

European Centre for Disease Prevention and Control

SARS-CoV-2 (COVID-19)

Stockholm, 07 January 2021

Disclaimer: These tables, histograms, maps and graphs are based on the available information at the time of publication, originating from several sources. Data completeness depends on the availability of information from the affected areas. All data should be interpreted with caution as the outbreak is evolving rapidly. In addition, due to the unavailability of date-of-onset data and different testing policies per country, these figures might not be reflective of the evolution of the epidemic.




Interpretation of the data



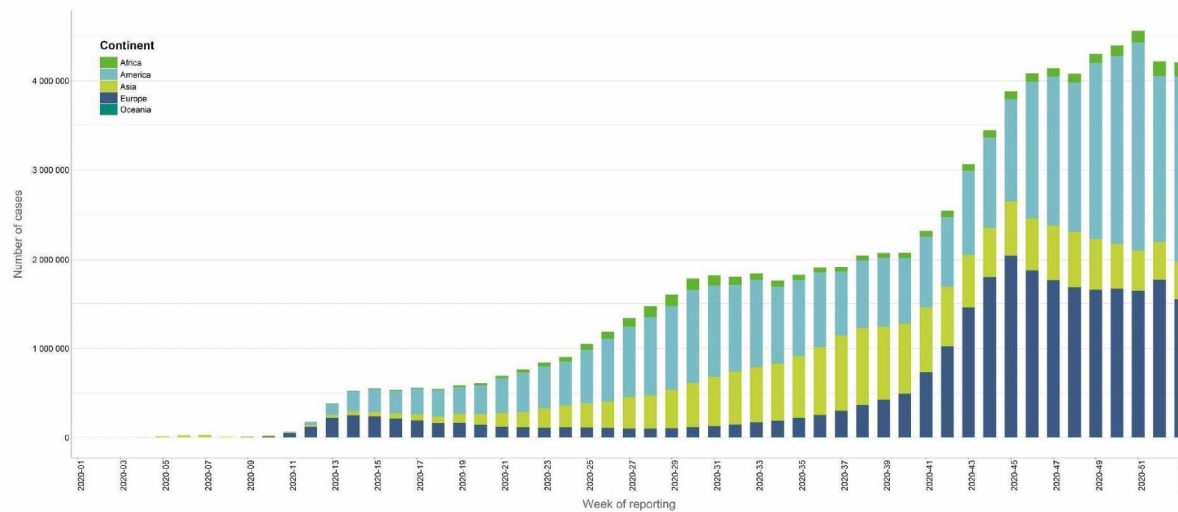
14-day notification rates and trends are collected using epidemic intelligence from various sources and are affected by the testing strategy, laboratory capacity and the effectiveness of surveillance systems.

As all of these factors can differ greatly between countries, ECDC does not recommend using notification rates to directly compare countries. Particular caution is needed when interpreting reported rates from areas with small populations where small changes in numbers of reported cases can have a big impact on the notification rate.

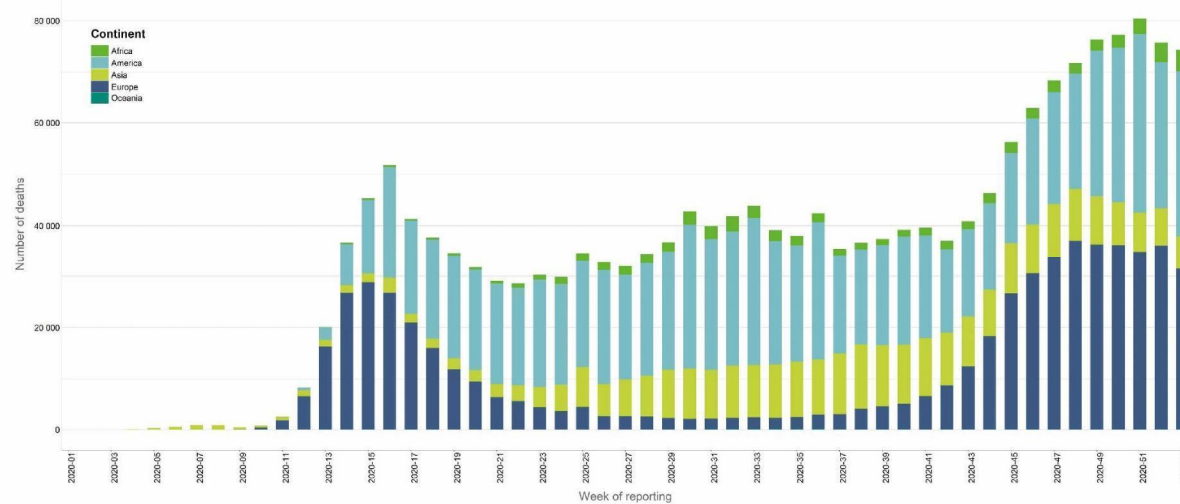
In addition, retrospective adjustment of data by reporting authorities is possible. Negative counts of new cases can arise if countries or subnational areas report cumulative totals that are lower than those reported previously, which can affect the presentation of data in maps and time-series plots.



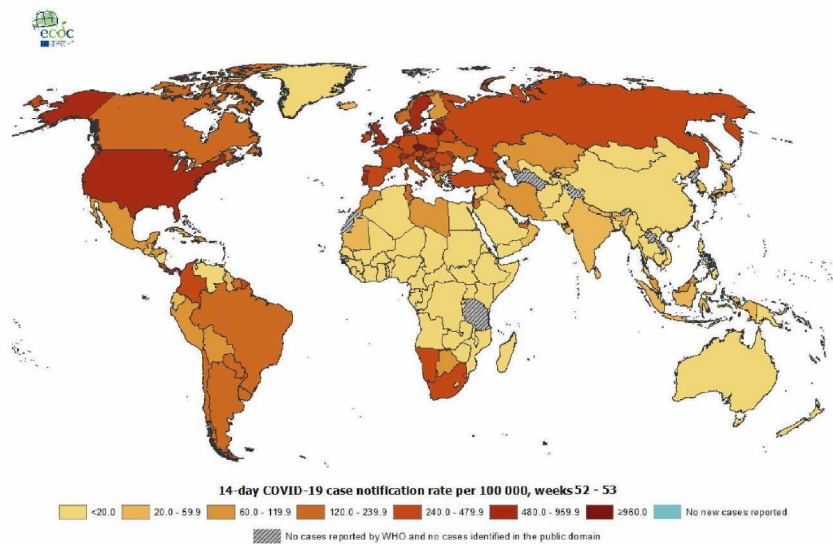
Distribution of COVID-19 cases in accordance with the applied case definitions in the affected countries, as of week 53, 2020



Distribution of COVID-19 deaths worldwide, as of week 53, 2020



Geographic distribution of 14-day cumulative number of reported COVID-19 cases per 100 000 population, worldwide, weeks 52-53

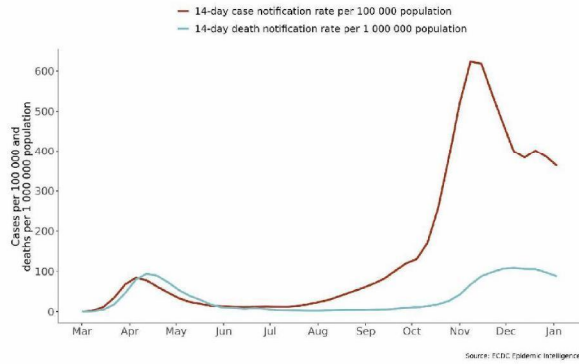


Administrative boundaries: © EuroGeographics © UN-FAO © Turstat. The boundaries and names shown on this map do not imply official endorsement or acceptance by the European Union. Date of production: 06 Jan 21.

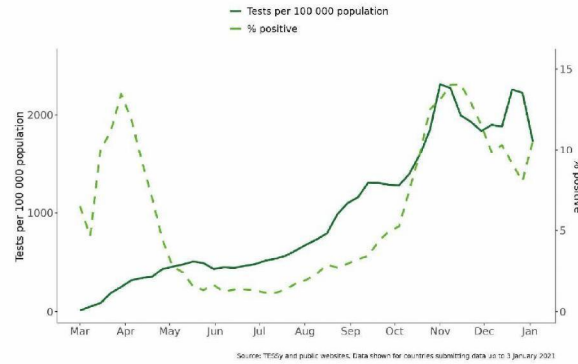
COVID-19 case and death notification rates, testing rates and test positivity, EU/EEA



EU/EEA: 14-day COVID-19 case and death notification rates, 1 March 2020 to 3 January 2021

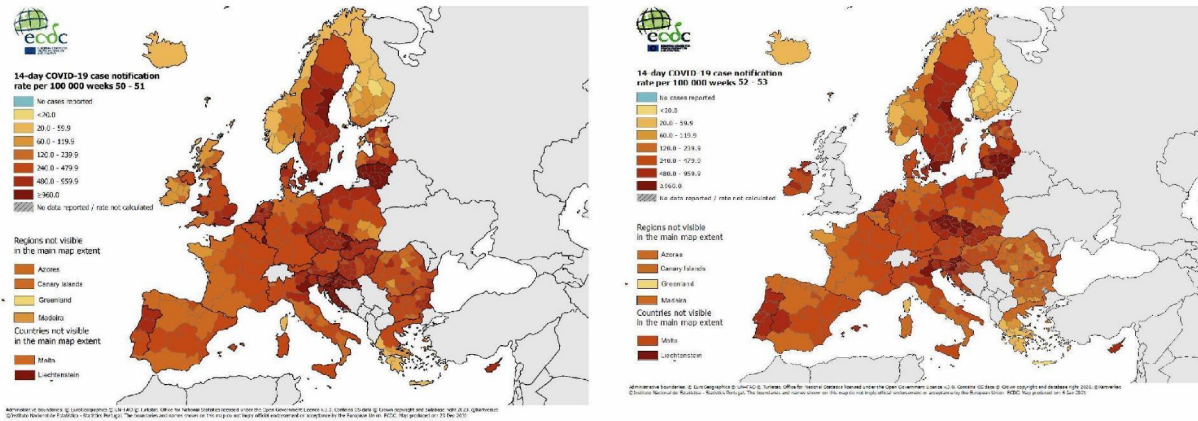


EU/EEA: testing rate and test positivity (%), 1 March 2020 to 3 January 2021





Subnational 14-day notification rates, weeks 51/52 and 52/53 EU/EEA



The 14-day notification rates for COVID-19 are not directly comparable between countries due to differences in testing policies, testing capacity and surveillance systems at national level. ECDC therefore does not recommend using notification rates for comparison between countries.



Trends in reported cases (1)



Overall situation


By the end of week 53 (ending Sunday 3 January 2021), there is a mixed picture with a number of countries with previous decreasing or stable trends now again showing increasing test positivity and in hospital or ICU admissions and/or occupancy due to COVID-19. The values of these indicators remain high for almost all countries, even where they are stable or decreasing, suggesting that transmission is still widespread. Six countries reported increasing trends in case notification rates in week 53 compared with fourteen countries in week 51. Case rates among older age groups were stable or decreasing in all countries, although in many situations still very high, whereas death rates continue to increase in seven countries. Seven countries continued to observe increases in hospital or ICU admissions and/or occupancy due to COVID-19. Note that there might be delays in reporting in some countries due to the holiday season which might affect results.

Trends in reported cases and testing

By the end of week 53, the 14-day case notification rate for the EU/EEA and the UK, based on data collected by ECDC from official national sources from 31 countries, was 363 (country range: 31 - 1 199) per 100 000 population. The rate has been stable for four weeks.

Among 29 countries with high case notification rates (at least 60 per 100 000), increases were observed in six countries (Cyprus, Czechia, Ireland, Malta, Norway and Portugal). Stable or decreasing trends in case rates of 1–7 weeks' duration were observed in 23 countries (Austria, Belgium, Bulgaria, Croatia, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, the Netherlands, Poland, Romania, Slovakia, Slovenia, Spain and Sweden).

The 14-day notification rates for COVID-19 are not directly comparable between countries due to differences in testing policies, testing capacity and surveillance systems at national level. ECDC therefore does not recommend using notification rates for comparison between countries.





Trends in reported cases (2)




Based on data reported to the European Surveillance System (TESSy) from 24 countries, among people over 65 years of age, high levels (at least 60 per 100 000) or increases in the 14-day COVID-19 case notification rates compared with last week have been observed in 20 countries (Austria, Belgium, Croatia, Cyprus, Czechia, Denmark, Estonia, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Romania, Slovakia, Slovenia, Spain and Sweden).

Notification rates are highly dependent on several factors, one of which is the testing rate. Weekly testing rates for week 53, available for 29 countries, varied from 452 to 9 277 tests per 100 000 population. Denmark had the highest testing rate for week 53, followed by Cyprus, Luxembourg, Malta and Ireland.

Among 24 countries in which weekly test positivity was high (at least 3%), 11 countries (Austria, Cyprus, Czechia, France, Germany, Hungary, Ireland, Italy, Portugal, Slovakia and Spain) observed an increase in test positivity compared with the previous week. Test positivity remained stable or had decreased in 13 countries (Belgium, Bulgaria, Croatia, Estonia, Latvia, Lithuania, Malta, the Netherlands, Norway, Poland, Romania, Slovenia and Sweden).

The 14-day notification rates for COVID-19 are not directly comparable between countries due to differences in testing policies, testing capacity and surveillance systems at national level. ECDC therefore does not recommend using notification rates for comparison between countries.






ECDC position on border closures



"ECDC does not suggest measures at the borders in the current epidemiological situation as an effective and efficient way of reducing the transmission of COVID-19. This position may change if a country or a region has achieved sustained control with low levels of community transmission."

¹ ECDC Technical report: Considerations for travel-related measures to reduce spread of COVID-19 in the EU/EEA, 26 May 2020
<https://www.ecdc.europa.eu/en/publications-data/considerations-travel-related-measures-reduce-spread-covid-19-eueea>

² ECDC Rapid Risk Assessment Coronavirus disease 2019 (COVID-19) in the EU/EEA and the UK - eleventh update, 10 August 2020
<https://www.ecdc.europa.eu/en/publications-data/rapid-risk-assessment-coronavirus-disease-2019-covid-19-eueea-and-uk-eleventh>



Thank you



Country overview report

<http://covid19-country-overviews.ecdc.europa.eu/>

COVID-19 dashboard

<https://qap.ecdc.europa.eu/public/extensions/covid-19/covid-19.html>



The image shows the exterior of the European Centre for Disease Prevention and Control (ECDC) building. The building is a modern, multi-story structure with a glass facade and a prominent glass canopy over the entrance. Several flags are flying in front of the building, including the European Union flag and the ECDC flag. The ECDC logo is visible in the top right corner of the image area.

Risk related to spread of new SARS-CoV-2 variants of concern in the EU/EEA

7 January 2021

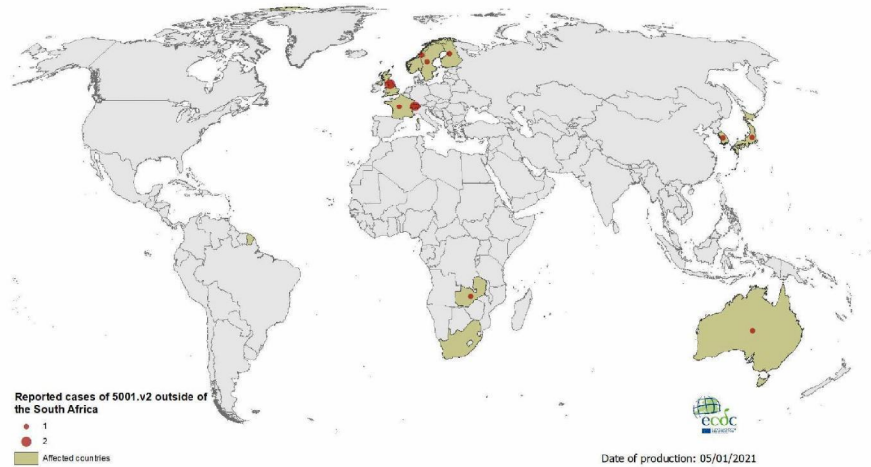


Background –501.V2, as of 28 December



- South Africa reported the emergence and rapid increase of a new variant 501.V2. It is now the dominant variant.
- 501.V2 is associated with a higher viral load, faster spread which may be related to higher transmissibility. No evidence is available yet on whether the infection severity is different.
- Introduction of 501.V2 has occurred in the EU/EEA and in the UK, but to a lesser extent than VOC 202012/01. Only few confirmed cases with links to travel o South Africa were reported in Finland (1) and in the UK (2).
- It is also expected that more cases will be reported in the EU/EEA and in the UK as well as globally in the coming weeks.

Countries reporting VOC 202012/01 and 501.V2 cases

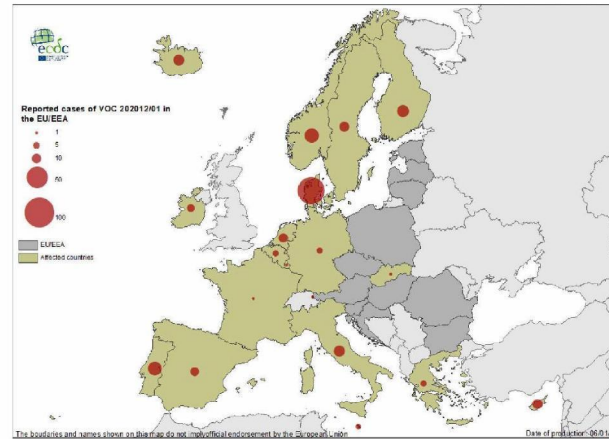


- 43 countries globally reported UK variant cases, 19 in the EU/EEA
- 11 countries globally reported the South African variant, 4 countries (Finland, France, Norway, Sweden) in the EU/EEA

EU/EEA countries reporting VOC 202012/01 cases



- Denmark reported community transmission with up to 5% VOC 202012/01 in the most affected regions among sequences from of cases in week 52*
- Detection of cases through targeted testing of travellers from UK or contacts of confirmed cases
- Majority of cases with link to UK, but also to other EU/EEA countries
- The fraction of cases with an associates sequence and the sampling strategy varies a lot between countries, comparing case numbers is currently not very useful
- Community spread in EU/EEA countries is likely ongoing, but the extent is unclear

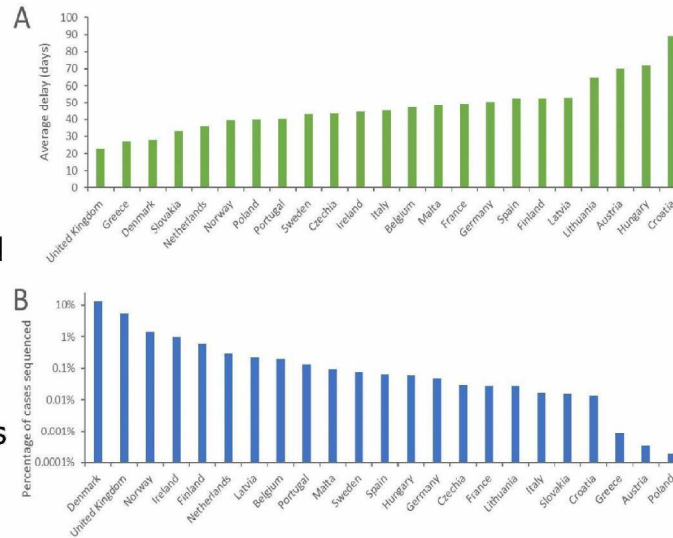


* <https://www.ssi.dk/-/media/cdn/files/opdaterede-data-paa-ny-engelsk-virusvariant-sarscov2-cluster-b117--01012021.pdf>

Variant detection capability in the EU/EEA



- Sequencing of the viral genome, or at least the S-gene, is required for samples with a positive test for SARS-CoV-2
- Of all EU/EEA Member States, only Denmark and Norway have sequenced and published more than 1% of cases* since September 2020
- Sequencing efforts are now targeted to find specific variants, which reduces the representativeness of sequences from many countries



Source: GISAID EpiCoV database, *Iceland has reported to ECDC that all cases in the country are sequenced within 48 hours, although these have not been uploaded to GISAID recently

SARS-CoV-2 global phylogeny November-December 2020



VOC 202012/01 in blue
501.V2 in yellow

https://nextstrain.org/ncov/global?c=gt-S_982,417&dmin=2020-11-01&m=div



Risk assessment (1)



- The overall risk associated with the introduction and further spread of SARS-CoV-2 VOC 202012/01 and 501.V2 as **high**, based on:
 - The probability of SARS-CoV-2 VOC 202012/01 and 501.V2 being introduced and further spread in the EU/EEA currently being **high**.
 - The impact of COVID-19 disease in terms of hospitalisations and deaths assessed as **high**, particularly for those in older age groups or with co-morbidities due to the increased transmissibility.



Risk assessment (2)



- The overall risk of an increased impact on health systems in the coming weeks as **high** based on:
 - The probability of increased circulation of any SARS-CoV-2 strains and this placing greater pressure on health systems in the coming weeks to be **high** due to the festive season and, higher still, in countries where the new variants are established.
 - The impact of this increased pressure on health systems being **high** even if current public health measures are maintained.



Options for response (1)



- Perform timely, targeted and representative sequencing of community cases to detect variant viruses early and monitor the incidence;
- Enhance targeted follow-up, testing, contact tracing and isolation of suspected and confirmed cases of the variant virus;
- Monitor local, regional and national situation to identify areas with abrupt changes in rates of transmission or disease severity;
- Notify cases of the new variant, as well as any other new SARS-CoV-2 variants of potential concern, through EWRS and TESSy;



Options for response (2)



- Maintain and strengthen the non-pharmaceutical interventions in accordance with the local epidemiological situation and national policies;
- Continue to advise the citizens of these need for non-pharmaceutical interventions including avoidance of all non-essential travel and social activities;
- Alert people coming from areas where the variant virus has been detected to the need to comply with quarantine, as well as getting tested and self-isolating if they develop symptoms;

Variant virus assessment framework



Criteria that could be considered for the development of such a framework:

- Changing **clinical presentation** (e.g. infection severity) and **epidemiological profile** (e.g. increase in morbidity and mortality);
- Presence of known **genetic markers** related to receptor binding, infectivity, severity, etc.;
- Changed **antigenic characteristics** suggested by increase in re-infections or breakthrough infections following vaccination;
- **Transmissibility** between humans;
- **Binding properties** to human receptor;
- Cross-protection, susceptibility and **immunity of the population**, vaccine coverage, vaccine product;
- Impact on available **vaccines**;
- Impact on available **treatment** e.g. antiviral susceptibility of viruses;
- Likely **animal reservoir** (species) being a risk for adaptive mutations and source of infection.