COVID-19 Weekly Epidemiological Update

Edition 66, published 16 November 2021

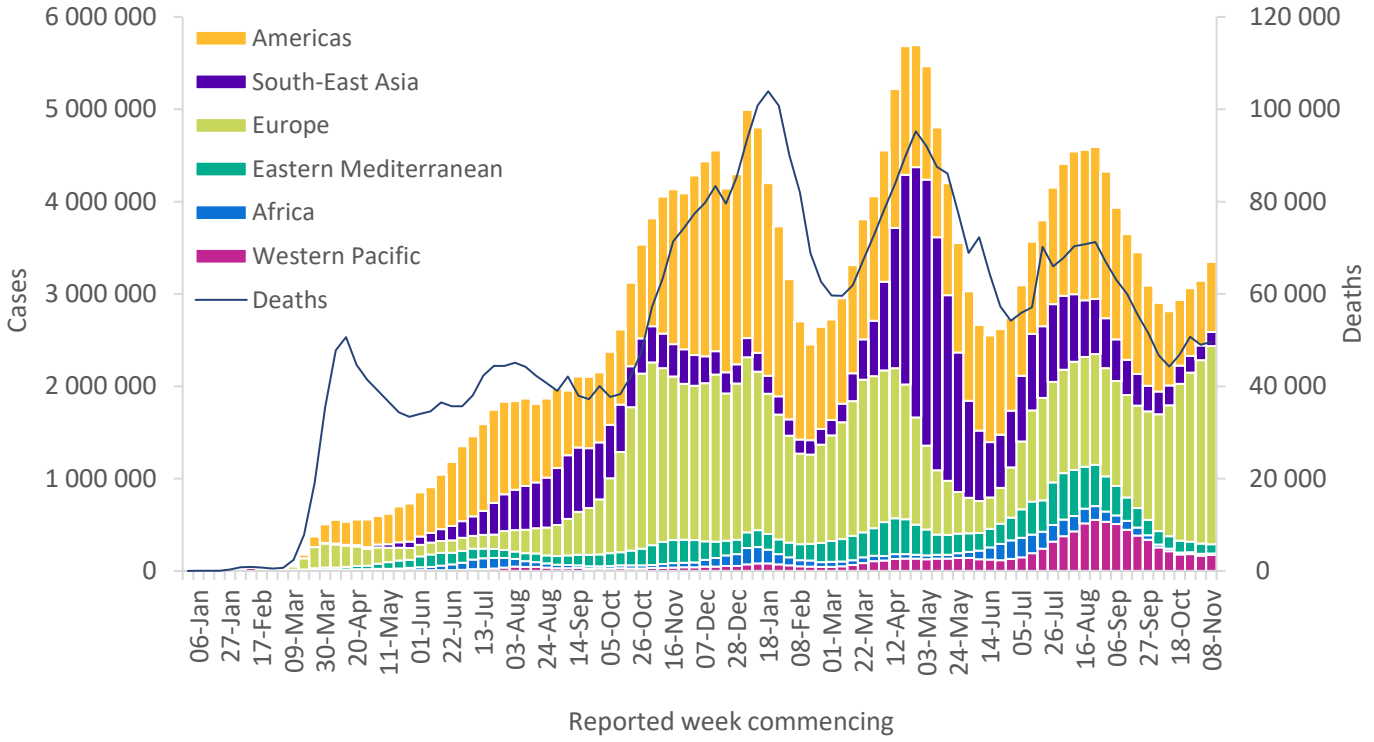
In this edition:

Global overview

Data as of 14 November 2021

During the week 8 to 14 November 2021, the increasing trend in new global weekly cases continued, with over 3.3 million new cases reported – a 6% increase as compared to the previous week (Figure 1). The Region of the Americas, the European and the Western Pacific Regions all reported increases in new weekly cases as compared to the previous week, while the other regions reported stable or declining trends (Table 1). Similarly, the European Region reported a 5% increase in new deaths, while the other regions reported stable or declining trends. Globally, just under 50 000 new deaths were reported, similar to the previous week's figures. As of 14 November, over 252 million confirmed cases and over 5 million deaths have been reported.

Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 14 November 2021**



**See *Annex 3: Data, table, and figure notes*

The regions reporting the highest weekly case incidence per 100 000 population were the European Region (230 new cases per 100 000 population) and the Region of the Americas (74.2 new cases per 100 000 population); these same two regions reported the highest weekly incidence in deaths, of 3.0 and 1.3 per 100 000 population, respectively.

The highest numbers of new cases were reported from the United States of America (550 684 new cases; 8% increase), the Russian Federation (275 579 new cases; similar to the previous week's figures), Germany (254 436 new cases; 50% increase), the United Kingdom (252 905 new cases; similar to the previous week's figures), and Turkey (180 167 new cases; 9% decrease).

Table 1. Newly reported and cumulative COVID-19 cases and deaths, by WHO Region, as of 14 November 2021**

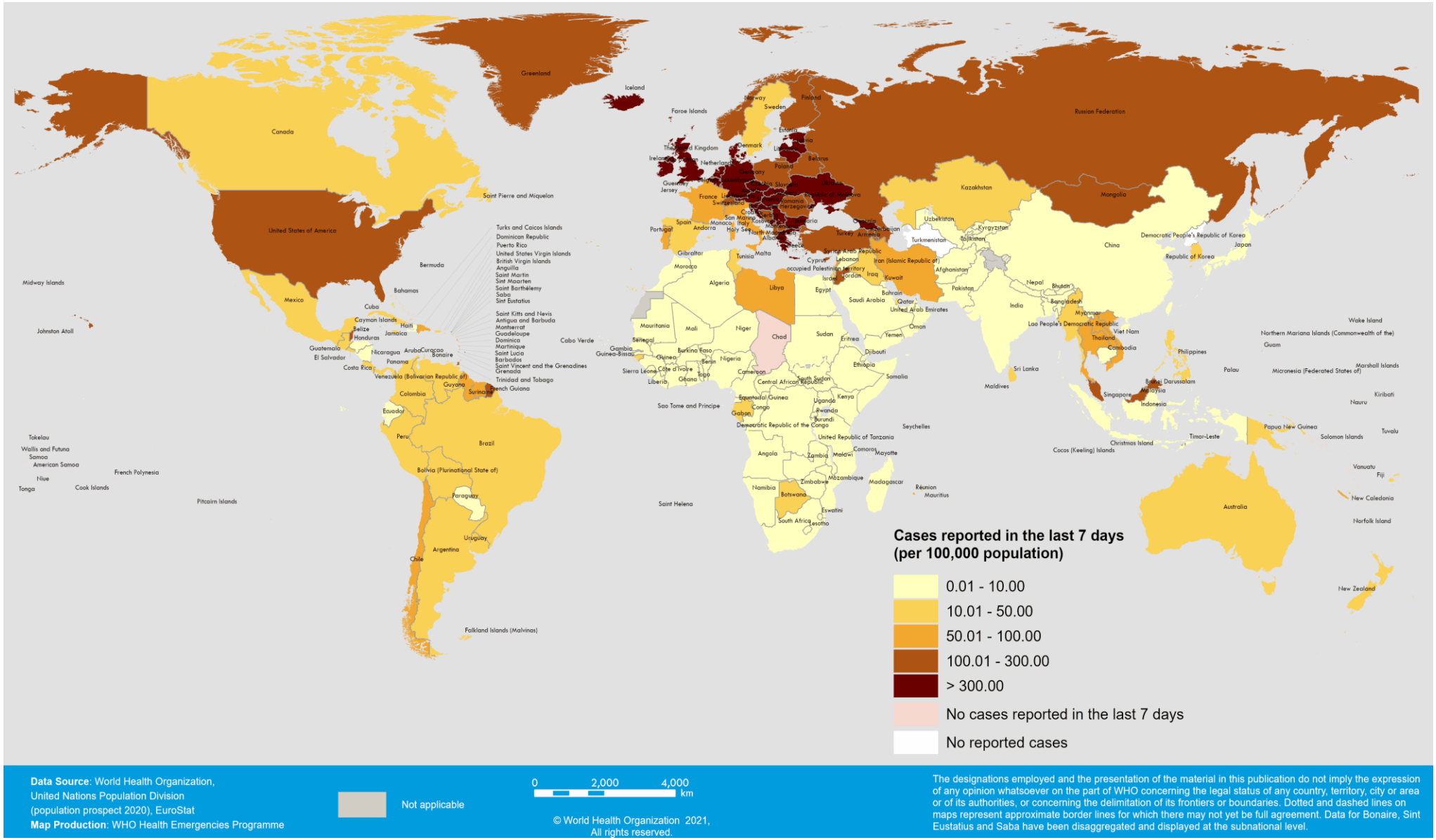
WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days *	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days *	Cumulative deaths (%)
Europe	2 145 966 (64%)	8%	80 941 615 (32%)	28 304 (57%)	5%	1 480 768 (29%)
Americas	758 669 (23%)	8%	95 089 154 (38%)	12 791 (26%)	-3%	2 320 358 (46%)
Western Pacific	173 930 (5%)	6%	9 772 383 (4%)	2 437 (5%)	-5%	134 617 (3%)
South-East Asia	152 535 (5%)	-3%	44 273 117 (18%)	3 530 (7%)	1%	699 920 (14%)
Eastern Mediterranean	101 743 (3%)	-9%	16 564 274 (7%)	1 974 (4%)	-14%	305 396 (6%)
Africa	13 674 (0%)	-33%	6 185 290 (2%)	548 (1%)	3%	151 689 (3%)
Global	**3 346 517 (100%)**	**6%**	**252 826 597 (100%)**	**49 584 (100%)**	**1%**	**5 092 761 (100%)**

**Percent change in the number of newly confirmed cases/deaths in the past seven days, compared to seven days prior*
***See Annex 3: Data, table, and figure notes*

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

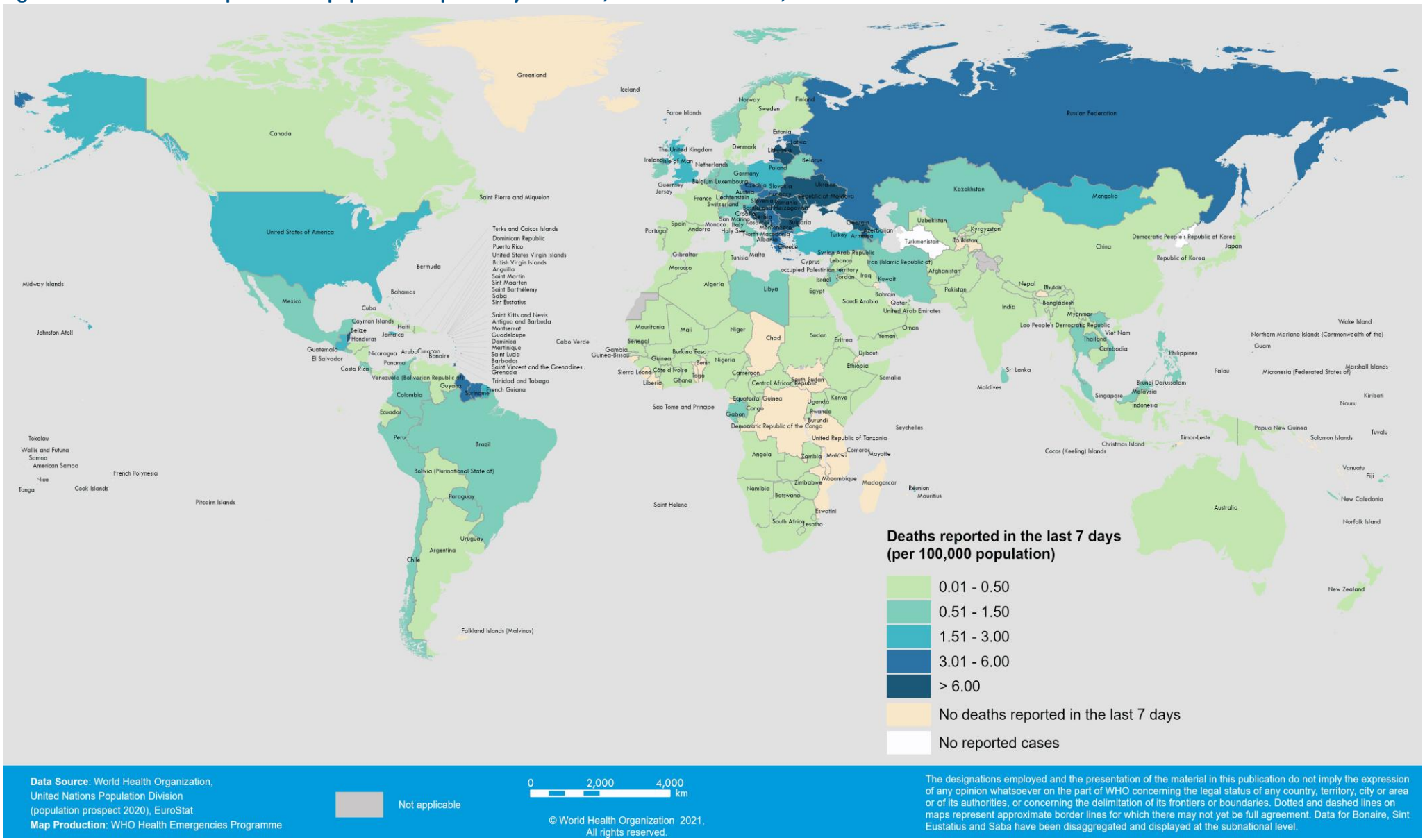
- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly Operational Update and previous editions of the Weekly Epidemiological Update

Figure 2. COVID-19 cases per 100 000 population reported by countries, territories and areas, 8-14 November 2021**



**See *Annex 3: Data, table, and figure notes*

Figure 3. COVID-19 deaths per 100 000 population reported by countries, territories and areas, 8-14 November 2021**



**See *Annex 3: Data, table, and figure notes*

Special Focus: Update on SARS-CoV-2 Variants of Interest and Variants of Concern

WHO, in collaboration with national authorities, institutions and researchers, routinely assesses if variants of SARS-CoV-2 alter transmission or disease characteristics, or impact effectiveness of vaccines, therapeutics, diagnostics or public health and social measures (PHSM) applied by national authorities to control disease spread. Potential Variants of Concern (VOCs), Variants of Interest (VOIs) or Variants Under Monitoring (VUMs) are regularly assessed based on the risk posed to global public health. As evidence becomes available, classifications of variants will be revised to reflect the continuous evolution of circulating variants and their changing epidemiology. Criteria for variant classification, and the current lists of VOCs, VOIs and VUMs, are available on the WHO Tracking SARS-CoV-2 variants website. National authorities may choose to designate other variants of local interest/concern and are encouraged to investigate and report on the impacts of these variants.

Geographic spread and prevalence of VOCs

The current global genetic epidemiology of SARS-CoV-2 is characterized by a predominance of the Delta variant, with the declining prevalence of other variants among sequences submitted to publicly available datasets or detections reported to WHO (Figure 4, Annex 2). Delta has outcompeted other variants, including other VOCs, in most countries. Of 799 645 sequences uploaded to GISAID with specimens collected in the last 60 days[i], 797 174 (99.7%) were Delta, 791 (0.1%) Gamma, 313 (<0.1%) Alpha, 15 (<0.1%) Beta, and 0.1% comprised other circulating variants (including VOIs Mu and Lambda). Sub-regional and country-level variation continues to be observed; most notably within some South American countries, where the progression of the Delta variant has been more gradual, and other variants (e.g., Gamma, Lambda, Mu) still contribute a large proportion of reported sequences. Moreover, global VOCs distribution should be interpreted with due consideration of surveillance limitations, including differences in sequencing capacities and sampling strategies between countries, as well as delays in reporting.

Phenotypic characteristics

Available evidence on the phenotypic impacts of VOCs is summarized in Table 2, as well as in previous editions of the COVID-19 Weekly Epidemiological Update. Since the last detailed update on 2 November, there are several new publications on the phenotypic characteristics of VOCs**.**

Results from a retrospective cohort study[1] of patients admitted to a referral hospital in Cape Town, South Africa, were published in a preprint on 4 November 2021. The study compares outcomes between two time periods: 26 March and 10 July 2020 (wave 1) and 15 November 2020 to 15 January 2021 (wave 2). A total of 1182 patients aged 18 years and over were included in the study: 571 during the first wave, and 611 during the second wave. Despite the reported higher numbers of cases and deaths during the second wave, there was no difference in the mortality risk [adjusted odds ratio (aOR) of 0.97, 95% confidence interval (CI) of 0.55-1.7, p=0.9]. Whole-genome sequencing performed on samples from the second wave, found that 97% (113/117) of those tested were identified as the Beta variant. It is possible that the increased use of corticosteroids (92.6% in the second wave as compared to 13.7% in the first), which was found to be associated with lower odds of mortality (aOR=0.4, 95%CI 0.28-0.84, p=0.01), and intensified anticoagulation (93.5% in the second as compared to 62.7% in the first) improved survival.

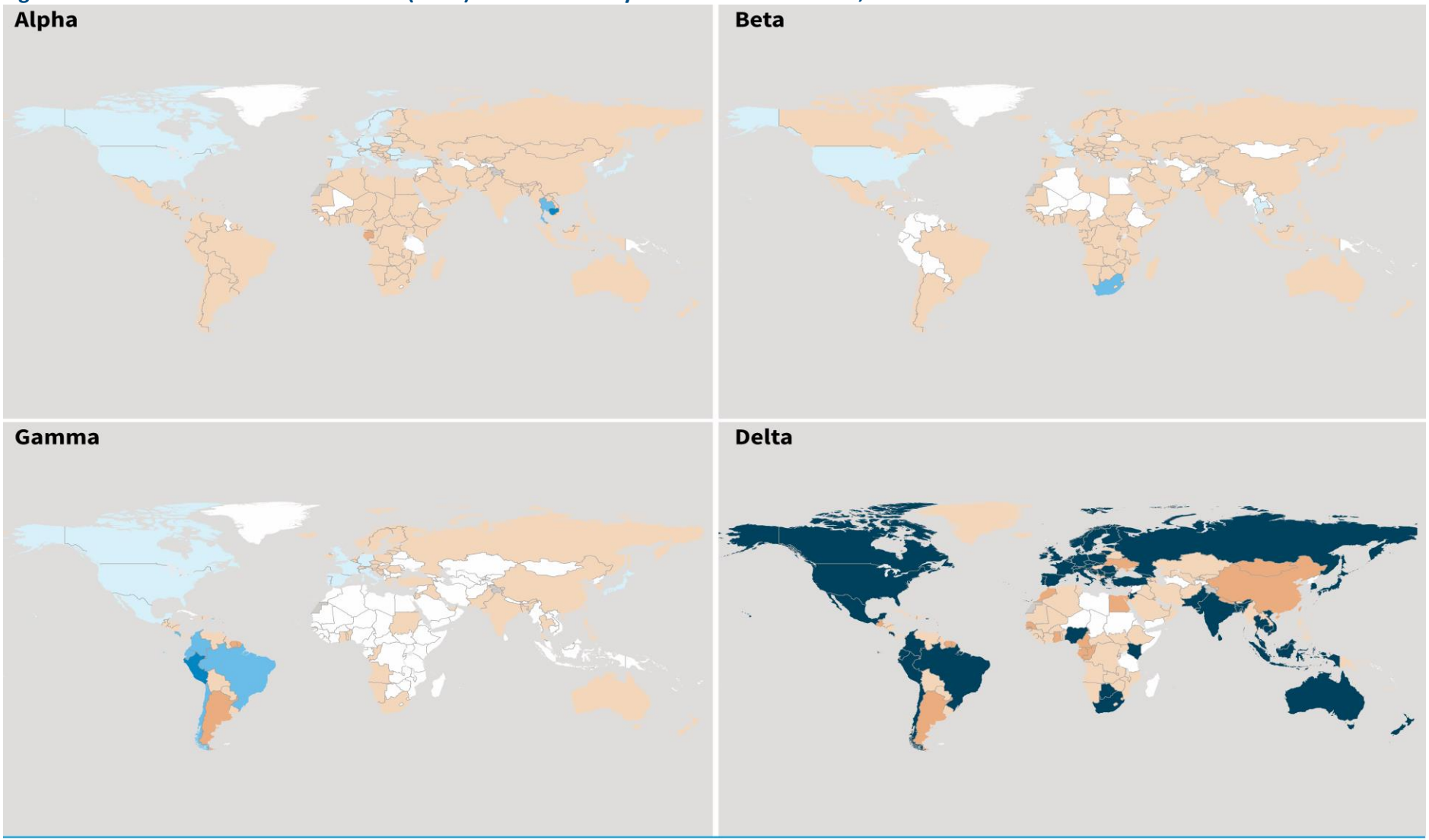
A pre-print study,[2] conducted in the United States of America during a period when Delta variant prevalence was above 95%, evaluated whether vaccine-induced immune responses reduce the amount of nasal viral RNA or the infectious virus titers as compared to the responses in infected, but unvaccinated persons. Authors compared RT-PCR cycle threshold (Ct) data from 699 test-positive anterior nasal swab specimens from fully vaccinated (n=310) or unvaccinated (n=389) COVID-19 cases. Fully vaccinated was defined as having received a second mRNA vaccine dose or single adenovirus vector vaccine dose ≥ 2 weeks prior to testing positive. Low Ct values (<25) were observed in

[i] Includes sequences submitted to GISAID with sample collected dates from 13 September to 12 November 2021 (last reported sample at the time of data extraction), excluding low coverage sequences.

212 of 310 fully vaccinated (68%) and 246 of 389 (63%) unvaccinated individuals, regardless of symptoms at the time of testing. Plaque assays were performed on an additional set of 48 samples with Ct <25, finding no difference in infectious virus titer between vaccinated and unvaccinated groups (p=0.40). Combined with other studies,[3,4] these data indicate that vaccinated as well as unvaccinated individuals infected with the Delta variant may be able to transmit the virus, although other studies suggest this transmission by immunized individuals may be relatively inefficient, as vaccination accelerates viral clearance.[5]

Preliminary analysis reported in a technical briefing by the United Kingdom Health Security Agency using surveillance data from the United Kingdom[6] between 1 August to 5 October 2021 suggests that estimated growth rates remain slightly higher for the Delta sub-lineage AY.4.2 than for other Delta lineages (parental Delta and Delta sub-lineages other than AY.4.2) and that the secondary attack rate for household contacts of cases with AY.4.2 may be slightly higher than for contacts of Delta cases (12.2% (95% CI: 11.8% - 12.7%) vs. 11.2% (95% CI: 11.1% - 11.3%). In non-household settings, the secondary attack rate was higher for AY.4.2 as compared to Delta cases, but this difference was not significant.[7] Initial analyses did not show strong evidence of a difference in risk of hospitalization or death between AY.4.2 and Delta (parental and sub-lineages other than AY.4.2). It is important to note that these analyses did not adjust for crucial factors that can influence outcomes such as age and vaccination status and should be interpreted with caution.

Figure 4. Prevalence of Variants of Concern (VOCs) in the last 60 days and historic detections, data as of 16 November 2021



*Prevalence calculated as a proportion of VOC sequences among total sequences uploaded to GISAID with sample collection dates within the past 60 days prior to the latest date of collection, excluding low coverage sequences, limited to countries with ≥100 total sequences in the same period. Countries assigned by location of sample collection.
**Includes both official reports to WHO and unofficial reports of VOC detections.

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.

Prevalence data based on sequences reported to GISAID, excluding low coverage sequences. See also Annex 2 for reported VOC detections by country/territory/area

Table 2: Summary of phenotypic impacts* of Variants of Concern

WHO label	Alpha	Beta	Gamma	Delta
Transmissibility	Increased transmissibility[8]	Increased transmissibility[9,10]	Increased transmissibility[10,11]	Increased transmissibility [6,10,12,13]
Disease severity	Possible increased risk of hospitalization[14,15], possible increased risk of severe disease and death[16,17]	Possible increased risk of hospitalization[15], possible increased in-hospital mortality[18]	Possible increased risk of hospitalization[15], possible increased risk of severe disease[19]	Possible increased risk of hospitalization[20,21]
Risk of reinfection	Neutralizing activity retained[22], risk of reinfection remains similar[23]	Reduction in neutralizing activity reported; T cell response elicited by D614G virus remains effective[24]	Moderate reduction in neutralizing activity reported[25]	Reduction in neutralizing activity reported[26–28]
Impacts on diagnostics	Limited impact – S gene target failure (SGTF), no impact on overall result from multiple target RT-PCR; No impact on Ag RDTs observed[29]	No impact on RT-PCR or Ag RDTs observed[28]	None reported to date	No impact on RT-PCR or Ag RDTs observed[30]

**Generalized findings as compared to previously/co-circulating variants. Based on emerging evidence, including non-peer-reviewed preprint articles and reports, all subject to ongoing investigation and revision.*

Table 3 summarizes the impact of variants on product-specific vaccine efficacy/effectiveness (VE) and quantifies the reduction in VE in the setting of variants compared to non-VOC settings. Since the 2 November update, five notable new studies have provided evidence of COVID-19 vaccine performance against variants of concern.

A peer-reviewed large retrospective cohort study from Scotland evaluated the effectiveness of AstraZeneca-Vaxzevria and Pfizer BioNTech-Comirnaty vaccines at preventing death among 98 066 persons who were aged 18 years and older and who tested positive for infection with the Delta variant.[31] VE against death among those infected with Delta was 91% (95% CI: 86-94%) for AstraZeneca-Vaxzevria and 90% (83-94%) for Pfizer BioNTech-Comirnaty. The maximum possible follow-up time post-second dose for this study was approximately 25 weeks.

A second test-negative case-control study from the United States of America, peer-reviewed, found the Pfizer BioNTech-Comirnaty vaccine to be 90% (89-91%) effective at preventing hospitalization ≥ 14 days post-second dose among immunocompetent adults aged 18 years and older, and 79% (74-83%) effective at preventing hospitalization among immunocompromised adults (individuals with an impaired immune system).[32] The maximum potential follow-up time post full vaccination was approximately 33 weeks for this study. The median interval from time of second dose to hospital admission was 89-90 days for both vaccines for both immunocompetent and immunocompromised adults.

A retrospective cohort study from Finland (not yet peer-reviewed) assessed the effectiveness of AstraZeneca-Vaxzevria, two doses of mRNA, and heterologous AstraZeneca-Vaxzevria/mRNA vaccination at preventing infection and hospitalization among healthcare workers with increasing time since vaccination.[33] VE of two doses of mRNA vaccine against SARS-CoV-2 infection declined from 85% (81-88%) 14-90 days after the second dose to 56% (46-65%) after 6 months. VE of AstraZeneca-Vaxzevria against infection declined from 88% (71-95%) 14-90 days after the second dose to 62% (-177-95%) 91-180 days post second dose. VE of heterologous AstraZeneca-Vaxzevria/mRNA vaccination declined from 80% (72-86%) 14-90 days post second dose to 63% (33-80%) 91-180 days post second dose (no estimates were available for 6+ months for these regimens). VE against hospitalization remained high (>95%) for mRNA vaccination and heterologous AstraZeneca/mRNA vaccination through 180 days post second dose; VE against

hospitalization for homologous AstraZeneca-Vaxzevria decreased from 100% (-∞, 100) 14-90 days post second dose to 81% (9-96%) 91-180 days post second dose.

Finally, a peer-reviewed, large retrospective study from Israel assessed the effectiveness of the third dose of Pfizer BioNTech-Comirnaty vaccine compared to those who had received two doses of the same vaccine 5 or more months prior to the analysis.[34] A third dose of the Pfizer BioNTech-Comirnaty vaccine was 88% (87-90%), 91% (89-92%), 92 (82-97%), and 81% (59-97%) more effective at preventing infection, symptomatic disease, severe disease, and death, seven or more days after the booster dose.

Additional resources

- Tracking SARS-CoV-2 Variants
- COVID-19 new variants: Knowledge gaps and research
- Genomic sequencing of SARS-CoV-2: a guide to implementation for maximum impact on public health
- Considerations for implementing and adjusting public health and social measures in the context of COVID-19

Table 3. Summary of vaccine performance against Variants of Concern

	WHO Emergency Use Listing (EUL) Qualified Vaccines							Vaccines without WHO EUL+			
	AstraZeneca-Vaxzevria/SII - Covishield	Beijing CNBG-BBIBP-CorV	Bharat-Covaxi	Janssen-Ad26.COV 2.S	Moderna-mRNA-1273	Moderna-mRNA-1273/ Pfizer BioN BioNTech-Comirnaty	Pfizer BioNTech-Comirnaty	Sinovac-CoronaVac	Anhui ZL-Recombinant	Gamaleya-Sputnik V	Novavax-Covavax
Alpha[35,36]											
Summary of VE*	Protection retained against all outcomes										
- Severe disease	↔$_2$	-	-	-	↔$_2$	↔$_1$	↔$_6$	-	-	-	-
- Symptomatic disease	↔ to ↓$_5$	-	-	-	↔$_1$	↔$_1$	↔$_4$	-	-	-	↓$_1$
- Infection	↔ to ↓$_4$	-	-		↔$_3$	-	↔$_3$	-	-	-	-
Neutralization	↔ to ↓$_8$	↔$_1$	↔$_2$	↔$_4$	↔ to ↓$_{12}$	↔ to ↓$_2$	↔ to ↓$_{40}$	↔ to ↓↓$_6$	↔$_2$	↔ to ↓$_4$	↓$_1$
Beta[37–40]											
Summary of VE*	Protection retained against severe disease; reduced protection against symptomatic disease; limited evidence										
- Severe disease	-	-	-	↔$_1$	↔$_1$	-	↔$_3$	-	-	-	-
- Symptomatic disease	↔ to ↓↓↓$_2$	-	-	↔$_1$	↔$_1$	-	↔$_2$	-	-	-	↓↓↓$_1$
- Infection	-	-	-	-	↔$_1$	-	↓$_1$	-	-	-	-
Neutralization	↓ to ↓↓$_8$	↔ to ↓$_2$	↓$_2$	↓ to ↓↓$_8$	↓ to ↓↓$_{16}$	↓↓ to ↓↓↓$_2$	↓ to ↓↓$_{41}$	↓ to ↓↓↓$_6$	↔ to ↓$_3$	↓↓ to ↓↓↓$_5$	↓↓↓$_1$
Gamma											
Summary of VE*	Unclear impact; very limited evidence										
- Severe disease	↔$_1$	-	-	-	↔$_1$	-	↔$_2$	-	-	-	-
- Symptomatic disease	↔$_1$	-	-	-	↔$_1$	-	↔$_1$	-	-	-	-
- Infection	↔$_1$	-	-	-	↔$_1$	-	↔$_1$	↔$_1$	-	-	-
Neutralization	↔ to ↓$_3$	-	-	↔ to ↓$_4$	↓$_8$	-	↔ to ↓$_{24}$	↔ to ↓$_4$	↔$_1$	↓ to ↓↓$_3$	-
Delta[41]											
Summary of VE*	Protection retained against severe disease; possible reduced protection against symptomatic disease and infection; limited evidence										
- Severe disease	↔$_3$	-	-	-	↔$_3$	-	↔$_6$	-	-	-	-
- Symptomatic disease	↓ to ↓↓$_5$	-	↓$_1$	-	↔$_1$	-	↔ to ↓$_4$	-	-	-	-
- Infection	↔ to ↓$_4$	-	-	↓↓↓$_1$	↔$_3$	-	↔ to ↓$_3$	-	-	-	-
Neutralization	↓$_9$	-	↔ to ↓$_3$	↔ to ↓↓$_8$	↓$_7$	↓ to ↓↓$_2$	↔ to ↓$_{19}$	↓ to ↓↓↓$_4$	↔ to ↓$_2$	-	-

VE refers to vaccine effectiveness and vaccine efficacy;

+As of submission of this update

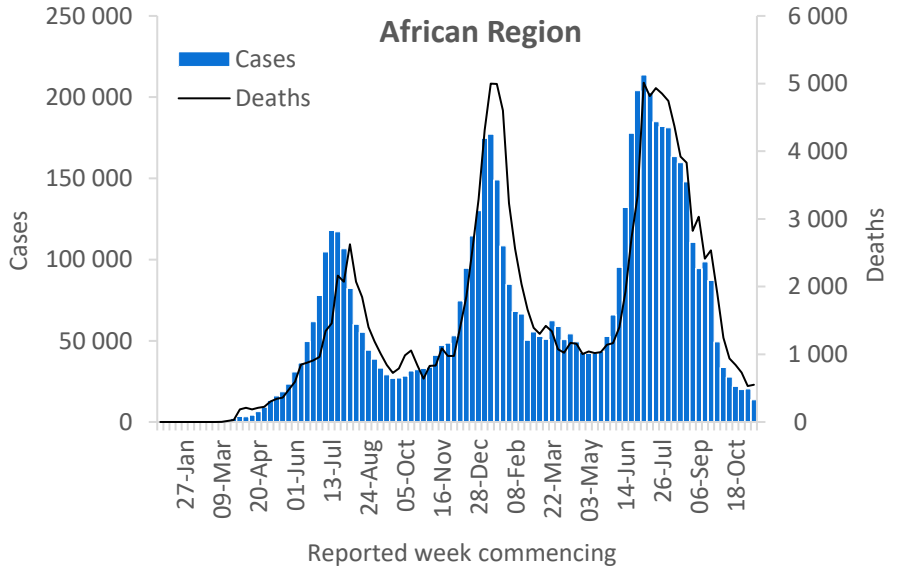
*Summary of VE: indicates the general conclusions but only for the vaccines evaluated against the specific variant. Arrows generalize the magnitude of reduction in VE or neutralization: "↔" <10% reduction in VE, or VE >90% with no comparator, or that there was a <2-fold reduction in neutralization; "↓" 10 to <20% reduction in VE, or 2 to <5-fold reduction in neutralization; "↓↓" 20 to <30% reduction in VE, or 5 to <10-fold reduction in neutralization; "↓↓↓" ≥30% reduction in VE, or ≥10-fold reduction in neutralization. When more than one neutralization study is available, the interquartile range (25th and 75th percentiles) of fold-reductions across all studies for specific vaccine/variant was used. "Moderna-mRNA-1273/Pfizer BioNTech-Comirnaty" indicates that both vaccines were evaluated together in the study. The number of studies is shown as subscripts: VE and neutralization studies informing this table can be found on the VIEW-hub Resource Library. References indicated by superscripts next to VOC label are VE from randomized controlled trials (RCTs) informing this table.

WHO regional overviews Epidemiological week 8-14 November 2021

African Region

The case incidence rates in the African Region have continued to decline since July, with a 33% decrease reported as compared to the previous week. However, 31% (15/49) of the countries in the region reported an increase of >10% in new cases as compared to the previous week. Over 500 new deaths were reported this week, similar to the previous week's figures. The highest numbers of new cases were reported from South Africa (1926 new cases; 3.2 new cases per 100 000 population; similar to the previous week), Ethiopia (1584 new cases; 1.4 new cases per 100 000; a 25% decrease), and Cameroon (1371 new cases; 5.2 new cases per 100 000; a 26% decrease).

The highest numbers of new deaths were reported from South Africa (157 new deaths; <1 new death per 100 000 population; similar to the previous week's figures), Ethiopia (82 new deaths; <1 new death per 100 000; similar to the previous week's figures), and Nigeria (55 new deaths; <1 new death per 100 000; a 450% increase).

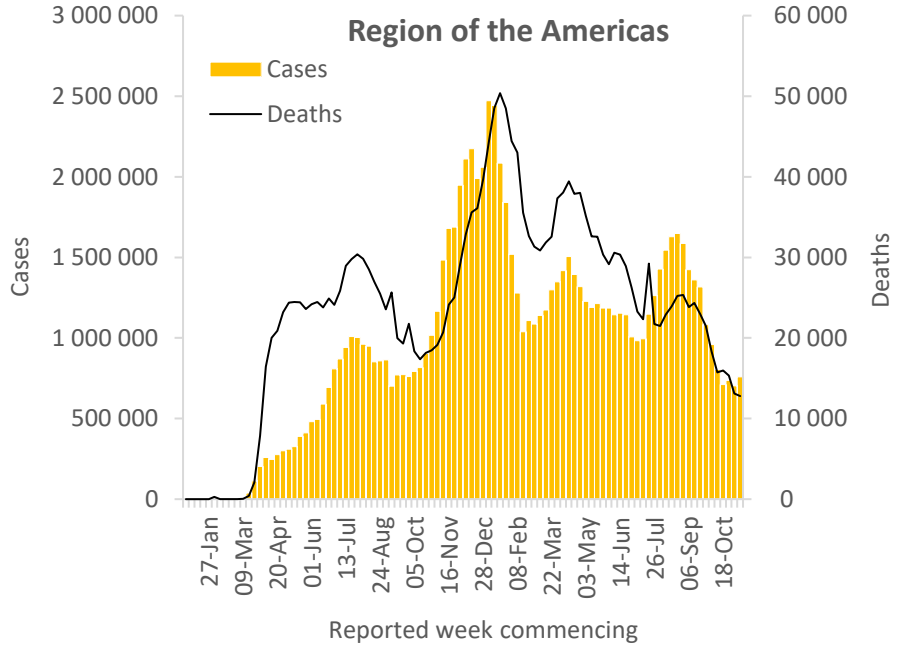


Updates from the African Region

Region of the Americas

The trend in cases in the Region of the Americas increased slightly with over 758 000 new cases reported, an 8% increase as compared to the previous week. Over 12 000 new deaths were reported, a number similar to that of the previous week. Thirty-two percent (19/59) of countries reported an increase of >10% in the number of new cases in the past week. The highest numbers of new cases were reported from the United States of America (550 684 new cases; 166.4 new cases per 100 000; an 8% increase), Brazil (76 738 new cases; 36.1 new cases per 100 000; an 11% increase), and Mexico (19 831 new cases; 15.4 new cases per 100 000; similar to the previous week's figures).

The highest numbers of new deaths were reported from the United States of America (7993 new deaths; 2.4 new deaths per 100 000; a 15% decrease), Mexico (1458 new deaths; 1.1 new deaths per 100 000; similar to the previous week), and Brazil (1431 new deaths; <1 new death per 100 000; a 10% decrease).

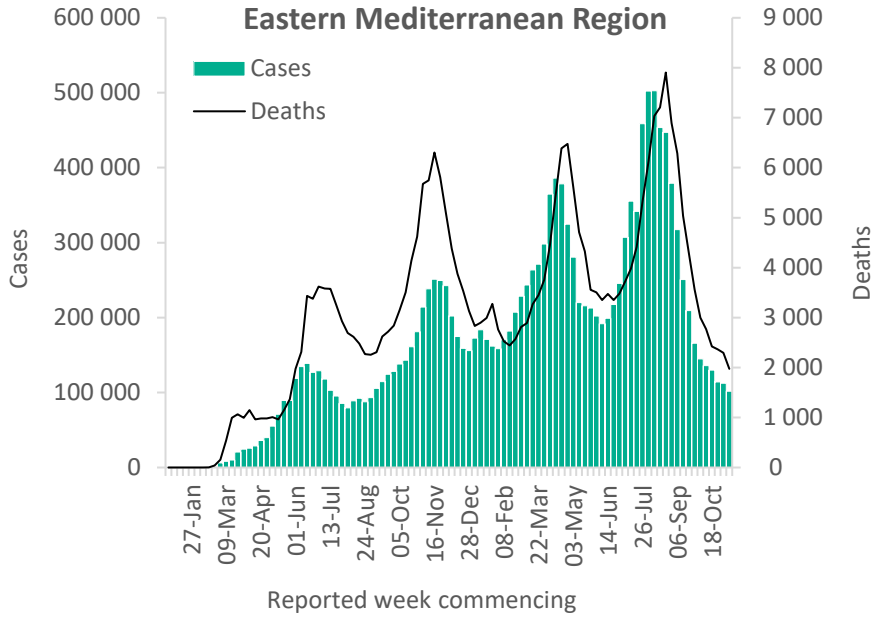


Updates from the Region of the Americas

Eastern Mediterranean Region

Case and death incidence rates in the Eastern Mediterranean Region have continued to decline since mid-July, with over 101 000 new cases and over 1900 new deaths reported, a 9% and 14% decrease, respectively as compared to the previous week. Out of the 22 countries in the Region, five reported an increase of over 10% in new cases, in the past week. The highest numbers of new cases were reported from the Islamic Republic of Iran that contributed to half of the cases in the Region (51 315 new cases; 61.1 new cases per 100 000; a 20% decrease), followed by Jordan (15 964 new cases; 156.5 new cases per 100 000; a 24% increase), and Iraq (6449 new cases; 16.0 new cases per 100 000; a 17% decrease).

The highest numbers of new deaths were reported from the Islamic Republic of Iran (869 new deaths; 1.0 new deaths per 100 000; a 17% decrease), Egypt (424 new deaths; <1 new death per 100 000; similar to the previous week's figures), and Iraq (164 new deaths; <1 new death per 100 000; a 9% decrease).

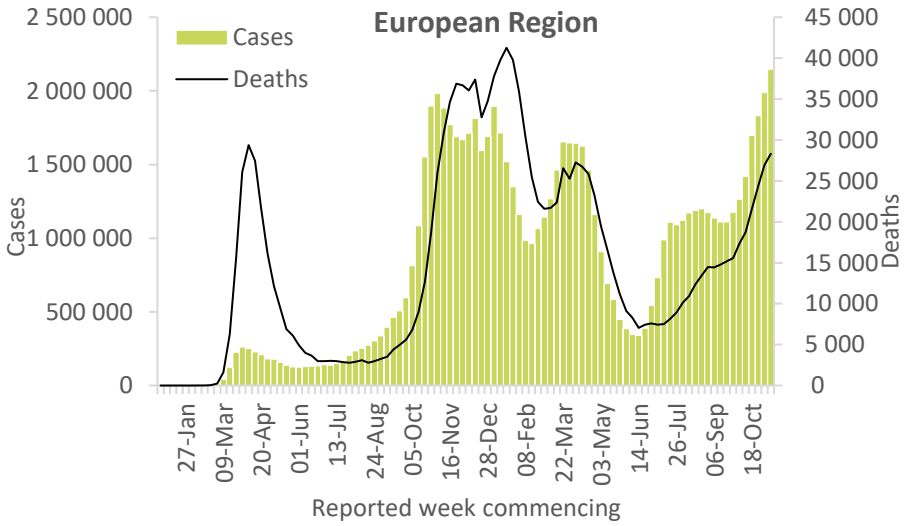


Updates from the Eastern Mediterranean Region

European Region

The European Region has continued to show an increasing trend in both cases and deaths, with over 2.1 million new cases and over 28 000 new deaths reported, increases of 8% and 5%, respectively as compared to the previous week. Nearly half (46%) of the countries which were widely distributed across the Region reported increases of over 10% in new cases in the past week, including Germany which reported the second-highest number of new cases in the past week and a 50% increase in cases as compared to the week before (254 436 new cases; 305.9 new cases per 100 000; a 50% increase). The other countries reporting the highest numbers of new cases were the Russian Federation (275 579 new cases; 188.8 new cases per 100 000; similar to the previous week's figures), and the United Kingdom (252 905 new cases; 372.5 new cases per 100 000; similar to the previous week's figures).

An increase of over 10% in deaths in the past week was seen in 38% of the countries with the greatest change seen in Norway (a 67% increase), Slovakia (a 58% increase), and Croatia (a 55% increase). The countries reporting the highest numbers of new deaths included the Russian Federation (8572 new deaths; 5.9 new deaths per 100 000; similar to the previous week's figures) and Ukraine (4621 new deaths; 10.6 new deaths per 100 000; a 6% increase).

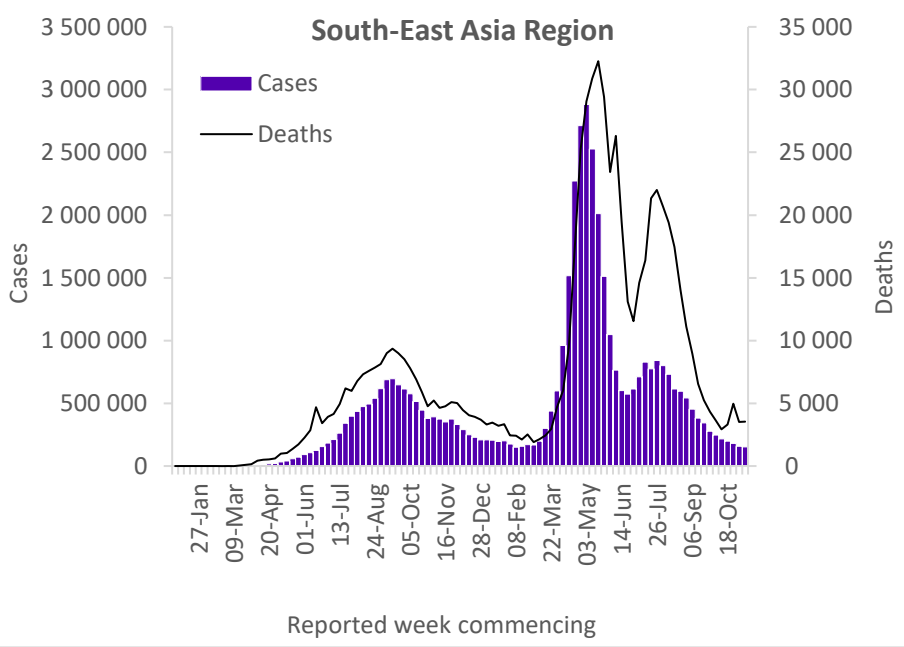


Updates from the European Region

South-East Asia Region

Following a declining trend since July, the incidence of cases and deaths in the South-East Asia Region has begun to plateau with over 152 000 new cases and over 3500 new deaths, similar numbers as compared to the previous week. Three of the ten countries in the region, reported increases of over 10% in new cases in the past week, while the highest numbers of new cases were reported from India (81 771 new cases; 5.9 new cases per 100 000; similar to the previous week's figures), Thailand (50 411 new cases; 72.2 new cases per 100 000; a 10% decrease), and Myanmar (6446 new cases; 11.8 new cases per 100 000; similar to the previous week's figures).

The highest numbers of new deaths were reported from India (2739 new deaths; <1 new death per 100 000; similar to the previous week's figures), Thailand (372 new deaths; <1 new death per 100 000; a 19% decrease), and Sri Lanka (139 new deaths; <1 new death per 100 000; a 23% increase).

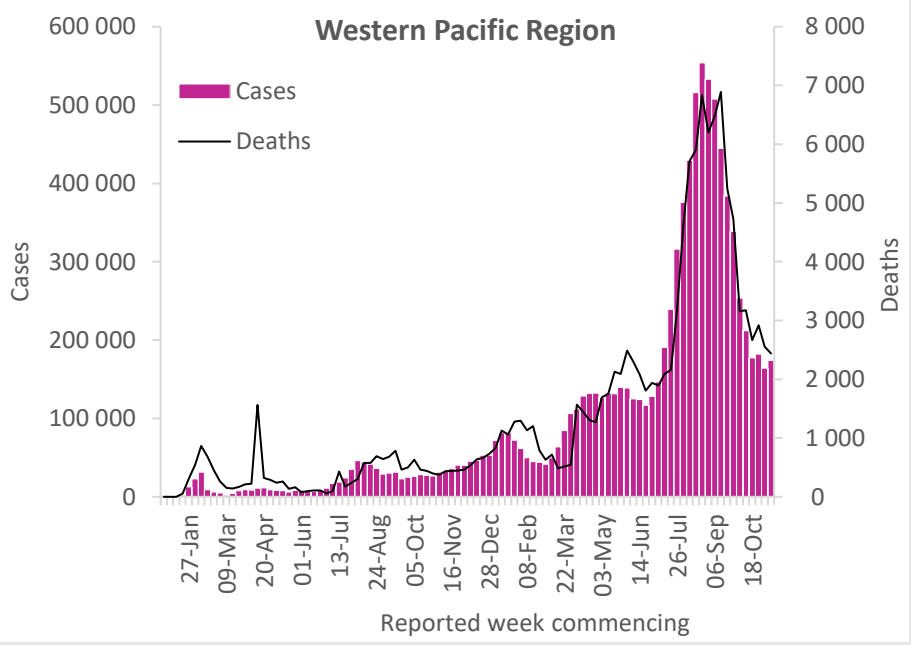


Updates from the South-East Asia Region

Western Pacific Region

During the past several weeks, the incidences of cases and deaths have been relatively stable with just under 174 000 new cases and over 2400 new deaths reported over this past week, a 6% increase and a 5% decrease, respectively as compared to the previous week. However, five of the 27 countries in the Region (19%) reported an increase this week as compared with the previous week, with the greatest changes reported in Fiji (a 42% increase), Viet Nam (a 26% increase), and New Zealand (a 20% increase). Viet Nam also reported the highest number of new cases (57 308; 58.9 new cases per 100 000).

The highest numbers of new deaths were reported from the Philippines (1033 new deaths; <1 new death per 100 000; an 14% decrease), Viet Nam (548 new deaths; <1 new death per 100 000; a 25% increase), and Malaysia (375 new deaths; 1.2 new deaths per 100 000; similar to the previous week's figures).



Updates from the Western Pacific Region

Summary of the COVID-19 Weekly Operational Update

The Weekly Operational Update is a report provided by the COVID-19 Strategic Preparedness and Response Plan (SPRP) Monitoring and Evaluation team, which aims to update on the ongoing global progress against the COVID-19 SPRP 2021 framework, and to highlight country-level actions and WHO support to countries. In this week's edition published on 15 November, highlights include the following:

- Delivering 6.6 tonnes of emergency medical kits to Sierra Leone following a fire disaster
- COVID-19 Intra-Action Review (IAR) in North Macedonia
- Launching nationwide vaccination campaign to scale up immunity against COVID-19 in Iraq
- Saving young lives through essential health services in Kenya
- Using social and behavioural data to fight COVID-19
- Progress on a subset of indicators from the SPRP 2021 Monitoring and Evaluation Framework
- Updates on WHO's financing to support countries in SPRP 2021 implementation and provision of critical supplies.

Technical guidance and other resources

- WHO technical guidance
- WHO COVID-19 Dashboard
- WHO Weekly Operational Updates on COVID-19
- WHO COVID-19 case definitions
- COVID-19 Supply Chain Inter-Agency Coordination Cell Weekly Situational Update
- Research and Development
- OpenWHO courses on COVID-19 in official UN languages and in additional national languages
- WHO Academy COVID-19 mobile learning app
- 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
- Recommendations and advice for the public:
  - Protect yourself
  - Questions and answers
  - Travel advice
- EPI-WIN: tailored information for individuals, organizations, and communities

Annexes

Annex 1. Additional notes on VOC impacts on vaccines

- Reductions in VE do not necessarily mean loss of protection, as indicated by the absolute VE estimate. For example, a 10-percentage point reduction in VE against symptomatic disease for mRNA vaccines would still mean high vaccine effectiveness of ~85%. In addition, vaccines have shown higher VE against severe disease; thus, small reductions in VE against severe disease due to VOCs may still mean substantial protection, as is the case for AstraZeneca-Vaxzevria.
- Table 3 summarizes the impact of VOCs on COVID-19 vaccine performance in the absence of waning, and, therefore, does not include studies that only assess VE greater than 4 months post final dose.
- Studies reporting VOC-specific VE estimates for full vaccination (≥7 days post final dose) are assessed against a comparator VE estimate for that vaccine product to determine the level of reduction in VE. For symptomatic disease, VOC VE is compared against phase 3 RCT results from non-VOC settings. For severe disease and infection, due to instability or lack of phase 3 RCT estimates, VOC VE is compared to non-VOC VE estimates from the same study when available (or to Alpha VE from the same study when assessing Beta, Gamma, or Delta); with an exception for AstraZeneca-Vaxzevria for infection (when a phase 3 estimate of VE against infection due to non-VOC is available and used as a comparator). In some instances, a study may be included for severe disease or infection outcomes even without a comparator if a very high VE estimate is reported against a VOC (i.e., >90%).
- It is also important to note that studies vary in population, outcome definitions, study design and other methodological considerations, which may in part explain differences when comparing VE estimates for a product between different studies. In addition, the reductions summarized in the table represent VE point estimates and do not represent the uncertainty intervals around these estimates which vary substantially across studies. The reductions in VE noted should be interpreted with these limitations in mind.

Annex 2. List of countries/territories/areas reporting variants of concern as of 16 November 2021

Country/Territory/Area	Alpha	Beta	Gamma	Delta
Afghanistan	●	-	-	●
Albania	●	-	-	○
Algeria	●	-	-	●
Andorra	○	○	-	○
Angola	●	●	●	●
Anguilla	●	-	-	●
Antigua and Barbuda	●	●	●	●
Argentina	●	●	●	●
Armenia	●	-	-	●
Aruba	●	●	●	●
Australia	●	●	●	●
Austria	●	●	●	●
Azerbaijan	●	-	-	○
Bahamas	●	-	●	●
Bahrain	●	●	●	●
Bangladesh	●	●	○	●
Barbados	●	-	●	●
Belarus	●	-	-	○
Belgium	●	●	●	●
Belize	●	-	●	●
Benin	●	●	●	●
Bermuda	●	●	-	●
Bhutan	●	●	-	●
Bolivia (Plurinational State of)	●	-	●	●
Bonaire	●	-	●	●
Bosnia and Herzegovina	●	●	●	○
Botswana	○	●	-	●
Brazil	●	●	●	●
British Virgin Islands	●	-	●	●
Brunei Darussalam	●	●	-	●
Bulgaria	●	●	-	●
Burkina Faso	●	-	-	●
Burundi	●	●	-	●
Cabo Verde	●	-	-	●
Cambodia	●	●	-	●
Cameroon	●	●	-	●
Canada	●	●	●	●
Cayman Islands	●	●	●	●
Central African Republic	●	●	-	●
Chad	●	-	-	-
Chile	●	●	●	●
China	●	●	●	●
Colombia	●	-	●	●
Comoros	-	●	-	-
Congo	●	○	●	●
Costa Rica	●	●	●	●
Croatia	●	●	●	○
Cuba	●	●	-	●
Curaçao	●	●	●	●
Cyprus	●	●	-	○
Czechia	●	●	●	●
Côte d'Ivoire	●	●	-	○
Democratic Republic of the Congo	●	●	-	●
Denmark	●	●	●	●
Djibouti	●	●	-	-
Dominica	●	-	-	●
Dominican Republic	●	-	●	●
Ecuador	●	-	●	●
Egypt	●	-	-	●
El Salvador	●	-	●	●
Equatorial Guinea	●	●	-	○
Estonia	●	●	○	○
Eswatini	○	●	-	●
Ethiopia	●	-	-	●
Falkland Islands (Malvinas)	●	●	-	-
Faroe Islands	●	-	●	-
Fiji	○	-	-	●
Finland	●	●	●	●
France	●	●	●	●
French Guiana	●	●	●	●
French Polynesia	●	●	●	●
Gabon	●	●	-	●
Gambia	●	-	-	●
Georgia	●	○	-	●
Germany	●	●	●	●
Ghana	●	●	●	●
Gibraltar	●	-	-	○
Greece	●	●	●	●
Greenland	-	-	-	●*
Grenada	●	-	-	●
Guadeloupe	●	●	●	●
Guam	●	●	●	●
Guatemala	●	●	●	●
Guinea	●	●	-	●
Guinea-Bissau	●	●	-	●
Guyana	-	-	●	●
Haiti	●	-	●	●
Honduras	●	-	●	●
Hungary	●	○	●	○
Iceland	●	●	●	●
India	●	●	●	●
Indonesia	●	●	-	●
Iran (Islamic Republic of)	●	●	-	●
Iraq	●	●	●	●
Ireland	●	●	●	●
Israel	●	●	●	●
Italy	●	●	●	●
Jamaica	●	-	-	●
Japan	●	●	●	●

Country/Territory/Area	Alpha	Beta	Gamma	Delta
Jordan	●	●	●	●
Kazakhstan	●	○	-	●
Kenya	●	●	-	●
Kosovo[1]	●	○	-	○
Kuwait	●	●	-	●
Kyrgyzstan	●	●	-	●
Lao People's Democratic Republic	●	-	-	●
Latvia	●	●	●	○
Lebanon	●	-	-	●
Lesotho	-	●	-	○
Liberia	●	●	-	●
Libya	●	●	-	-
Liechtenstein	●	-	○	○
Lithuania	●	●	●	○
Luxembourg	●	●	●	●
Madagascar	●	●	-	-
Malawi	●	●	-	●
Malaysia	●	●	-	●
Maldives	●	-	-	●
Mali	-	-	-	●
Malta	●	○	●	○
Martinique	●	●	●	●
Mauritania	●	●	-	●
Mauritius	●	●	-	●
Mayotte	●	●	-	○
Mexico	●	●	●	●
Monaco	●	●	-	●
Mongolia	●	-	-	●
Montenegro	●	-	○	○
Montserrat	●	-	●	●
Morocco	●	●	-	●
Mozambique	●	●	-	●
Myanmar	●	-	-	●
Namibia	●	●	○	●

Country/Territory/Area	Alpha	Beta	Gamma	Delta
Nepal	●	-	-	●
Netherlands	●	●	●	●
New Caledonia	●	-	-	●
New Zealand	●	●	○	●
Nicaragua	●	●	●	●
Niger	●	-	-	-
Nigeria	●	●	-	●
North Macedonia	●	●	-	○
Northern Mariana Islands (Commonwealth of the)	○	-	-	●
Norway	●	●	●	●
Occupied Palestinian Territory	●	●	-	●
Oman	●	●	-	●
Pakistan	●	●	●	●
Panama	●	●	●	●
Papua New Guinea	-	-	-	●
Paraguay	●	-	●	●
Peru	●	-	●	●
Philippines	●	●	●	●
Poland	●	○	●	●
Portugal	●	●	●	●
Puerto Rico	●	●	●	●
Qatar	●	●	-	●
Republic of Korea	●	●	●	●
Republic of Moldova	●	-	-	●
Romania	●	●	●	●
Russian Federation	●	●	○	●
Rwanda	●	●	-	●
Réunion	●	●	●	○
Saba	-	-	-	●
Saint Barthélemy	●	-	-	●
Saint Kitts and Nevis	-	-	-	●
Saint Lucia	●	-	-	●
Saint Martin	●	●	-	●
Saint Pierre and Miquelon	-	-	-	●

Country/Territory/Area	Alpha	Beta	Gamma	Delta
Saint Vincent and the Grenadines	-	-	●	●
Sao Tome and Principe	●	-	-	○
Saudi Arabia	●	●	-	●
Senegal	●	●	-	●
Serbia	●	-	-	●
Seychelles	●	●	-	●
Sierra Leone	-	●	-	●
Singapore	●	●	●	●
Sint Maarten	●	●	●	●
Slovakia	●	●	-	●
Slovenia	●	●	●	●
Somalia	●	●	-	-
South Africa	●	●	○	●
South Sudan	●	●	-	●
Spain	●	●	●	●
Sri Lanka	●	●	-	●
Sudan	●	●	●	-
Suriname	●	●	●	●
Sweden	●	●	●	●
Switzerland	●	●	●	●
Thailand	●	●	●	●
Timor-Leste	●	-	-	●
Togo	●	●	●	●
Trinidad and Tobago	●	-	●	●
Tunisia	●	●	-	●
Turkey	●	●	●	●
Turks and Caicos Islands	●	-	●	●
Uganda	●	●	-	●
Ukraine	●	○	-	○
United Arab Emirates	●	●	●	●
United Kingdom	●	●	●	●
United Republic of Tanzania	-	●	-	-
United States Virgin Islands	●	●	●	●
United States of America	●	●	●	●

Country/Territory/Area	Alpha	Beta	Gamma	Delta
Uruguay	●	●	●	●
Uzbekistan	●	●	-	○
Venezuela (Bolivarian Republic of)	●	-	●	●

Country/Territory/Area	Alpha	Beta	Gamma	Delta
Viet Nam	●	●	-	●
Wallis and Futuna	●	-	-	-
Yemen	●	●	-	-
Zambia	●	●	-	●

Country/Territory/Area	Alpha	Beta	Gamma	Delta
Zimbabwe	●	●	-	●

**Newly reported in this update. "●" indicates that information for this variant was received by WHO from official sources. "○" indicates that information for this variant was received by WHO from unofficial sources and will be reviewed as more information become available. **Includes countries/territories/areas reporting the detection of VOCs among travellers (e.g., imported cases detected at points of entry), or local cases (detected in the community). Excludes countries, territories, and areas that have never reported the detection of a variant of concern. See also Annex 3: 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 incidences, and variable delays to reflecting these data at the 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 that 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 countries of interest, time period, 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. COVID-19 confirmed cases and deaths reported in the last seven days by countries, territories, and areas, and WHO Region (reported in previous issues) are now available at: https://covid19.who.int/table.

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 except, 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, the number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.

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