COVID-19 Weekly Epidemiological Update

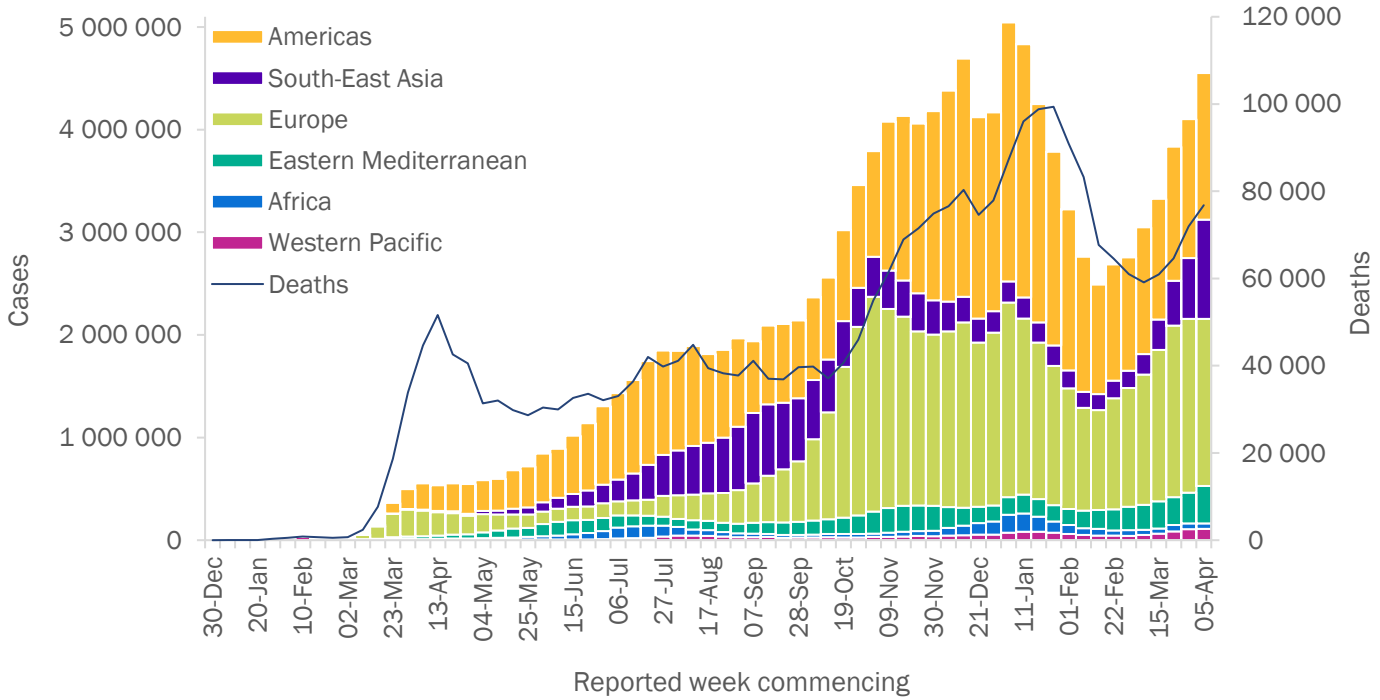
Data as received by WHO from national authorities, as of 11 April 2021, 10 am CET

In this edition:

Global overview

Globally, new COVID-19 cases rose for a seventh consecutive week, with over 4.5 million new cases reported in the last week (Figure 1). The number of new deaths increased for the fourth consecutive week, increasing by 7% compared to last week, with over 76 000 new deaths reported. The largest increases in case incidence were observed in the South-East Asia (most notably in India) and the Eastern Mediterranean regions (Table 1). All regions, except for the African Region and the Americas, reported increases in the number of deaths, with the largest increase of 189% from the Western Pacific Region (largely driven by a steep increase in new deaths in the Philippines) followed by 47% in South-East Asia.

Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 11 April 2021**



**See *Annex: Data, table and figure notes*

The highest numbers of new cases were reported from India (873 296 new cases; 70% increase), the United States of America (468 395 new cases; 5% increase), Brazil (463 092 new cases; 8% decrease), Turkey (353 281 new cases; 33% increase), and France (265 444 new cases; 9% increase).

Table 1. Newly reported and cumulative COVID-19 cases and deaths, by WHO Region, as of 11 April 2021**

WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days *	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days *	Cumulative deaths (%)
Americas	1 427 623 (31%)	5%	58 025 495 (43%)	36 599 (48%)	-2%	1 405 254 (48%)
Europe	1 630 624 (36%)	-4%	47 547 449 (35%)	26 853 (35%)	7%	1 008 251 (35%)
South-East Asia	965 591 (21%)	63%	16 177 826 (12%)	6 331 (8%)	47%	228 385 (8%)
Eastern Mediterranean	364 456 (8%)	22%	8 057 550 (6%)	4 398 (6%)	19%	165 010 (6%)
Africa	50 710 (1%)	-14%	3 171 006 (2%)	1 022 (1%)	-5%	79 545 (3%)
Western Pacific	111 833 (2%)	6%	2 077 516 (2%)	1 570 (2%)	189%	33 474 (1%)
Global	**4 550 837 (100%)**	**11%**	**135 057 587 (100%)**	**76 773 (100%)**	**7%**	**2 919 932 (100%)**

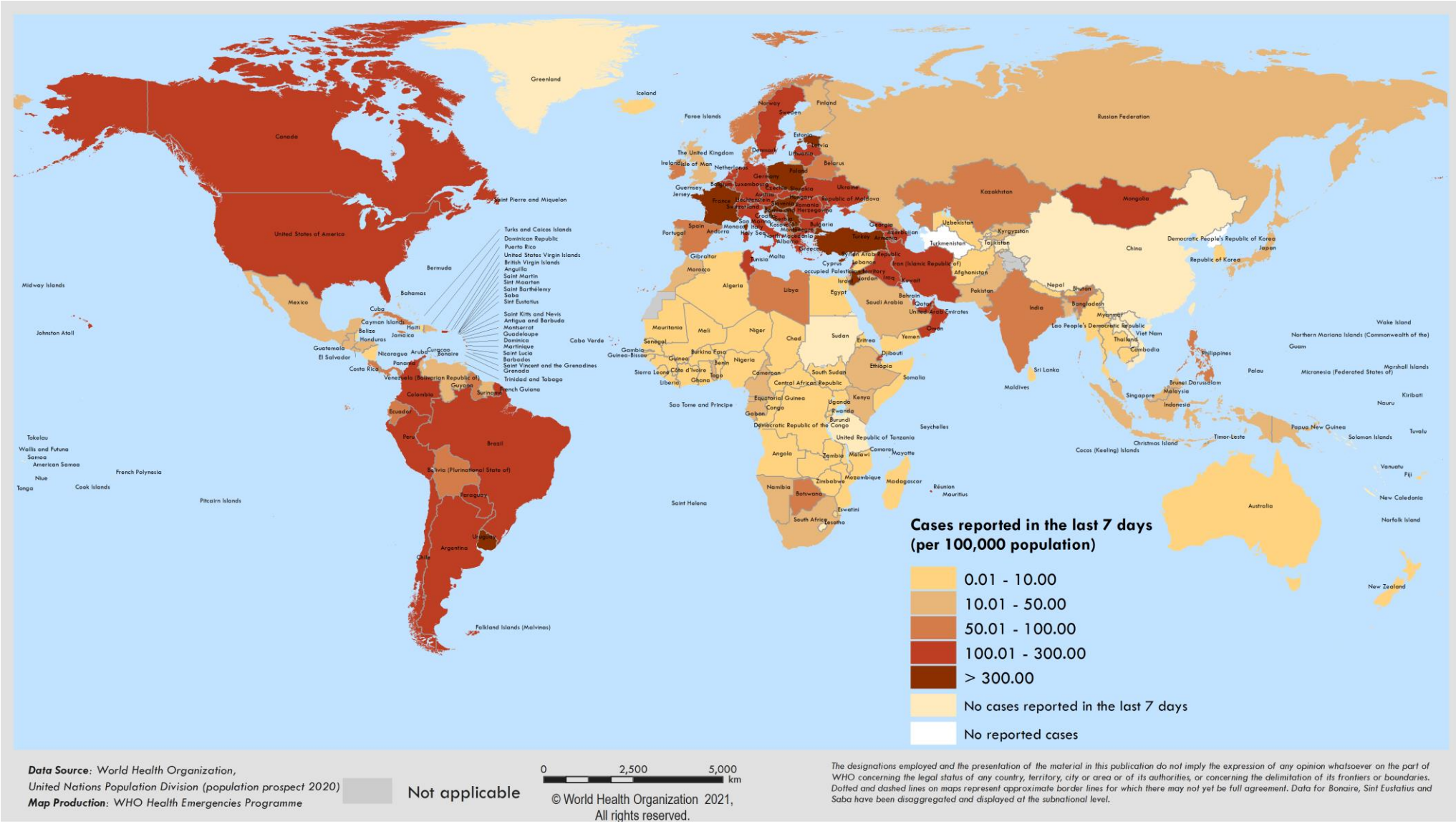
**Percent change in the number of newly confirmed cases/deaths in past seven days, compared to seven days prior*

**See *Annex: Data, table and figure notes*

For the latest data and other updates on COVID-19, please see:

- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly Operational Update

Figure 2. COVID-19 cases per 100 000 population reported by countries, territories and areas, 5-11 April 2021**



Data Source: *World Health Organization, United Nations Population Division (population prospect 2020)*
Map Production: *WHO Health Emergencies Programme*

The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement. Data for Bonaire, Sint Eustatius and Saba have been disaggregated and displayed at the subnational level.

**See *Annex: Data, table and figure notes*

Special Focus: Update on SARS-CoV-2 Variants

WHO, in collaboration with national authorities, institutions and researchers, continues to monitor the public health events associated with SARS-CoV-2 variants and provides updates as new information becomes available. Further information on the background of the variants of interest (VOIs) and variants of concern (VOCs) is available from previously published editions of the Weekly Epidemiological Update. Here we provide an update on the geographical distribution, and emerging evidence surrounding impacts of VOCs on COVID-19 epidemiology, vaccines and diagnostics. We also update on a recent global consultation, and emerging VOIs.

The number of countries reporting VOCs continue to increase (Table 2, Figures 3, 4 and 6, Annex 2). This information should be interpreted with due consideration of limitations of ongoing surveillance, including but not limited to differences between countries in sequencing capacity and which samples are prioritized for sequencing. WHO continues to advocate for strengthening surveillance and sequencing capacity, and a systematic approach to provide a representative indication of the extent of transmission of SARS-CoV-2 variants; based on the local epidemiological situation and capacity, and the detection of unusual events.

On 29 March 2021, WHO convened a Global Consultation on a Decision Framework for Assessing the Impact of SARS-CoV-2 VOCs on Public Health Interventions. This was the first global forum of stakeholders to outline the global risk assessment and framework, including critical steps for the detection, monitoring, and assessment of SARS-CoV-2 variants, and to provide an overview of the available evidence on current VOCs and their impact on public health interventions. Using COVID-19 vaccines as an example, WHO and partners reviewed potential decision-making processes with respect to analysing the impact of VOCs, evaluating and modifying vaccines, and issuing policy recommendations. While the existing COVID-19 vaccines are still effective against VOCs, the consultation provided the opportunity to consider the overall process for making changes to vaccines, should they be needed. Following the consultation, WHO is working with partners to further define the global risk monitoring and assessment framework for SARS-CoV-2 variants to fully elaborate decision-making processes, including recommending any changes to vaccine composition, and triggers for such decision making. The meeting report will be published in the coming weeks. A follow up consultation is tentatively planned for June 2021.

Table 2: Overview of emerging information on key variants of concern, as of 13 April 2021*

Nextstrain clade	**20I/501Y.V1**	**20H/501Y.V2†**	**20J/501Y.V3**
PANGO lineage	B.1.1.7	B.1.351	B.1.1.28.1, alias **P.1†**
GISAID clade	GR	GH	GR
Alternate names	**VOC 202012/01†**	VOC 202012/02	VOC 202101/02
First detected by	United Kingdom	South Africa	Brazil / Japan
Earliest sample(s)	20 September 2020	Early August 2020	December 2020
Key spike mutations	H69/V70 deletion; Y144 deletion; N501Y; A570D; and P681H	L242/A243/L244 deletion; K417N; E484K; N501Y	K417T; E484K; N501Y
Common mutation	S106/G107/F108 deletion in non-structural protein 6 (nsp6)		
Transmissibility	Increased (43%-90%)[1], increased secondary attack rate [11% (95%CI: 10.9-11.2%) among closer contacts][2]	Increased [1.50 (95% CI: 1.20-2.13) times more transmissible than previously circulating variant[3, 4]	Increased, more transmissible than previous circulating variants[5]
Severity	Possible increased risk of hospitalization[6], severity and mortality[7]. Other studies showing limited impact/mixed findings [1, 8, 9]	Possible increased risk of in-hospital mortality by 20%[4,10]	Under investigation, limited impact[5]
Assessment of potential reinfection/breakthrough	Slight reduction in neutralization capacity but overall neutralizing titers still remained above the levels expected to confer protection[11]	Decreased neutralization capacity, suggesting potential increased risk of reinfection[3, 12, 13]	Decreased neutralization capacity, reinfections reported[14, 15]
Potential impacts on vaccines	• No or minimal impact on post-vaccine neutralization by Moderna, Pfizer-BioNTech, Oxford-AstraZeneca, Novavax, Bharat, Gamaleya, and Sinopharm vaccines [11, 16-30,31]; however there is some evidence of more substantial loss for AstraZeneca.[32] • Bharat, Gamaleya, Sinopharm, and Sinovac vaccines have each been evaluated by single studies reporting no significant reduction in neutralization.[33, 34] • No significant change in prevention of disease by Oxford-AstraZeneca, Novavax, and Pfizer[35-37] • Evidence for prevention of infection limited. Reduced effect reported for Oxford-AstraZeneca.[32]	• Post-vaccine neutralization reductions from several from studies range from minimal to substantial for Moderna and Pfizer. • Substantial reductions have been found for the Oxford-AstraZeneca product.[29, 40] • Minimal to modest reductions have been found for Sinopharm. • A single study found modest reduction for Sinovac. • Single studies found more substantial reduction for Novavax and Gamaleya. • Efficacy against disease was retained, but somewhat lower, in South Africa for the Novavax and Janssen vaccines when 501Y.V2 was dominant compared to settings without this variant.[41, 42] • In a small study, AstraZeneca vaccine did not demonstrate vaccine efficacy against mild-moderate COVID-19 disease, with wide confidence intervals, while efficacy against severe disease was not assessed and is undetermined.[43, 44] • Information regarding vaccine impact on asymptomatic infection by 501Y.V2 remains a gap.	• Limited to modest reduction in post-vaccine neutralization by Oxford-AstraZeneca, Moderna and Pfizer vaccines; however there is some evidence of more substantial reduction. [18, 21, 28, 29, 38, 45, 46] • Preliminary suggestion of loss of neutralization following vaccination with Sinovac[47] • Preliminary vaccine effectiveness of Sinovac in setting of P.1 was estimated in Brazil[6]
Potential impacts on diagnostics	S gene target failure (SGTF). No impact on Ag RDTs observed[48]	None reported to date	None reported to date
Countries reporting cases (newly reported since the last update)**	132 (2)	82 (2)	52 (7)

†While work is ongoing to establish standardized nomenclature for key variants, these are the names by which WHO will refer to them in this publication.

**Generalized findings as compared to non-VOC viruses. Based on emerging evidence from multiple countries, including nonpeer reviewed preprint articles and reports from public health authorities and researchers – all subject to ongoing investigation and continuous revision.*

***Includes official and unofficial reports of VOCs detections in countries/territories/areas.*

Variant VOC 202012/01

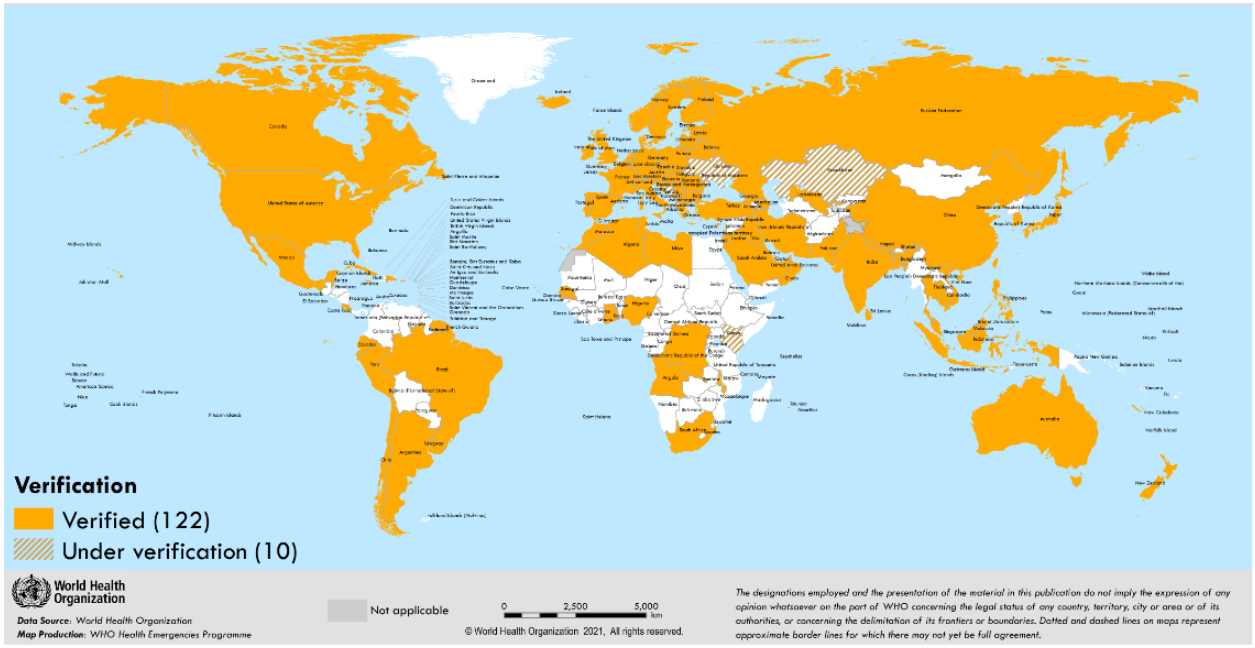
Since our last update on 30 March, VOC 202012/01 has been detected in two additional countries. As of 13 April, a total of 132 countries across all six WHO regions have reported cases of this variant (Figure 3).

Several studies have shown increased transmissibility (including secondary attack rates), severity and mortality associated with VOC 202012/01 compared to non-VOC variants.[1, 6-9, 49-53] As mentioned in earlier publications, the likelihood of infection upon contact (secondary attack rate) is higher in people infected with VOC202012/01 than other variants. A recent technical briefing by Public Health England estimated the secondary attack rates to be 11% (95%CI: 10.9%-11.2%) higher among close contacts of cases who have not travelled between 5 January to 7 March 2021. Among the cases who travelled, secondary attack rates were estimated to be 1.9% (95% CI: 1.7%-2.2%); of note this population was not restricted to only close contacts and included several categories such as contacts on a plane linked by additional contact tracing.[2]

A recently published study which used datasets from several European countries and the United States of America estimated that VOC 202012/01 has a 43–93% higher reproduction number (95% CI: 38–130%) than previously circulating variants.[1] The study also assessed the severity of disease, but differing from other studies, suggested no clear evidence increased severity associated with VOC 202012/01; however, these estimates should be interpreted with caution given delays between infection and hospitalization or death (models were fitted through to 24 December 2020). Additionally, it has been shown that higher rates of transmission and case incidence may lead to more hospital admissions and strain on health systems – potentially impacting on patient outcomes. Two other recently published peer reviewed studies (an ecological study and a hospital-based cohort study) found no evidence of an association between VOC202012/01 and severe disease or death [8, 9]; again, the generalizability to these findings require further review against other evidence. Collectively, these studies highlighted the need for further research to better understand the impact of VOC 202012/01.

There is a growing body of evidence on vaccine-induced neutralizing antibody activity against VOC 202012/01, including for AstraZeneca, Moderna, Pfizer, Novavax, Bharat, Gamaleya, and Sinopharm vaccines.[11, 16-30 31] As noted in the Weekly epidemiological Update published on 23 March, the findings support that neutralizing activity is largely sustained against this variant. A recent evaluation of CD8+ T-cell from convalescent sera supports the likelihood of maintaining recognition of this variant; however, vaccine induced T-cell responses were not directly evaluated.[55] Evidence for vaccine protection against disease is available from randomized control trials and observational studies (AstraZeneca and Pfizer vaccines) and early evidence on prevention of infection of this variant by the AstraZeneca vaccine.[55]

Figure 3. Countries, territories and areas reporting SARS-CoV-2 VOC 202012/01 as of 13 April 2021



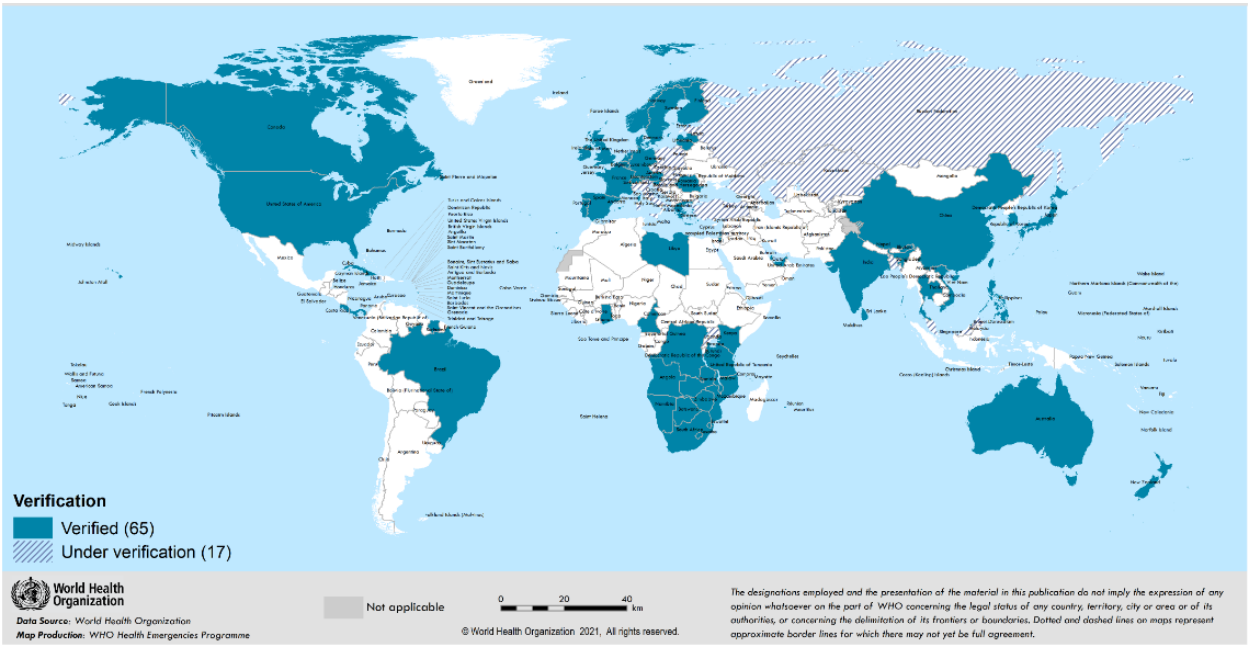
Variant 501Y.V2

Since the last update on 30 March, 501Y.V2 has been reported from two additional countries – totalling 82 countries across all six WHO regions (Figure 4).

Investigations from a recent study[56] showed five imported cases of variant 501Y.V2 was responsible for 14 transmission chains and a total 36 cases in France. It suggested that epidemiological characteristics, such as incubation period and transmissibility, seemed comparable to those described in China [57-59] before the emergence of the 501Y.V2 variant. This study also established that the secondary attack rate (confirmed or probable cases) was estimated at 76.9% and the tertiary attack rate was estimated at 73.3%. The study highlights that the lack of tertiary transmission outside of the personal sphere suggests that distancing and barrier measures were effective.

Reductions in neutralizing antibody activity against 501Y.V2 induced by vaccines or natural infection compared with wild-type (non-VOC) variants, have been documented in a substantial number of studies.[3, 18, 21, 24, 25, 27-29, 40, 46, 60, 61] Findings from four recent studies report substantial reductions in neutralizing antibody activity for Moderna (9.7-fold reduction), Pfizer-BioNTech (14-fold and 8.8-fold reductions)[30], Novavax (14.5-fold reduction) and Gamaleya (6.8-fold reduction) vaccines.[22, 24, 61] However, some studies report smaller reductions for Moderna and Pfizer-BioNTech vaccines.[21, 26, 40] Another recent study found 2.4 to 3.3-fold reductions in neutralizing activity induced by the Sinovac and Sinopharm vaccines.[34] Adding to the previously cited T-cell analyses from the 30 March update, which suggested a likely maintenance of function, a further analysis of CD8+ T-cell responses from convalescent sera which also support the likely retention of function.[55, 62]

Figure 4. Countries, territories and areas reporting SARS-CoV-2 501Y.V2 as of 13 April 2021



Variant P.1

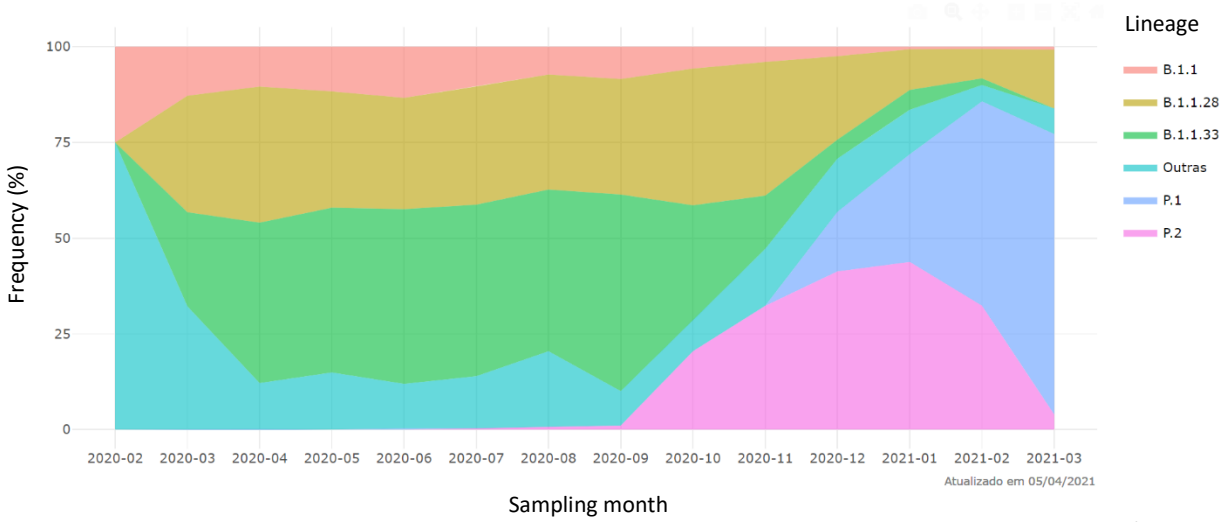
Since our last update, variant P.1 has been reported in seven additional countries. As of 13 April, this variant is reported in 52 countries across all six WHO regions (Figure 5).

Genomic surveillance and modelling studies based in Brazil suggest higher transmissibility of the P.1 variant when compared to Brazilian non-P.1 lineages.[15, 63, 64] Moreover, case fatality rates in Brazil increased in people older than 20 years in February 2021, when compared to January 2021, suggesting a potential association between P.1 and more severe disease.[65] Akin to similar observations with other VOCs elsewhere, it will be important to disentangle changes in disease severity from impacts of increased transmissibility/high incidence adding pressures to health systems and adversely impacting patient outcomes.

A recent study carried out in Italy in settings where both P.1 and VOC 202012/01 were co-circulating at significant levels highlighted that the P.1 variant was outcompeted by VOC 202012/01, which rapidly dominated in the majority of regions. The same study also highlighted potential cross-protection across variants.[66]

In Brazil, the proportion of variant P.1 increased from 28% of specimens collected in January 2021 to 73% in March 2021, based on the data generated from the Fiocruz Genomic Network and GISAID (Figure 5).[67] By geographic region of specimen collection, the proportion of variant P.1 was higher in the South east and North regions, which includes Amazonas State, compared to other regions.

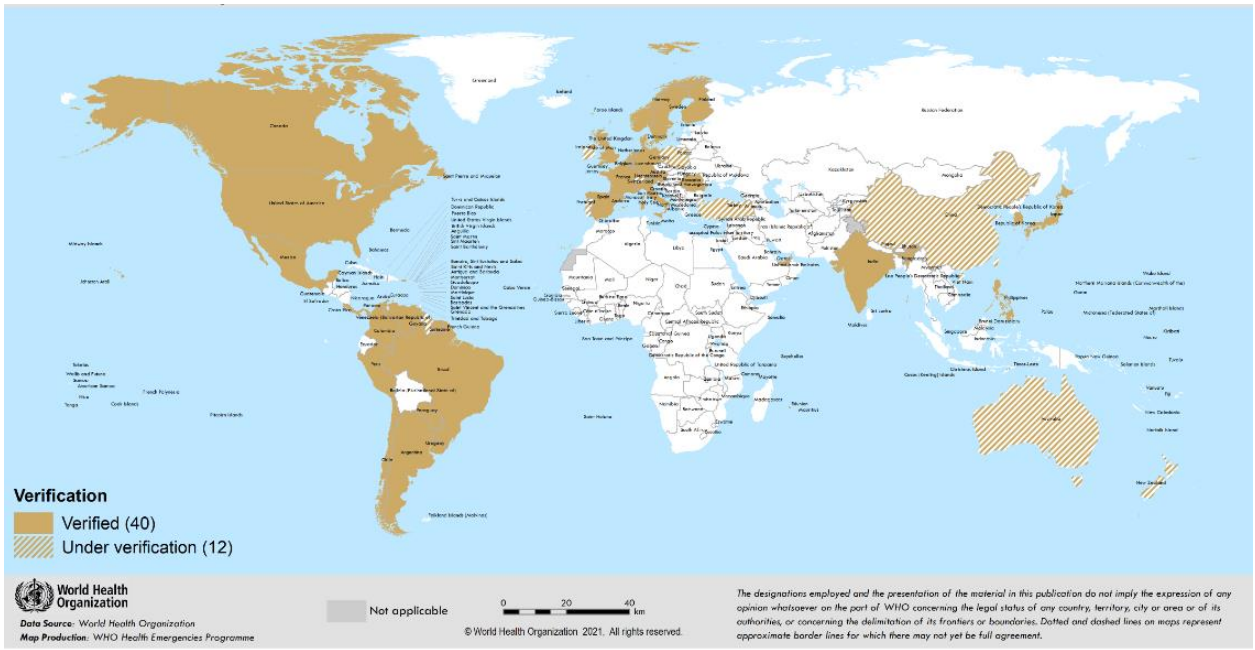
Figure 5. Proportion of lineages of SARS-CoV-2 identified in Brazil by month of sampling, February 2020 – March 2021



(source: Fiocruz [67])

Several studies have measured the neutralization of variant P.1 by sera from those vaccinated with Pfizer, Moderna, AstraZeneca or Sinovac, including a recent report from the phase III randomized control trial of Sinovac in Brazil reporting seroconversion.[17, 21, 25, 26, 28, 29, 46, 68, 69] Based on these findings, the neutralization activity was reduced by 1.7 to 10-fold depending on the vaccine and individuals; for some vaccines, there was substantial variability in results across studies. One T-cell study concluded that responses against this variant were largely preserved and a recent CD8+ T-cell study of convalescent sera also inferred likely retention of activity.[55] Preliminary clinical outcome data are currently limited to a recent matched test-negative case-control study of healthcare workers in Manaus, Brazil at a time when P.1 was prevalent. It found the Sinovac vaccine to be 49.6% effective against symptomatic COVID-19 and 35.1% effective against asymptomatic infection, though these findings have not yet been peer-reviewed.[70]

Figure 6. Countries, territories and areas reporting SARS-CoV-2 P.1 variant as of 13 April 2021



Emerging variants of interest (VOIs)

All viruses, including SARS-CoV-2, change over time resulting in the emergence of new variants, most without a direct benefit to the virus or other public health impacts. WHO, in collaboration with national authorities, institutions and researchers, routinely assesses if variants of SARS-CoV-2 result in changes in transmissibility, clinical presentation and severity, or if they impact on public health and social measures (PHSM). Systems have been established to detect "signals" of potential variants of interest or concern, as well as unusual events potentially associated with a variant, and assess these based on the risk posed to global public health (see also working definitions). A number of such signals are currently under assessment, and as new VOIs or VOCs are determined, WHO is committed to highlighting these to support prioritization for further monitoring and assessment. Table 3 summarises assessed and designated VOIs as of 13 April 2021. National authorities may choose to designate other variants of local interest/concern as every local situation is unique, with different variants circulating, requiring surveillance and response systems to adapt to their local epidemiological situation.

Table 3: Overview of variants of interest (VOIs), as of 13 April 2021*

Nextstrain clade	PANGO lineage	GISAID clade	Alternate names	First detected by	Earliest samples	Key spike mutations
20C	B.1.525	G/484K.V3	-	United Kingdom and Nigeria	Dec 2020	H69-V70 deletion; Y144 deletion; Q52R; E484K; Q677H; D614G; and F888L
20C/S.452R	B.1.427/B.1.429	GH/452R.V1	CAL.20C/L452R	United States of America	Jun 2020	L452R; W152C; S13I; and D614G
20B/S.484K	B.1.1.28.2, alias P.2	GR	-	Brazil	Apr 2020	L18F; T20N; P26S; F157L; E484K; D614G; S929I; and V1176F
Not yet assigned	B.1.1.28.3, alias P.3	Not yet assigned	PHL-B.1.1.28	Philippines and Japan	Feb 2021	141-143 deletion E484K; N501Y; and P681H
20C	B.1.526 with E484K or S477N	GH	-	United States of America	Nov 2020	L5F; T95I; D253G; D614G; A701V; and E484K or S477N
20C	B.1.616	GH	-	France	Jan 2021	G142 deletion; D66H; Y144V; D215G; V483A; D614G; H655Y; G669S; Q949R; and N1187D

WHO recommendations

The potential for virus mutation increases with the frequency of human and animal infections. Therefore, reducing transmission of SARS-CoV-2 by using established disease control methods as well as avoiding introductions to animal populations, are critical aspects to the global strategy to reduce the occurrence of mutations that have negative public health implications. PHSM remain critically important to curb the spread of SARS-CoV-2, including newly reported variants. Evidence from multiple countries with extensive transmission of VOCs has indicated that the implementation of physical distancing and other PHSM, as well as infection prevention and control (IPC) measures in health facilities, has been effective in reducing COVID-19 case incidence, hospitalizations and deaths. Findings from new studies evaluating transmission, severity and impact on medical countermeasures will continue to help inform PHSM and IPC measures employed by Member States. National and local authorities are encouraged to continue strengthening existing PHSM, IPC and disease control activities, including epidemiological surveillance, strategic testing, and systematic sequencing of SARS-CoV-2 where feasible.

Additional resources

- Proposed working definitions of SARS-CoV-2 Variants of Interest and Variants of Concern
- COVID-19 new variants: Knowledge gaps and research
- PAHO Epidemiological Update: Variants of SARS-CoV-2 in the Americas - 24 March 2021
- Genomic sequencing of SARS-CoV-2: a guide to implementation for maximum impact on public health
- Considerations for implementing and adjusting PHSM in the context of COVID-19
- Disease Outbreak News on SARS-CoV-2 Variants, 31 December 2020

References

1. Davies NG, Abbott S, Barnard RC, Jarvis CI, Kucharski AJ, Munday JD, et al. Estimated transmissibility and impact of SARS-CoV-2 lineage B.1.1.7 in England. Science. 2021:eabg3055. Available from: http://science.sciencemag.org/content/early/2021/03/03/science.abg3055.abstract
2. Public Health England. SARS-CoV-2 variants of concern and variants under investigation in England: Technical Briefing 8 2021 [Available from: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/975742/Variants_of_Concern_VOC_Technical_Briefing_8_England.pdf.
3. Wibmer CK, Ayres F, Hermanus T, Madzivhandila M, Kgagudi P, Oosthuysen B, et al. SARS-CoV-2 501Y.V2 escapes neutralization by South African COVID-19 donor plasma. Nat Med. 2021. Available from: https://www.ncbi.nlm.nih.gov/pubmed/33654292
4. Pearson CAB RT, Davies NG et al. Estimates of severity and transmissibility of novel SARS-CoV-2 variant 501Y.V2 in South Africa. 2021. Available from: https://cmmid.github.io/topics/covid19/sa-novel-variant.html
5. Faria NR, Mellan TA, Whittaker C. Genomics and epidemiology of a novel SARS-CoV-2 lineage in Manaus, Brazil.
6. Bager P WJ, Fonager J, Albertsen M, Michaelsen TY, Moller CH, et al. Increased Risk of Hospitalisation Associated with Infection with SARS-CoV-2 Lineage B.1.1.7 in Denmark. Lancet. 2021. Available from: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3792894
7. NERVTAG paper on COVID-19 variant of concern B.1.1.7. GOVUK. 2021. Available from: https://www.gov.uk/government/publications/nervtag-paper-on-covid-19-variant-of-concern-b117
8. Graham MS, Sudre CH, May A, Antonelli M, Murray B, Varsavsky T, et al. Changes in symptomatology, reinfection, and transmissibility associated with the SARS-CoV-2 variant B.1.1.7: an ecological study. The Lancet Public Health. Available from: https://doi.org/10.1016/S2468-2667(21)00055-4
9. Frampton D, Rampling T, Cross A, Bailey H, Heaney J, Byott M, et al. Genomic characteristics and clinical effect of the emergent SARS-CoV-2 B.1.1.7 lineage in London, UK: a whole-genome sequencing and hospital-based cohort study. The Lancet Infectious Diseases. Available from: https://doi.org/10.1016/S1473-3099(21)00170-5
10. Jassat W MC, Ozougwu L, ., et al. Increased mortality among individuals hospitalised with COVID-19 during the second wave in South Africa. 2021.
11. Muik A, Wallisch A-K, Sänger B, Swanson KA, Mühl J, Chen W, et al. Neutralization of SARS-CoV-2 lineage B.1.1.7 pseudovirus by BNT162b2 vaccine–elicited human sera. Science. 2021:eabg6105. Available from: https://science.sciencemag.org/content/sci/early/2021/01/28/science.abg6105.full.pdf
12. Li R, Ma X, Deng J, Chen Q, Liu W, Peng Z, et al. Differential efficiencies to neutralize the novel mutants B.1.1.7 and 501Y.V2 by collected sera from convalescent COVID-19 patients and RBD nanoparticle-vaccinated rhesus macaques. Cell Mol Immunol. 2021. Available from: https://www.ncbi.nlm.nih.gov/pubmed/33580167
13. Cele S, Gazy I, Jackson L, Hwa S-H, Tegally H, Lustig G, et al. Escape of SARS-CoV-2 501Y.V2 variants from neutralization by convalescent plasma.19. Available from: https://www.medrxiv.org/content/10.1101/2021.01.26.21250224v1
14. Sabino EC, Buss LF, Carvalho MPS, Prete CA, Crispim MAE, Fraiji NA, et al. Resurgence of COVID-19 in Manaus, Brazil, despite high seroprevalence. The Lancet. 2021;397(10273):452-5. Available from: https://linkinghub.elsevier.com/retrieve/pii/S0140673621001835
15. Naveca F et al. COVID-19 epidemic in the Brazilian state of Amazonas was driven by long-term persistence of endemic SARS-CoV-2 lineages and the recent emergence of the new Variant of Concern P.1. Nature Portfolio. 2021. Available from: https://doi.org/10.21203/rs.3.rs-275494/v1
16. Edara VV, Hudson WH, Xie X, Ahmed R, Suthar MS. Neutralizing Antibodies Against SARS-CoV-2 Variants After Infection and Vaccination. JAMA. 2021. Available from: https://www.ncbi.nlm.nih.gov/pubmed/33739374
17. Garcia-Beltran WF, Lam EC, St Denis K, Nitido AD, Garcia ZH, Hauser BM, et al. Multiple SARS-CoV-2 variants escape neutralization by vaccine-induced humoral immunity. Cell. 2021:S0092-8674(21)00298-1. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7953441/
18. Liu Y, Liu J, Xia H, Zhang X, Fontes-Garfias CR, Swanson KA, et al. Neutralizing Activity of BNT162b2-Elicited Serum. New England Journal of Medicine. 2021. Available from: https://doi.org/10.1056/NEJMc2102017
19. Trinité B, Pradenas E, Marfil S, Rovirosa C, Urrea V, Tarrés-Freixas F, et al. Previous SARS-CoV-2 infection increases B.1.1.7 cross-neutralization by vaccinated individuals. bioRxiv. 2021:2021.03.05.433800. Available from: http://biorxiv.org/content/early/2021/03/05/2021.03.05.433800.abstract
20. Wang Z, Schmidt F, Weisblum Y, Muecksch F, Barnes CO, Finkin S, et al. mRNA vaccine-elicited antibodies to SARS-CoV-2 and circulating variants. Nature. 2021. Available from: https://www.ncbi.nlm.nih.gov/pubmed/33567448
21. Wang P, Nair MS, Liu L, Iketani S, Luo Y, Guo Y, et al. Antibody Resistance of SARS-CoV-2 Variants B.1.351 and B.1.1.7. Nature. 2021. Available from: https://doi.org/10.1038/s41586-021-03398-2
22. Shen X, Tang H, Pajon R, Smith G, Glenn GM, Shi W, et al. Neutralization of SARS-CoV-2 Variants B.1.429 and B.1.351. New England Journal of Medicine. 2021. Available from: https://www.nejm.org/doi/full/10.1056/NEJMc2103740
23. Tada T, Dcosta BM, Samanovic-Golden M, Herati RS, Cornelius A, Mulligan MJ, et al. Neutralization of viruses with European, South African, and United States SARS-CoV-2 variant spike proteins by convalescent sera and BNT162b2 mRNA vaccine-elicited antibodies. bioRxiv. 2021:2021.02.05.430003. Available from: https://www.biorxiv.org/content/biorxiv/early/2021/02/07/2021.02.05.430003.full.pdf
24. Planas D, Bruel T, Grzelak L, Guivel-Benhassine F, Staropoli I, Porrot F, et al. Sensitivity of infectious SARS-CoV-2 B.1.1.7 and B.1.351 variants to neutralizing antibodies. Nature Medicine. 2021. Available from: https://doi.org/10.1038/s41591-021-01318-5
25. Wu K, Werner AP, Koch M, Choi A, Narayanan E, Stewart-Jones GBE, et al. Serum Neutralizing Activity Elicited by mRNA-1273 Vaccine - Preliminary Report. N Engl J Med. 2021. Available from: https://www.ncbi.nlm.nih.gov/pubmed/33596346
26. McCallum M, Bassi J, Marco AD, Chen A, Walls AC, Iulio JD, et al. SARS-CoV-2 immune evasion by variant B.1.427/B.1.429. bioRxiv. 2021:2021.03.31.437925. Available from: https://www.biorxiv.org/content/biorxiv/early/2021/04/01/2021.03.31.437925.full.pdf
27. Becker M, Dulovic A, Junker D, Ruetalo N, Kaiser PD, Pinilla YT, et al. Immune response to SARS-CoV-2 variants of concern in vaccinated individuals. medRxiv. 2021:2021.03.08.21252958. Available from: https://www.medrxiv.org/content/medrxiv/early/2021/03/10/2021.03.08.21252958.full.pdf
28. Hoffmann M, Arora P, Groß R, Seidel A, Hörnich B, Hahn A, et al. SARS-CoV-2 variants B.1.351 and B.1.1.248: Escape from therapeutic antibodies and antibodies induced by infection and vaccination. bioRxiv. 2021:2021.02.11.430787. Available from: http://biorxiv.org/content/early/2021/02/11/2021.02.11.430787.abstract
29. Dejnirattisai W, Zhou D, Supasa P, Liu C, Mentzer AJ, Ginn HM, et al. Antibody evasion by the Brazilian P.1 strain of SARS-CoV-2. bioRxiv. 2021:2021.03.12.435194. Available from: http://biorxiv.org/content/early/2021/03/19/2021.03.12.435194.abstract
30. Bates TA, Leier HC, Lyski ZL, McBride SK, Coulter FJ, Weinstein JB, et al. Neutralization of SARS-CoV-2 variants by convalescent and vaccinated serum. medRxiv. 2021:2021.04.04.21254881. Available from: https://www.medrxiv.org/content/medrxiv/early/2021/04/09/2021.04.04.21254881.full.pdf
31. Skelly DT et al. Vaccine-induced immunity provides more robust heterotypic immunity than natural infection to emerging SARS-CoV-2 variants of concern. https://www.researchsquare.com/article/rs-226857/v1
32. Emary KRW, Golubchik T, Aley PK, Ariani CV, Angus B, Bibi S, et al. Efficacy of ChAdOx1 nCoV-19 (AZD1222) vaccine against SARS-CoV-2 variant of concern 202012/01 (B.1.1.7): an exploratory analysis of a randomised controlled trial. Lancet (London, England). 2021;397(10282):1351-62. Available from: https://pubmed.ncbi.nlm.nih.gov/33798499
33. Sapkal GN, Yadav PD, Ella R, Deshpande GR, Sahay RR, Gupta N, et al. Neutralization of UK-variant VUI-202012/01 with COVAXIN vaccinated human serum. bioRxiv. 2021:2021.01.26.426986. Available from: http://biorxiv.org/content/early/2021/01/27/2021.01.26.426986.abstract
34. Wang G-L, Wang Z-Y, Duan L-J, Meng Q-C, Jiang M-D, Cao J, et al. Susceptibility of Circulating SARS-CoV-2 Variants to Neutralization. New England Journal of Medicine. 2021. Available from: https://www.nejm.org/doi/full/10.1056/NEJMc2103022
35. Emary K, Golubchik T, Aley P, Ariani C, Angus B, Bibi S, et al. Efficacy of ChAdOx1 nCoV-19 (AZD1222) Vaccine Against SARS-CoV-2 VOC 202012/01 (B.1.1.7). SSRN Electronic Journal. 2021.

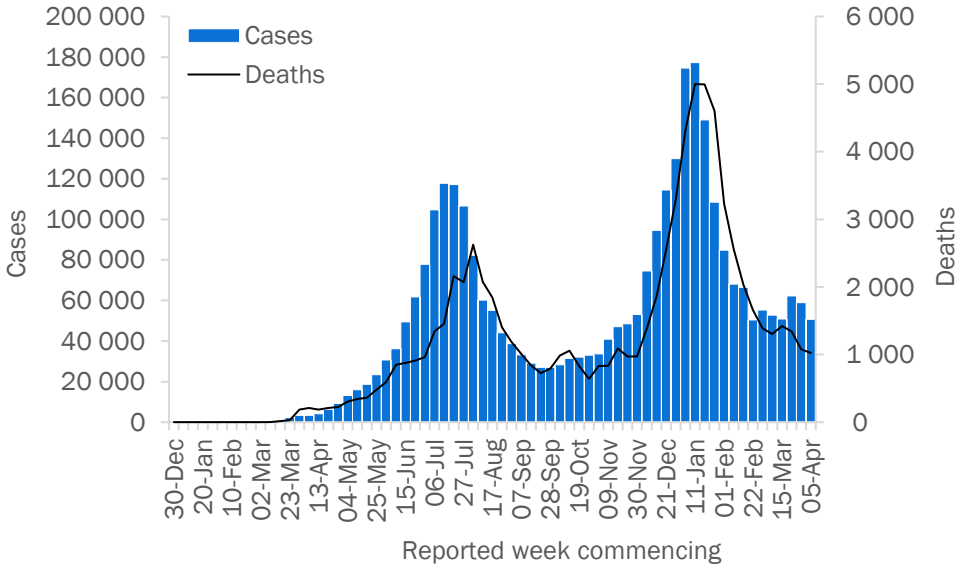
36. Lumley SF, Rodger G, Constantinides B, Sanderson N, Chau KK, Street TL, et al. An observational cohort study on the incidence of SARS-CoV-2 infection and B.1.1.7 variant infection in healthcare workers by antibody and vaccination status. medRxiv. 2021:2021.03.09.21253218. Available from: http://medrxiv.org/content/early/2021/03/12/2021.03.09.21253218.abstract
37. Lopez Bernal J, Andrews N, Gower C, Stowe J, Robertson C, Tessier E, et al. Early effectiveness of COVID-19 vaccination with BNT162b2 mRNA vaccine and ChAdOx1 adenovirus vector vaccine on symptomatic disease, hospitalisations and mortality in older adults in England. medRxiv. 2021:2021.03.01.21252652. Available from: http://medrxiv.org/content/early/2021/03/02/2021.03.01.21252652.abstract
38. Garcia-Beltran WF LE, Denis KS, et al. Multiple SARS-CoV-2 variants escape neutralization by vaccine-induced humoral immunity. 2021. Available from: https://www.medrxiv.org/content/10.1101/2021.02.14.21251704v2
39. Huang B DL, Wang H et al. Neutralization of SARS-CoV-2 VOC 501Y.V2 by human antisera elicited by both inactivated BBIBP-CorV and recombinant dimeric RBD ZF2001 vaccines. bioRxiv; 2021
40. Zhou D, Dejnirattisai W, Supasa P, Liu C, Mentzer AJ, Ginn HM, et al. Evidence of escape of SARS-CoV-2 variant B.1.351 from natural and vaccine-induced sera. Cell. 2021. Available from: https://www.ncbi.nlm.nih.gov/pubmed/33730597
41. Mahase E. Covid-19: Novavax vaccine efficacy is 86% against UK variant and 60% against South African variant. BMJ. 2021:n296. Available from: https://www.bmj.com/lookup/doi/10.1136/bmj.n296
42. US Food and Drug Administration. Vaccines and Related Biological Products Advisory Committee Meeting February 26, 2021, FDA Briefing Document Janssen Ad26.COV2.S Vaccine for the Prevention of COVID-19. 2021.
43.Latest - Oxford Covid-19 vaccine trial results - Wits University. Available from: https://www.wits.ac.za/covid19/covid19-news/latest/oxford-covid-19-vaccine-trial-results.html
44. ChAdOx1 nCov-19 provides minimal protection against mild-moderate COVID-19 infection from B.1.351 coronavirus variant in young South African adults | University of Oxford. Available from: https://www.ox.ac.uk/news/2021-02-07-chadox1-ncov-19-provides-minimal-protection-against-mild-moderate-covid-19-infectionfiles/84
45. Jangra S, Ye C, Rathnasinghe R, Stadlbauer D, Krammer F, Simon V, et al. The E484K mutation in the SARS-CoV-2 spike protein reduces but does not abolish neutralizing activity of human convalescent and post-vaccination sera. medRxiv. 2021:2021.01.26.21250543. Available from: http://medrxiv.org/content/early/2021/01/29/2021.01.26.21250543.abstract
46. Chang X, Augusto GS, Liu X, Kündig TM, Vogel M, Mohsen MO, et al. BNT162b2 mRNA COVID-19 vaccine induces antibodies of broader cross-reactivity than natural infection but recognition of mutant viruses is up to 10-fold reduced. bioRxiv. 2021:2021.03.13.435222. Available from: http://biorxiv.org/content/early/2021/03/15/2021.03.13.435222.abstract
47. de Souza WM, Amorim MR, Sesti-Costa R. Levels of SARS-CoV-2 Lineage P.1 Neutralization by Antibodies Elicited after Natural Infection and Vaccination. Lancet. 2021. Available from: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3793486
48. SARS-CoV-2 lateral flow antigen tests: evaluation of VUI-202012/01. GOVUK. Available from: https://www.gov.uk/government/publications/sars-cov-2-lateral-flow-antigen-tests-evaluation-of-vui-20201201/sars-cov-2-lateral-flow-antigen-tests-evaluation-of-vui-20201201
49. Snell LB, Wang W, Alcolea-Medina A, Charalampous T, Nebbia G, Batra R, et al. First and second SARS-CoV-2 waves in inner London: A comparison of admission characteristics and the impact of the B.1.1.7 variant. medRxiv. 2021:2021.03.16.21253377. Available from: http://medrxiv.org/content/early/2021/03/24/2021.03.16.21253377.abstract
50. Challen R, Brooks-Pollock E, Read JM, Dyson L, Tsaneva-Atanasova K, Danon L. Risk of mortality in patients infected with SARS-CoV-2 variant of concern 202012/1: matched cohort study. BMJ. 2021;372:n579. Available from: http://www.bmj.com/content/372/bmj.n579.abstract
51. Volz E, Mishra S, Chand M, Barrett JC, Johnson R, Geidelberg L, et al. Assessing transmissibility of SARS-CoV-2 lineage B.1.1.7 in England. Nature. 2021. Available from: https://doi.org/10.1038/s41586-021-03470-x
52. Grubaugh ND, Hodcroft EB, Fauver JR, Phelan AL, Cevik M. Public health actions to control new SARS-CoV-2 variants. Cell. 2021;184(5):1127-32. Available from: https://pubmed.ncbi.nlm.nih.gov/33581746
53. Lee LYW, Rozmanowski S, Pang M, Charlett A, Anderson C, Hughes GJ, et al. SARS-CoV-2 infectivity by viral load, S gene variants and demographic factors and the utility of lateral flow devices to prevent transmission. medRxiv. 2021:2021.03.31.21254687. Available from: http://medrxiv.org/content/early/2021/04/05/2021.03.31.21254687.abstract
54. Xie X, Liu Y, Liu J, Zhang X, Zou J, Fontes-Garfias CR, et al. Neutralization of SARS-CoV-2 spike 69/70 deletion, E484K and N501Y variants by BNT162b2 vaccine-elicited sera. Nature Medicine. 2021:1-2. Available from: https://www.nature.com/articles/s41591-021-01270-4
55. Redd AD, Nardin A, Kared H, Bloch EM, Pekosz A, Laeyendecker O, et al. CD8+ T cell responses in COVID-19 convalescent individuals target conserved epitopes from multiple prominent SARS-CoV-2 circulating variants. Open Forum Infectious Diseases. 2021. Available from: https://doi.org/10.1093/ofid/ofab143
56. The SARS-CoV-2 variant with lineage B.1.351 clusters investigation team. Linked transmission chains of imported SARS-CoV-2 variant B.1.351 across mainland France, January 2021. Euro surveillance : bulletin Europeen sur les maladies transmissibles = European communicable disease bulletin. 2021;26(13):2100333. Available from: https://pubmed.ncbi.nlm.nih.gov/33797392 https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8017907/
57. Guan WJ, Ni ZY, Hu Y, Liang WH, Ou CQ, He JX, et al. Clinical Characteristics of Coronavirus Disease 2019 in China. N Engl J Med. 2020;382(18):1708-20. Available from: https://www.ncbi.nlm.nih.gov/pubmed/32109013
58. Lu J, Gu J, Li K, Xu C, Su W, Lai Z, et al. COVID-19 Outbreak Associated with Air Conditioning in Restaurant, Guangzhou, China, 2020. Emerg Infect Dis. 2020;26(7):1628-31. Available from: https://www.ncbi.nlm.nih.gov/pubmed/32240078
59. Xu XK, Liu XF, Wu Y, Ali ST, Du Z, Bosetti P, et al. Reconstruction of Transmission Pairs for Novel Coronavirus Disease 2019 (COVID-19) in Mainland China: Estimation of Superspreading Events, Serial Interval, and Hazard of Infection. Clin Infect Dis. 2020;71(12):3163-7. Available from: https://www.ncbi.nlm.nih.gov/pubmed/32556265
60. Madhi SA, Baillie V, Cutland CL, Voysey M, Koen AL, Fairlie L, et al. Efficacy of the ChAdOx1 nCoV-19 Covid-19 Vaccine against the B.1.351 Variant. New England Journal of Medicine. 2021. Available from: https://doi.org/10.1056/NEJMoa2102214
61. Ikegame et al. Qualitatively distinct modes of Sputnik V vaccine-neutralization escape by SARS-CoV-2 Spike variants. 2021. https://www.medrxiv.org/content/10.1101/2021.03.31.21254660v2
62. Tarke A, Sidney J, Methot N, Zhang Y, Dan JM, Goodwin B, et al. Negligible impact of SARS-CoV-2 variants on CD4 (+) and CD8 (+) T cell reactivity in COVID-19 exposed donors and vaccinees. bioRxiv : the preprint server for biology. 2021:2021.02.27.433180. Available from: https://pubmed.ncbi.nlm.nih.gov/33688655
63. Coutinho RM, Marquitti FMD, Ferreira LS, Borges ME, da Silva RLP, Canton O, et al. Model-based estimation of transmissibility and reinfection of SARS-CoV-2 P.1 variant. medRxiv. 2021:2021.03.03.21252706. Available from: https://www.medrxiv.org/content/10.1101/2021.03.03.21252706v3.full.pdf
64. Faria NR, Mellan TA, Whittaker C, Claro IM, Candido DdS, Mishra S, et al. Genomics and epidemiology of a novel SARS-CoV-2 lineage in Manaus, Brazil. medRxiv. 2021:2021.02.26.21252554. Available from: http://medrxiv.org/content/early/2021/03/03/2021.02.26.21252554.abstract
65. de Oliveira MHS, Lippi G, Henry BM. Sudden rise in COVID-19 case fatality among young and middle-aged adults in the south of Brazil after identification of the novel B.1.1.28.1 (P.1) SARS-CoV-2 strain: analysis of data from the state of Parana. medRxiv. 2021:2021.03.24.21254046. Available from: https://www.medrxiv.org/content/medrxiv/early/2021/03/26/2021.03.24.21254046.full.pdf
66. Stefanelli P, Trentini F, Guzzetta G, Marziano V, Mammone A, Poletti P, et al. Co-circulation of SARS-CoV-2 variants B.1.1.7 and P.1. medRxiv. 2021:2021.04.06.21254923. Available from: https://www.medrxiv.org/content/medrxiv/early/2021/04/07/2021.04.06.21254923.full.pdf
67. Fiocruz. Frequency of main lineages of SARS-CoV-2 by month of sampling. 2021. http://www.genomahcov.fiocruz.br/frequencia-das-principais-linhagens-do-sars-cov-2-por-mes-de-amostragem/
68. Palacios R et al. Efficacy and Safety of a COVID-19 Inactivated Vaccine in Healthcare Professionals in Brazil: The PROFISCOV Study. 2021. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3822780
69. Wang P, Liu L, Iketani S, Luo Y, Guo Y, Wang M, et al. Increased Resistance of SARS-CoV-2 Variants B.1.351 and B.1.1.7 to Antibody Neutralization. bioRxiv. 2021:2021.01.25.428137. Available from: http://biorxiv.org/content/early/2021/01/26/2021.01.25.428137.1.abstract
70. Hitchings MDT, et al. Effectiveness of CoronaVac in the setting of high SARS-CoV-2 P.1 variant transmission in Brazil: A test-negative case-control study. 2021. https://www.medrxiv.org/content/10.1101/2021.04.07.21255081v1

WHO regional overviews

African Region

The African Region reported over 50 000 new cases and over 1000 new deaths, a 14% and a 5% decrease respectively compared to the previous week. Weekly cases incidence has fluctuated since late February 2021; however, deaths have continued an overall downward trend. The highest numbers of new cases were reported from Ethiopia (13 944 new cases; 12.1 new cases per 100 000 population; a 4% decrease), Kenya (7107 new cases; 13.2 new cases per 100 000; a 19% decrease), and South Africa (6026 new cases; 10.2 new cases per 100 000; a 14% decrease).

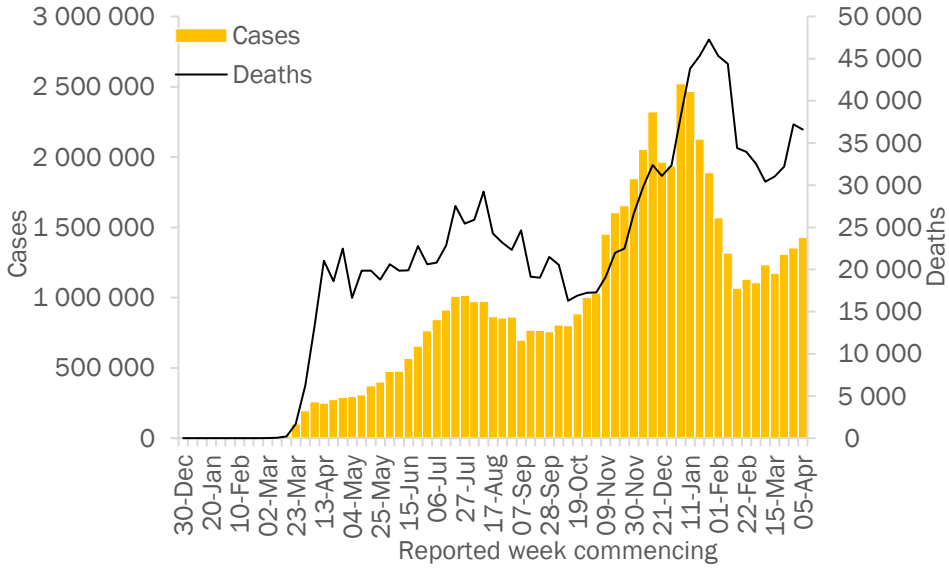
The highest numbers of new deaths were reported from South Africa (302 new deaths; 0.5 new deaths per 100 000 population; a 1% decrease), Ethiopia (210 new deaths; 0.2 new deaths per 100 000; a 38% increase), and Kenya (124 new deaths; 0.2 new deaths per 100 000; a 22% increase).



Region of the Americas

The Region of the Americas reported over 1.4 million new cases and over 36 000 new deaths, a 5% increase and 2% decrease respectively compared to the previous week. Cases have overall gradually increased since mid-February 2021. The highest numbers of new cases were reported from the United States of America (468 395 new cases; 141.5 new cases per 100 000; a 5% decrease), Brazil (463 092 new cases; 217.9 new cases per 100 000; an 8% decrease), and Argentina (124 728 new cases; 276.0 new cases per 100 000; a 52% increase).

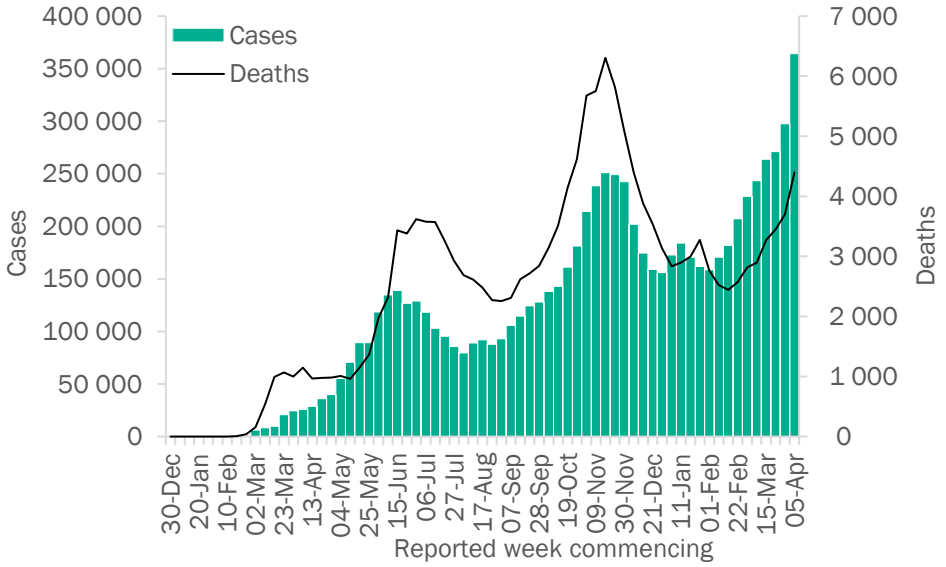
The highest numbers of new deaths were reported from Brazil (20 512 new deaths; 9.7 new deaths per 100 000; a 3% decrease), the United States of America (5173 new deaths; 1.6 new deaths per 100 000; a 31% decrease), and Mexico (3166 new deaths; 2.5 new deaths per 100 000; a 6% increase).



Eastern Mediterranean Region

The Eastern Mediterranean Region reported over 364 000 new cases and just under 4400 new deaths, a 22% and a 19% increase respectively compared to the previous week. Upward trends in cases and deaths reported since February have continued, with steep increases this week compared to the previous week. The highest numbers of new cases were reported from the Islamic Republic of Iran (128 684 new cases; 153.2 new cases per 100 000; a 75% increase), Iraq (49 955 new cases; 124.2 new cases per 100 000; a 22% increase), and Jordan (35 520 new cases; 348.1 new cases per 100 000; a 21% decrease).

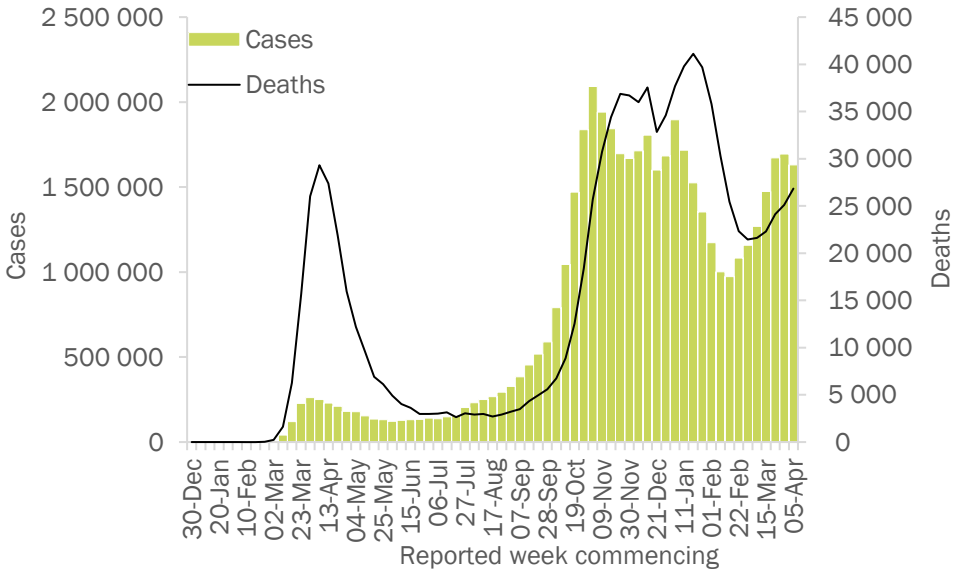
The highest numbers of new deaths were reported from the Islamic Republic of Iran (1233 new deaths; 1.5 new deaths per 100 000; a 78% increase), Pakistan (632 new deaths; 0.3 new deaths per 100 000; a 17% increase), and Jordan (578 new deaths; 5.7 new deaths per 100 000; a 12% decrease).



European Region

The European Region reported over 1.6 million new cases and over 26 000 new deaths, a 4% decrease and a 7% increase respectively compared to the previous week. The decrease in cases this week was reported after six consecutive weeks of increases since late February. Deaths continued to increase for a fifth week. The highest numbers of new cases were reported from Turkey (353 281 new cases; 418.9 new cases per 100 000; a 33% increase), France (265 444 new cases; 408.1 new cases per 100 000; a 9% increase), and Poland (136 089 new cases; 358.5 new cases per 100 000; a 27% decrease).

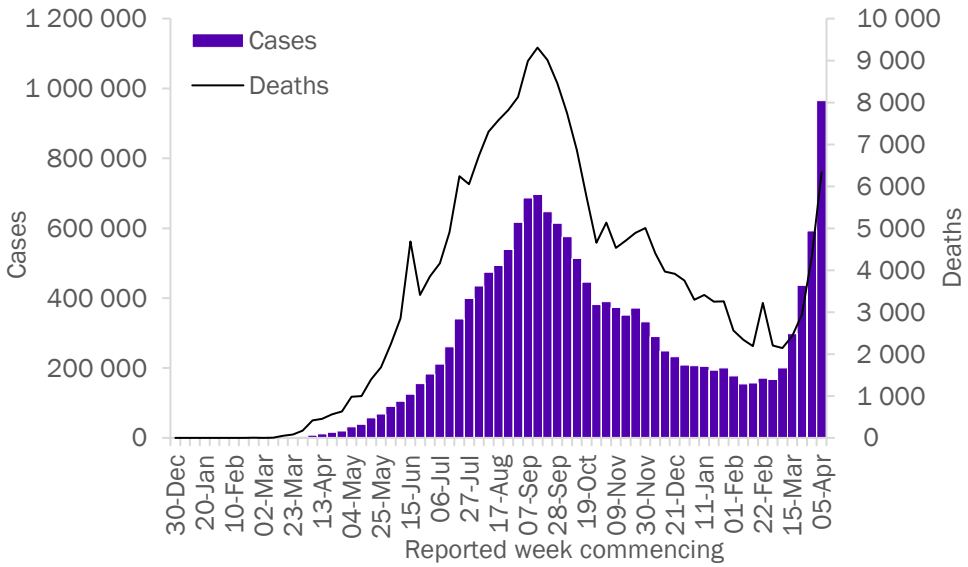
The highest numbers of new deaths were reported from Poland (3480 new deaths; 9.2 new deaths per 100 000; a 14% increase), Italy (3219 new deaths; 5.4 new deaths per 100 000; a 5% increase), and Ukraine (2681 new deaths; 6.1 new deaths per 100 000; a 13% increase).



South-East Asia Region

The South-East Asia Region reported over 965 000 new cases and over 6300 new deaths, a 63% and a 47% increase respectively compared to the previous week. There were steep increases in both cases and deaths, and the highest number of weekly cases was reported in the Region since the beginning of the pandemic. The highest numbers of new cases were reported from India (873 296 new cases; 63.3 new cases per 100 000; a 70% increase), Bangladesh (48 660 new cases; 29.5 new cases per 100 000; a 26% increase), and Indonesia (35 344 new cases; 12.9 new cases per 100 000; a 1% decrease).

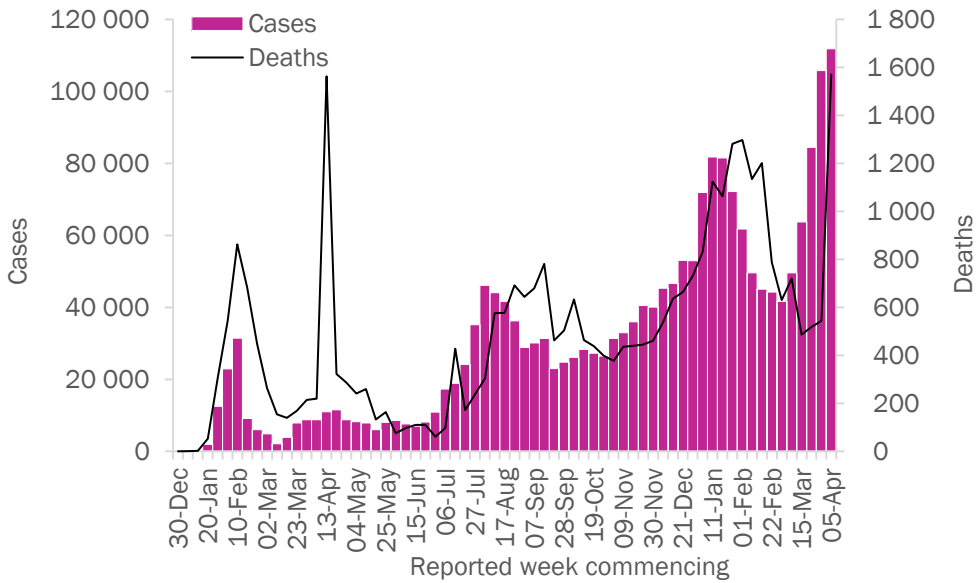
The highest numbers of new deaths were reported from India (4652 new deaths; 0.3 new deaths per 100 000; a 51% increase), Indonesia (1201 new deaths; 0.4 new deaths per 100 000; a 37% increase), and Bangladesh (448 new deaths; 0.3 new deaths per 100 000; a 30% increase).



Western Pacific Region

The Western Pacific Region reported over 111 000 new cases and over 1500 new deaths, a 6% and a 189% increase respectively compared to the previous week. For a fifth consecutive week, the number of cases increased. The sharp rise in deaths were attributed to steep increases in deaths in the Philippines. The highest numbers of new cases were reported from the Philippines (69 164 new cases; 63.1 new cases per 100 000; a 3% decrease), Japan (20 536 new cases; 16.2 new cases per 100 000; a 28% increase), and Malaysia (9507 new cases; 29.4 new cases per 100 000; a 6% increase).

The highest numbers of new deaths were reported from the Philippines (1321 new deaths; 1.2 new deaths per 100 000; a 400% increase), Japan (161 new deaths; 0.1 new deaths per 100 000; a 15% decrease), and Malaysia (35 new deaths; 0.1 new deaths per 100 000; similar to the previous week).



Key weekly updates

WHO Director-General's key message

Opening remarks at the media briefing on COVID-19 – 9 April 2021:

- A total of 196 countries have started vaccination.
- More than 700 million vaccine doses have been administered globally, but over 87% have gone to high income or upper middle-income countries, while low-income countries have received just 0.2%.
- WHO, Gavi, CEPI and other COVAX partners are working on several options for accelerating production and supply.

World Health Day

- World Health Day 2021: Building a fairer, healthier world
- For World Health Day, 7 April 2021, WHO issued five calls for urgent action to improve health for all
- "Give a Breath for Health" campaign launched on World Health Day to kickstart global effort for purchasing oxygen and other life-saving supplies and therapeutics for COVID-19 patients starting in the Americas

Publications

- Interim statement of the COVID-19 subcommittee of the WHO Global Advisory Committee on Vaccine Safety on AstraZeneca COVID-19 vaccine
- COVAX reaches over 100 economies, 42 days after first international delivery
- WHO COVID-19 infection prevention and control (IPC) pillar achievements, Feb 2020 – Jan 2021
- Safe Ramadan practices in the context of COVID-19

Events

- Webinar: Infection prevention and control and public health and social measures in light of the variants of concern, 21 April 2021

Technical guidance and other resources

- Technical guidance
- WHO Coronavirus Disease (COVID-19) Dashboard
- Weekly COVID-19 Operational Updates
- WHO COVID-19 case definitions
- COVID-19 Supply Chain Inter-Agency Coordination Cell Weekly Situational Update
- Research and Development
- Online courses on COVID-19 in official UN languages and in additional national languages
- The Strategic Preparedness and Response Plan (SPRP) outlining the support the international community can provide to all countries to prepare and respond to the virus
- Updates from WHO regions:
  - African Region
  - Region of the Americas
  - Eastern Mediterranean Region
  - South-East Asia Region
  - European Region
  - Western Pacific Region
- Recommendations and advice for the public:
  - Protect yourself
  - Questions and answers
  - Travel advice
- EPI-WIN: tailored information for individuals, organizations and communities
- WHO Academy COVID-19 mobile learning app

Annex

Annex 1. COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories and areas, and WHO Region, as of 11 April 2021**

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Africa	**50 710**	**3 171 006**	**282.6**	**1 022**	**79 545**	**7.1**	
Ethiopia	13 944	227 255	197.7	210	3 146	2.7	Community transmission
Kenya	7 107	145 184	270.0	124	2 330	4.3	Community transmission
South Africa	6 026	1 557 527	2 626.1	302	53 256	89.8	Community transmission
Cameroon	3 417	57 337	216.0	72	851	3.2	Community transmission
Madagascar	2 286	27 548	99.5	44	493	1.8	Community transmission
Botswana	1 796	42 674	1 814.7	45	636	27.0	Community transmission
Mali	1 273	11 705	57.8	14	405	2.0	Community transmission
Zambia	1 118	89 918	489.1	11	1 226	6.7	Community transmission
Rwanda	1 100	23 343	180.2	3	314	2.4	Community transmission
Togo	883	11 947	144.3	6	116	1.4	Community transmission
Algeria	854	118 378	270.0	24	3 126	7.1	Community transmission
Côte d'Ivoire	819	45 145	171.1	14	261	1.0	Community transmission
Cabo Verde	808	18 629	3 350.6	6	177	31.8	Community transmission
Gabon	773	20 636	927.2	8	127	5.7	Community transmission
Angola	752	23 331	71.0	10	550	1.7	Community transmission
Namibia	742	45 323	1 783.7	33	564	22.2	Community transmission
Nigeria	623	163 736	79.4	2	2 060	1.0	Community transmission
Ghana	586	91 260	293.7	10	754	2.4	Community transmission
Mozambique	573	68 578	219.4	7	789	2.5	Community transmission
Guinea	488	20 807	158.4	4	133	1.0	Community transmission
Senegal	411	39 364	235.1	14	1 077	6.4	Community transmission
Congo	403	10 084	182.7	2	137	2.5	Community transmission
Zimbabwe	362	37 273	250.8	14	1 538	10.3	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Democratic Republic of the Congo	250	28 542	31.9	0	745	0.8	Community transmission
Burundi	243	3 154	26.5	0	6	0.1	Community transmission
Central African Republic	220	5 465	113.2	2	74	1.5	Community transmission
Equatorial Guinea	211	7 219	514.5	3	106	7.6	Community transmission
Benin	202	7 515	62.0	0	93	0.8	Community transmission
Seychelles	196	4 490	4 565.5	2	24	24.4	Community transmission
Malawi	166	33 805	176.7	8	1 127	5.9	Community transmission
Burkina Faso	153	12 956	62.0	2	152	0.7	Community transmission
Uganda	151	41 113	89.9	2	337	0.7	Community transmission
Gambia	143	5 602	231.8	3	168	7.0	Community transmission
Eritrea	113	3 447	97.2	0	10	0.3	Community transmission
Mauritania	88	18 005	387.2	1	450	9.7	Community transmission
South Sudan	85	10 340	92.4	2	114	1.0	Community transmission
Mauritius	78	1 112	87.4	0	12	0.9	Community transmission
Comoros	49	3 831	440.5	0	146	16.8	Community transmission
Niger	39	5 072	21.0	0	188	0.8	Community transmission
Chad	27	4 616	28.1	3	167	1.0	Community transmission
Eswatini	26	17 373	1 497.5	1	669	57.7	Community transmission
Sao Tome and Principe	23	2 263	1 032.6	0	35	16.0	Community transmission
Guinea-Bissau	17	3 678	186.9	1	66	3.4	Community transmission
Sierra Leone	6	3 993	50.1	0	79	1.0	Community transmission
Liberia	5	2 066	40.8	0	85	1.7	Community transmission
Lesotho	0	10 707	499.8	0	315	14.7	Community transmission
United Republic of Tanzania	0	509	0.9	0	21	0.0	Pending
Territoriesiii							
Réunion	922	17 508	1 955.5	8	123	13.7	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Mayotte	153	19 643	7 200.1	5	167	61.2	Community transmission
Americas	**1 427 623**	**58 025 495**	**5 673.3**	**36 599**	**1 405 254**	**137.4**	
United States of America	468 395	30 772 857	9 296.9	5 173	555 712	167.9	Community transmission
Brazil	463 092	13 373 174	6 291.5	20 512	348 718	164.1	Community transmission
Argentina	124 728	2 497 881	5 526.8	1 327	57 350	126.9	Community transmission
Colombia	76 158	2 504 206	4 921.5	1 506	65 283	128.3	Community transmission
Peru	60 174	1 628 519	4 939.1	1 954	54 285	164.6	Community transmission
Canada	50 442	1 045 278	2 769.5	249	23 251	61.6	Community transmission
Chile	49 044	1 068 522	5 589.6	792	24 213	126.7	Community transmission
Uruguay	26 378	137 946	3 971.1	322	1 363	39.2	Community transmission
Mexico	24 707	2 272 064	1 762.2	3 166	207 020	160.6	Community transmission
Paraguay	14 256	232 142	3 254.7	404	4 698	65.9	Community transmission
Ecuador	11 702	344 877	1 954.7	365	17 275	97.9	Community transmission
Venezuela (Bolivarian Republic of)	9 731	172 461	606.5	110	1 739	6.1	Community transmission
Guatemala	7 604	202 640	1 131.1	126	7 001	39.1	Community transmission
Cuba	7 190	85 572	755.5	22	453	4.0	Community transmission
Bolivia (Plurinational State of)	6 702	280 649	2 404.3	123	12 428	106.5	Community transmission
Honduras	4 822	194 548	1 964.2	144	4 766	48.1	Community transmission
Costa Rica	4 095	222 544	4 368.6	44	3 018	59.2	Community transmission
Dominican Republic	3 405	257 186	2 370.8	51	3 385	31.2	Community transmission
Panama	2 248	358 098	8 299.4	30	6 156	142.7	Community transmission
Jamaica	1 670	42 119	1 422.4	56	669	22.6	Community transmission
El Salvador	1 060	65 491	1 009.7	27	2 048	31.6	Community transmission
Guyana	512	10 958	1 393.2	17	252	32.0	Clusters of cases
Trinidad and Tobago	207	8 323	594.7	0	145	10.4	Community transmission
Bahamas	183	9 417	2 394.7	1	189	48.1	Clusters of cases

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Suriname	128	9 265	1 579.4	1	178	30.3	Clusters of cases
Haiti	52	12 840	112.6	0	251	2.2	Community transmission
Barbados	43	3 708	1 290.3	2	44	15.3	Community transmission
Nicaragua	40	5 366	81.0	1	179	2.7	Community transmission
Saint Lucia	40	4 329	2 357.5	3	64	34.9	Community transmission
Saint Vincent and the Grenadines	35	1 790	1 613.5	0	10	9.0	Community transmission
Belize	31	12 487	3 140.4	1	318	80.0	Community transmission
Antigua and Barbuda	12	1 182	1 207.0	2	30	30.6	Clusters of cases
Grenada	2	157	139.5	0	1	0.9	Sporadic cases
Dominica	0	165	229.2	0	0	0.0	Clusters of cases
Saint Kitts and Nevis	0	44	82.7	0	0	0.0	Sporadic cases
Territoriesiii							
Puerto Rico	4 339	113 200	3 956.9	26	2 152	75.2	Community transmission
Curaçao	1 798	10 632	6 479.3	22	60	36.6	Community transmission
Martinique	724	8 887	2 368.2	5	59	15.7	Community transmission
French Guiana	417	17 549	5 875.5	- 2	94	31.5	Community transmission
Guadeloupe	414	12 304	3 075.0	6	189	47.2	Community transmission
Bermuda	411	1 773	2 847.1	2	14	22.5	Community transmission
Aruba	393	9 896	9 268.9	6	92	86.2	Community transmission
Bonaire	90	1 475	7 052.4	3	14	66.9	Community transmission
United States Virgin Islands	40	2 971	2 845.1	0	26	24.9	Community transmission
British Virgin Islands	24	178	588.7	0	1	3.3	Clusters of cases
Sint Maarten	23	2 174	5 069.7	0	27	63.0	Community transmission
Saint Barthélemy	18	928	9 388.0	0	1	10.1	Clusters of cases
Saint Martin	16	1 703	4 405.2	0	13	33.6	Community transmission
Cayman Islands	15	516	785.1	0	2	3.0	Sporadic cases

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Falkland Islands (Malvinas)	8	60	1 722.7	0	0	0.0	Sporadic cases
Anguilla	4	29	193.3	0	0	0.0	Sporadic cases
Saint Pierre and Miquelon	1	25	431.4	0	0	0.0	No cases
Montserrat	0	20	400.1	0	1	20.0	No cases
Saba	0	6	310.4	0	0	0.0	No cases
Sint Eustatius	0	20	637.1	0	0	0.0	No cases
Turks and Caicos Islands	0	2 344	6 054.0	0	17	43.9	Clusters of cases
Eastern Mediterranean	**364 456**	**8 057 550**	**1 102.5**	**4 398**	**165 010**	**22.6**	
Iran (Islamic Republic of)	128 684	2 049 078	2 439.6	1 233	64 232	76.5	Community transmission
Iraq	49 955	918 155	2 282.7	248	14 678	36.5	Community transmission
Jordan	35 520	662 395	6 492.1	578	7 708	75.5	Community transmission
Pakistan	33 080	715 968	324.1	632	15 329	6.9	Community transmission
Lebanon	17 520	494 633	7 246.9	251	6 630	97.1	Community transmission
United Arab Emirates	13 914	481 937	4 872.8	25	1 529	15.5	Clusters of cases
Tunisia	11 962	270 297	2 287.0	304	9 235	78.1	Community transmission
Kuwait	9 715	245 704	5 753.4	64	1 403	32.9	Community transmission
Oman	7 987	168 005	3 289.9	66	1 747	34.2	Community transmission
Bahrain	7 632	155 402	9 132.8	23	554	32.6	Community transmission
Qatar	6 516	189 064	6 562.3	30	331	11.5	Community transmission
Libya	5 800	166 888	2 428.8	123	2 807	40.9	Community transmission
Saudi Arabia	5 627	397 636	1 142.2	57	6 747	19.4	Community transmission
Egypt	5 421	209 677	204.9	282	12 405	12.1	Community transmission
Morocco	3 856	501 688	1 359.2	49	8 891	24.1	Clusters of cases
Djibouti	1 213	9 722	984.0	21	93	9.4	Community transmission
Syrian Arab Republic	834	20 118	115.0	69	1 368	7.8	Community transmission
Somalia	648	12 271	77.2	59	605	3.8	Community transmission
Yemen	579	5 280	17.7	99	1 032	3.5	Sporadic cases

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Afghanistan	484	57 160	146.8	24	2 521	6.5	Community transmission
Sudan	0	31 833	72.6	0	2 063	4.7	Clusters of cases
Territories[iii]							
occupied Palestinian territory	17 509	294 639	5 775.6	161	3 102	60.8	Community transmission
Europe	**1 630 624**	**47 547 449**	**5 095.8**	**26 853**	**1 008 251**	**108.1**	
Kosovo [1]	4 492	97 424		70	1 966		Community transmission
Turkey	353 281	3 798 333	4 503.6	1 624	33 702	40.0	Community transmission
France	265 444	4 945 238	7 603.5	2 087	97 956	150.6	Community transmission
Poland	136 089	2 574 631	6 782.8	3 480	58 421	153.9	Community transmission
Germany	112 882	2 998 268	3 605.1	1 390	78 353	94.2	Community transmission
Ukraine	107 540	1 853 249	4 237.6	2 681	37 014	84.6	Community transmission
Italy	103 830	3 754 077	6 294.4	3 219	113 923	191.0	Clusters of cases
Russian Federation	60 496	4 641 390	3 180.5	2 612	102 986	70.6	Clusters of cases
Netherlands	47 307	1 342 329	7 711.2	150	16 754	96.2	Community transmission
Hungary	34 185	720 164	7 371.5	1 702	23 417	239.7	Community transmission
Romania	32 641	1 002 865	5 188.4	1 033	25 006	129.4	Community transmission
Sweden	30 382	857 401	8 302.0	22	13 621	131.9	Community transmission
Czechia	28 293	1 580 189	14 776.5	863	27 808	260.0	Community transmission
Spain	28 102	3 336 637	7 049.3	189	76 179	160.9	Community transmission
Serbia	25 111	639 476	9 232.0	278	5 700	82.3	Community transmission
Belgium	23 931	926 640	8 042.0	304	23 470	203.7	Community transmission
Greece	20 304	293 763	2 740.7	531	8 833	82.4	Community transmission
Austria	19 309	571 805	6 424.0	228	9 393	105.5	Community transmission
Bulgaria	19 272	371 531	5 344.6	844	14 351	206.4	Clusters of cases
Kazakhstan	17 348	323 208	1 721.3	151	3 963	21.1	Clusters of cases
The United Kingdom	16 290	4 368 049	6 434.4	254	127 080	187.2	Community transmission
Azerbaijan	14 865	283 579	2 796.9	231	3 879	38.3	Clusters of cases

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Switzerland	13 820	619 477	7 157.8	51	9 764	112.8	Community transmission
Croatia	12 490	292 516	7 208.1	250	6 308	155.4	Community transmission
Belarus	8 798	334 863	3 543.8	68	2 344	24.8	Community transmission
Bosnia and Herzegovina	8 279	183 125	5 581.7	555	7 358	224.3	Community transmission
North Macedonia	8 233	141 157	6 775.4	322	4 182	200.7	Community transmission
Slovenia	6 525	225 952	10 780.9	26	4 407	210.3	Clusters of cases
Republic of Moldova	6 492	240 886	5 971.4	277	5 369	133.1	Community transmission
Lithuania	6 462	226 173	8 094.7	78	3 687	132.0	Community transmission
Armenia	6 183	202 817	6 844.4	143	3 735	126.0	Community transmission
Slovakia	5 820	371 062	6 798.7	540	10 565	193.6	Clusters of cases
Norway	5 189	101 959	1 899.5	11	684	12.7	Community transmission
Estonia	4 775	114 174	8 591.1	79	1 020	76.8	Clusters of cases
Georgia	4 563	288 396	7 229.5	66	3 877	97.2	Community transmission
Denmark	4 383	237 101	4 072.0	11	2 439	41.9	Community transmission
Portugal	4 066	826 928	8 031.6	42	16 910	164.2	Clusters of cases
Cyprus	3 753	51 035	5 747.2	11	272	30.6	Clusters of cases
Latvia	3 373	107 240	5 621.5	63	1 986	104.1	Community transmission
Ireland	2 948	240 643	4 847.3	68	4 783	96.3	Community transmission
Finland	2 613	81 707	1 478.8	22	868	15.7	Community transmission
Albania	1 972	128 155	4 453.2	54	2 310	80.3	Clusters of cases
Israel	1 776	835 813	9 656.4	57	6 292	72.7	Community transmission
Montenegro	1 675	94 417	15 033.1	68	1 373	218.6	Clusters of cases
Luxembourg	1 545	63 650	10 166.0	18	768	122.7	Community transmission
Uzbekistan	1 299	84 922	253.7	3	634	1.9	Clusters of cases
Kyrgyzstan	1 213	90 227	1 383.0	16	1 522	23.3	Clusters of cases
Malta	359	29 548	5 742.3	5	402	78.1	Clusters of cases
Andorra	323	12 497	16 174.2	3	120	155.3	Community transmission

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
San Marino	151	4 956	14 603.1	1	85	250.5	Community transmission
Liechtenstein	64	2 842	7 334.8	0	54	139.4	Sporadic cases
Monaco	48	2 373	6 046.8	2	31	79.0	Sporadic cases
Iceland	33	6 258	1 718.6	0	29	8.0	Community transmission
Holy See	0	26	3 213.8	0	0	0.0	Sporadic cases
Tajikistan	0	13 714	143.8	0	91	1.0	Pending
Territoriesiii							
Isle of Man	4	1 574	1 851.1	0	29	34.1	No cases
Gibraltar	2	4 277	12 694.8	0	94	279.0	Clusters of cases
Jersey	1	3 230	2 996.4	0	69	64.0	Community transmission
Faroe Islands	0	661	1 352.7	0	1	2.0	Sporadic cases
Greenland	0	31	54.6	0	0	0.0	No cases
Guernsey	0	821	1 273.5	0	14	21.7	Community transmission
South-East Asia	**965 591**	**16 177 826**	**800.3**	**6 331**	**228 385**	**11.3**	
India	873 296	13 358 805	968.0	4 652	169 275	12.3	Clusters of cases
Bangladesh	48 660	678 937	412.3	448	9 661	5.9	Community transmission
Indonesia	35 344	1 562 868	571.4	1 201	42 443	15.5	Community transmission
Thailand	3 498	32 625	46.7	2	97	0.1	Clusters of cases
Nepal	1 957	279 725	960.0	7	3 039	10.4	Clusters of cases
Sri Lanka	1 553	94 848	442.9	20	595	2.8	Clusters of cases
Maldives	873	25 524	4 721.9	0	67	12.4	Clusters of cases
Timor-Leste	294	1 008	76.5	1	1	0.1	Clusters of cases
Myanmar	97	142 576	262.0	0	3 206	5.9	Clusters of cases
Bhutan	19	910	117.9	0	1	0.1	Sporadic cases
Western Pacific	**111 833**	**2 077 516**	**105.7**	**1 570**	**33 474**	**1.7**	
Philippines	69 164	853 187	778.6	1 321	14 744	13.5	Community transmission
Japan	20 536	503 403	398.0	161	9 382	7.4	Clusters of cases

Reporting Country/Territory/Area[i]	New cases in last 7 days	Cumulative cases	Cumulative cases per 100 thousand population	New deaths in last 7 days	Cumulative deaths	Cumulative deaths per 100 thousand population	Transmission classification[ii]
Malaysia	9 507	359 117	1 109.6	35	1 321	4.1	Clusters of cases
Mongolia	4 585	14 183	432.6	9	20	0.6	Clusters of cases
Republic of Korea	4 280	109 559	213.7	24	1 768	3.4	Clusters of cases
Papua New Guinea	1 585	8 442	94.4	7	68	0.8	Community transmission
Cambodia	1 549	4 238	25.3	10	29	0.2	Sporadic cases
China	216	103 083	7.0	2	4 853	0.3	Clusters of cases
Singapore	165	60 633	1 036.4	0	30	0.5	Sporadic cases
New Zealand	67	2 218	46.0	0	26	0.5	Clusters of cases
Viet Nam	63	2 692	2.8	0	35	0.0	Clusters of cases
Australia	55	29 396	115.3	0	909	3.6	Clusters of cases
Brunei Darussalam	5	219	50.1	0	3	0.7	Sporadic cases
Fiji	1	68	7.6	0	2	0.2	Sporadic cases
Lao People's Democratic Republic	0	49	0.7	0	0	0.0	Sporadic cases
Solomon Islands	0	19	2.8	0	0	0.0	No cases
Territoriesiii							
French Polynesia	19	18 652	6 639.9	0	141	50.2	Sporadic cases
Guam	19	7 625	4 517.8	0	136	80.6	Clusters of cases
Wallis and Futuna	16	441	3 921.4	1	5	44.5	Sporadic cases
Northern Mariana Islands (Commonwealth of the)	1	160	278.0	0	2	3.5	Pending
Marshall Islands	0	4	6.8	0	0	0.0	No cases
New Caledonia	0	121	42.4	0	0	0.0	Sporadic cases
Samoa	0	4	2.0	0	0	0.0	No cases
Vanuatu	0	3	1.0	0	0	0.0	No cases
Global	**4 550 837**	**135 057 587**		**76 773**	**2 919 932**		

*See *Annex: Data, table and figure notes*

Annex 2. List of countries/territories/areas reporting variants of concern as of 13 April 2021**

Country/Territory/Area	VOC 202012/01 (B.1.1.7)	501Y.v2 (B.1.351)	P.1 (B.1.1.28)
Albania	Not Verified		
Algeria	Verified		
Angola	Verified	Verified	
Argentina	Verified		Verified
Aruba	Verified	Verified	Verified
Australia	Verified	Verified	Not Verified
Austria	Verified	Verified	Verified
Azerbaijan	Verified		
Bahrain	Verified		
Bangladesh	Verified	Not Verified	
Barbados	Verified		
Belarus	Verified		
Belgium	Verified	Verified	Verified
Belize	Verified		
Bonaire	Verified		
Bosnia and Herzegovina	Not Verified		
Botswana		Verified	
Brazil	Verified	Verified	Verified
Brunei Darussalam	Verified	Verified	
Bulgaria	Verified		
Cabo Verde	Verified		
Cambodia	Verified		
Cameroon		Verified	
Canada	Verified	Verified	Verified
Cayman Islands	Verified		
Chile	Verified		Verified
China	Verified	Verified	Not Verified
Colombia			Verified
Comoros		Verified	
Costa Rica	Verified	Verified	Verified
Croatia	Verified	Not Verified	
Cuba	Verified	Verified	
Curaçao	Verified		
Cyprus	Verified		
Czechia	Verified	Not Verified	
Democratic Republic of the Congo	Verified	Verified	
Denmark	Verified	Verified	Verified
Dominican Republic	Verified		
Ecuador	Verified		
Estonia	Verified	Not Verified	
Eswatini		Verified	
Faroe Islands			Verified
Finland	Verified	Verified	Verified
France	Verified	Verified	Verified
French Guiana	Verified		Verified
French Polynesia	Verified		Not Verified
Gambia	Verified		
Georgia	Verified		
Germany	Verified	Verified	Verified
Ghana	Verified	Verified	
Gibraltar	Not Verified		

Country/Territory/Area	VOC 202012/01 (B.1.1.7)	501Y.v2 (B.1.351)	P.1 (B.1.1.28)
Greece	Verified	Verified	
Grenada	Verified		
Guadeloupe	Verified	Verified	Verified
Guyana			Not Verified
Hungary	Verified	Not Verified	
Iceland	Verified		
India	Verified	Verified	Verified
Indonesia	Verified		
Iran (Islamic Republic of)	Verified		
Iraq	Verified		
Ireland	Verified	Verified	Not Verified
Israel	Verified	Verified	
Italy	Verified	Not Verified	Verified
Jamaica	Verified		
Japan	Verified	Verified	Verified
Jordan	Verified		
Kazakhstan	Not Verified	Not Verified	
Kenya	Not Verified	Verified	
Kosovo[1]	Verified		
Kuwait	Verified		
Latvia	Verified	Verified	
Lebanon	Verified		
Lesotho		Verified	
Libya	Verified	Verified	
Liechtenstein	Verified		
Lithuania	Verified	Verified	

Country/Territory/Area	VOC 202012/01 (B.1.1.7)	501Y.v2 (B.1.351)	P.1 (B.1.1.28)
Luxembourg	Verified	Verified	Not Verified
Malawi	Verified	Verified	
Malaysia	Verified	Not Verified	
Malta	Verified	Not Verified	
Martinique	Verified	Verified	Verified
Mauritius	Not Verified		
Mayotte	Verified	Verified	
Mexico	Verified		Verified
Monaco	Verified	Not Verified	
Montenegro	Verified		
Morocco	Verified		
Mozambique		Verified	
Namibia		Verified	
Nepal	Verified		
Netherlands	Verified	Verified	Verified
New Caledonia	Verified		
New Zealand	Verified	Verified	Not Verified
Nigeria	Verified		
North Macedonia	Verified		
Norway	Verified	Verified	Verified
occupied Palestinian territory	Verified	Verified	
Oman	Verified		
Pakistan	Verified		
Panama		Verified	Verified
Paraguay			Verified
Peru	Verified		Verified

Country/Territory/Area	VOC 202012/01 (B.1.1.7)	501Y.v2 (B.1.351)	P.1 (B.1.1.28)
Philippines	Verified	Verified	Verified
Poland	Verified	Not Verified	Not Verified
Portugal	Verified	Verified	Not Verified
Puerto Rico	Verified		Verified
Qatar	Verified	Verified	
Republic of Korea	Verified	Verified	Verified
Republic of Moldova	Not Verified		
Réunion	Verified	Verified	Verified
Romania	Verified	Verified	Verified
Russian Federation	Verified	Not Verified	
Rwanda	Not Verified	Not Verified	
Saint Barthélemy	Verified		
Saint Lucia	Verified		
Saint Martin	Verified	Verified	Verified
Saudi Arabia	Verified		
Senegal	Verified		
Serbia	Verified		
Singapore	Verified	Not Verified	
Sint Maarten	Verified		
Slovakia	Verified	Not Verified	
Slovenia	Verified	Verified	Not Verified
South Africa	Verified	Verified	
Spain	Verified	Verified	Verified
Sri Lanka	Verified	Verified	
Suriname	Verified	Verified	Verified
Sweden	Verified	Verified	Verified
Switzerland	Verified	Verified	Not Verified
Thailand	Verified	Verified	
The United Kingdom	Verified	Verified	Verified
Togo	Verified		
Trinidad and Tobago	Verified		
Tunisia	Verified		
Turkey	Verified	Not Verified	Not Verified
Turks and Caicos Islands	Verified		
Uganda		Not Verified	
Ukraine	Not Verified		
United Arab Emirates	Verified	Verified	Verified
United Republic of Tanzania		Verified	
United States of America	Verified	Verified	Verified
Uruguay	Verified		Verified
Uzbekistan	Verified		
Venezuela (Bolivarian Republic of)			Verified
Viet Nam	Verified	Verified	
Wallis and Futuna	Not Verified		
Zambia		Verified	
Zimbabwe		Verified	

**See *Annex : Data, table and figure notes*

Annex 3. Data, table and figure notes

Data presented are based on official laboratory-confirmed COVID-19 case and deaths reported to WHO by country/territories/areas, largely based upon WHO case definitions and surveillance guidance. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change, and caution must be taken when interpreting these data as several factors influence the counts presented, with variable underestimation of true case and death incidence, and variable delays to reflecting these data at global level. Case detection, inclusion criteria, testing strategies, reporting practices, and data cut-off and lag times differ between countries/territories/areas. A small number of countries/territories/areas report combined probable and laboratory-confirmed cases. Differences are to be expected between information products published by WHO, national public health authorities, and other sources. Due to public health authorities conducting data reconciliation exercises which remove large numbers of cases or deaths from their total counts, negative numbers may be displayed in the new cases/deaths columns as appropriate. When additional details become available that allow the subtractions to be suitably apportioned to previous days, graphics will be updated accordingly. A record of historic data adjustment made is available upon request by emailing epi-data-support@who.int. Please specify the country(ies) of interest, time period(s), and purpose of the request/intended usage. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data. Global totals include 745 cases and 13 deaths reported from international conveyances.

The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement. Countries, territories and areas are arranged under the administering WHO region. The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.

[i] Excludes countries, territories, and areas that have never reported a confirmed COVID-19 case (Annex 1), or the detection of a variant of concern (Annex 2).

[ii] Transmission classification is based on a process of country/territory/area self-reporting. Classifications are reviewed on a weekly basis and may be revised as new information becomes available. Differing degrees of transmission may be present within countries/territories/areas. For further information, please see: Considerations for implementing and adjusting public health and social measures in the context of COVID-19:

- No (active) cases: No new cases detected for at least 28 days (two times the maximum incubation period), in the presence of a robust surveillance system. This implies a near-zero risk of infection for the general population.
- Imported / Sporadic cases: Cases detected in the past 14 days are all imported, sporadic (e.g., laboratory acquired or zoonotic) or are all linked to imported/sporadic cases, and there are no clear signals of further locally acquired transmission. This implies minimal risk of infection for the general population.
- Clusters of cases: Cases detected in the past 14 days are predominantly limited to well-defined clusters that

are not directly linked to imported cases, but which are all linked by time, geographic location and common exposures. It is assumed that there are a number of unidentified cases in the area. This implies a low risk of infection to others in the wider community if exposure to these clusters is avoided.

- Community transmission: Which encompasses a range of levels from low to very high incidence, as described below and informed by a series of indicators described in the aforementioned guidance. As these subcategorization are not currently collated at the global level, but rather intended for use by national and sub-national public health authorities for local decision-making, community transmission has not been disaggregated in this information product.
    - CT1: Low incidence of locally acquired, widely dispersed cases detected in the past 14 days, with many of the cases not linked to specific clusters; transmission may be focused in certain population sub-groups. Low risk of infection for the general population.
    - CT2: Moderate incidence of locally acquired, widely dispersed cases detected in the past 14 days; transmission less focused in certain population sub-groups. Moderate risk of infection for the general population.
    - CT3: High incidence of locally acquired, widely dispersed cases in the past 14 days; transmission widespread and not focused in population sub-groups. High risk of infection for the general population.
    - CT4: Very high incidence of locally acquired, widely dispersed cases in the past 14 days. Very high risk of infection for the general population.
- Pending: transmission classification has not been reported to WHO.

[iii] "Territories" include territories, areas, overseas dependencies and other jurisdictions of similar status.