021

(/en/publications-data/threat-assessment-emergence-sars-cov-2-b1617-variants)
Publication

Threat Assessment Brief: Emergence of SARS-CoV-2 B.1.617 variants in India and situation in the EU/EEA



Risk assessment - 11 May 2021

(/en/publications-data/methods-detection-and-identification-sars-cov-2-variants)
Publication

Methods for the detection and identification of SARS-CoV-2 variants



Technical report - 3 Mar 2021

(/en/publications-data/detection-and-characterisation-capability-and-capacity-sars-cov-2-variants)
Publication

Detection and characterisation capability and capacity for SARS-CoV-2 variants within the EU/EEA



Technical report - 16 Feb 2021

(/en/publications-data/covid-19-risk-assessment-variants-vaccine-fourteenth-update-february-2021)
Publication

Risk assessment: SARS-CoV-2 - increased circulation of variants of concern and vaccine rollout in the EU/EEA, 14th update



Risk assessment - 15 Feb 2021

Coronavirus (/en/search?f%5B0%5D=diseases%3A2943) | COVID-19 (/en/search?f%5B0%5D=diseases%3A2942) | Surveillance (/en/search?f%5B0%5D=public_health_areas%3A1598)

More on this topic

COVID-19

See all information on COVID-19, situation updates, risk assessments, questions and answers, latest evidence, surveillance and laboratory guidance and how to protect yourself and others.

Read more >

(/en/covid-19)

Situation updates on COVID-19

Overview of all the data available on the COVID-19 pandemic.

Read more >

(/en/covid-19/situation-updates)

Latest evidence on COVID-19

Latest evidence on coronaviruses, epidemiology, transmission, clinical characteristics, diagnostics testing and screening, immune response and immunity and vaccines and treatment.

Read more >

(/en/covid-19/latest-evidence)

© European Centre for Disease Prevention and Control (ECDC) 2021