COVID-19 Weekly Epidemiological Update

Edition 50, published 27 July 2021

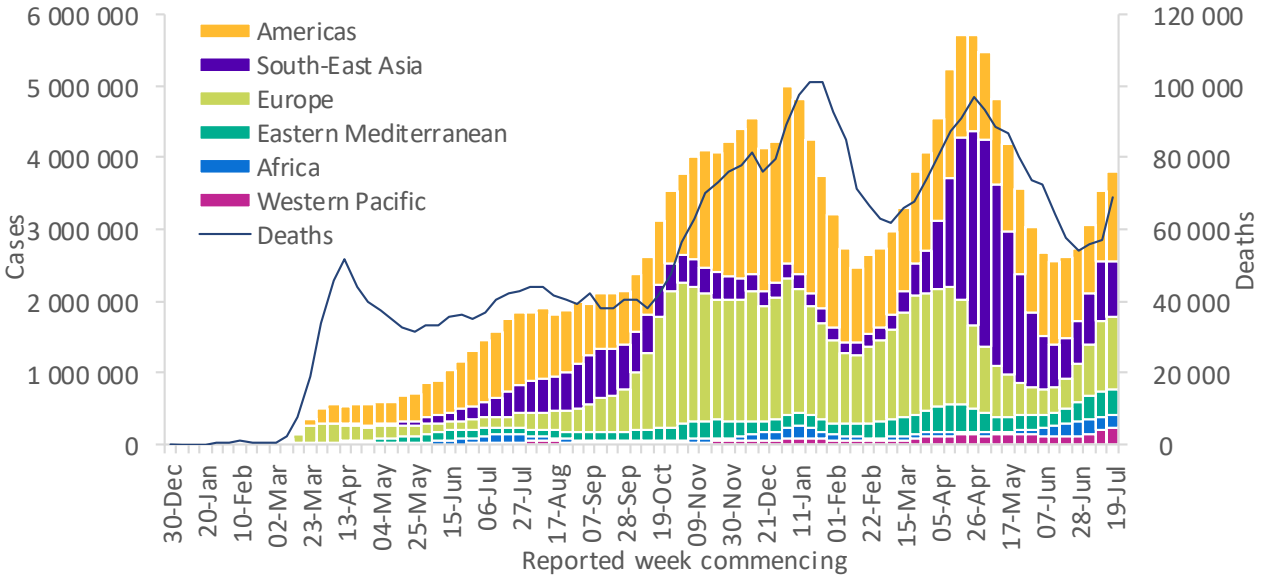
In this edition:

Global overview

Data as of 25 July 2021

The global number of new cases reported last week (19-25 July 2021) was over 3.8 million, an 8% increase as compared to the previous week (Figure 1); an average of around 540 000 cases were reported each day over the past week as compared to 490 000 cases reported daily the week before. This trend is largely attributed to substantial increases in the Americas and Western Pacific Regions. The number of deaths reported this week increased sharply with over 69 000 deaths, a 21% increase when compared to the previous week; the greatest number of new deaths were reported from the Americas and South-East Asia Regions. The cumulative number of cases reported globally is now nearly 194 million and the number of cumulative deaths exceeds 4 million. If these trends continue, the cumulative number of cases reported globally could exceed 200 million in the next two weeks. Last week, three WHO Regions - the Americas, Europe and Western Pacific reported an increase in case incidence. The Region of the Americas reported the largest increase in case incidence as compared to the previous week, followed by the Western Pacific Region (30% and 25%, respectively) (Table 1). The European Region also reported an increase in new cases, albeit at a much lower rate of 3%, when compared to the previous week. The number of new deaths increased in all regions apart from the European Region where it remained similar to the previous week.

Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 25 July 2021**



**See *Annex 2: Data, table and figure notes*

The highest weekly case incidence rates per 100 000 population were reported by the Americas and European Regions, which reported 123.3 and 108.3 new cases per 100 000 population, respectively. The highest numbers of deaths per 100 000 population over the past week were observed in the Americas and South-East Asia Regions which reported 2.8 and 1.1 new deaths per 100 000 population, respectively.

Over the past week, the highest numbers of new cases were reported from the United States of America (500 332 new cases; 131% increase), Brazil (324 334 new cases; 13% increase), Indonesia (289 029 new cases; 17% decrease), the United Kingdom (282 920 new cases; 5% decrease), and India (265 836 new cases; similar to the previous week).

Globally, cases of the Alpha variant have been reported in 182 countries, territories or areas (hereafter countries; two new countries in the past week), while 131 countries (two new countries) have reported cases of the Beta variant; 81 countries (three new countries) have reported cases of the Gamma variant; and 132 countries (eight new countries) have reported cases of the Delta variant.

Table 1. Newly reported and cumulative COVID-19 cases and deaths, by WHO Region, as of 25 July 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	1 260 598 (33%)	30%	75 995 514 (39%)	28 938 (42%)	29%	1 989 575 (48%)
Europe	1 010 270 (27%)	3%	59 009 652 (30%)	7 545 (11%)	-1%	1 211 783 (29%)
South-East Asia	775 618 (20%)	-7%	37 536 524 (19%)	21 334 (31%)	30%	548 276 (13%)
Eastern Mediterranean	338 605 (9%)	-4%	12 133 038 (6%)	4 225 (6%)	8%	230 676 (6%)
Africa	184 361 (5%)	-9%	4 773 581 (2%)	4 931 (7%)	2%	112 429 (3%)
Western Pacific	238 487 (6%)	25%	4 208 652 (2%)	2 159 (3%)	3%	61 908 (1%)
Global	**3 807 939 (100%)**	**8%**	**193 657 725 (100%)**	**69 132 (100%)**	**21%**	**4 154 660 (100%)**

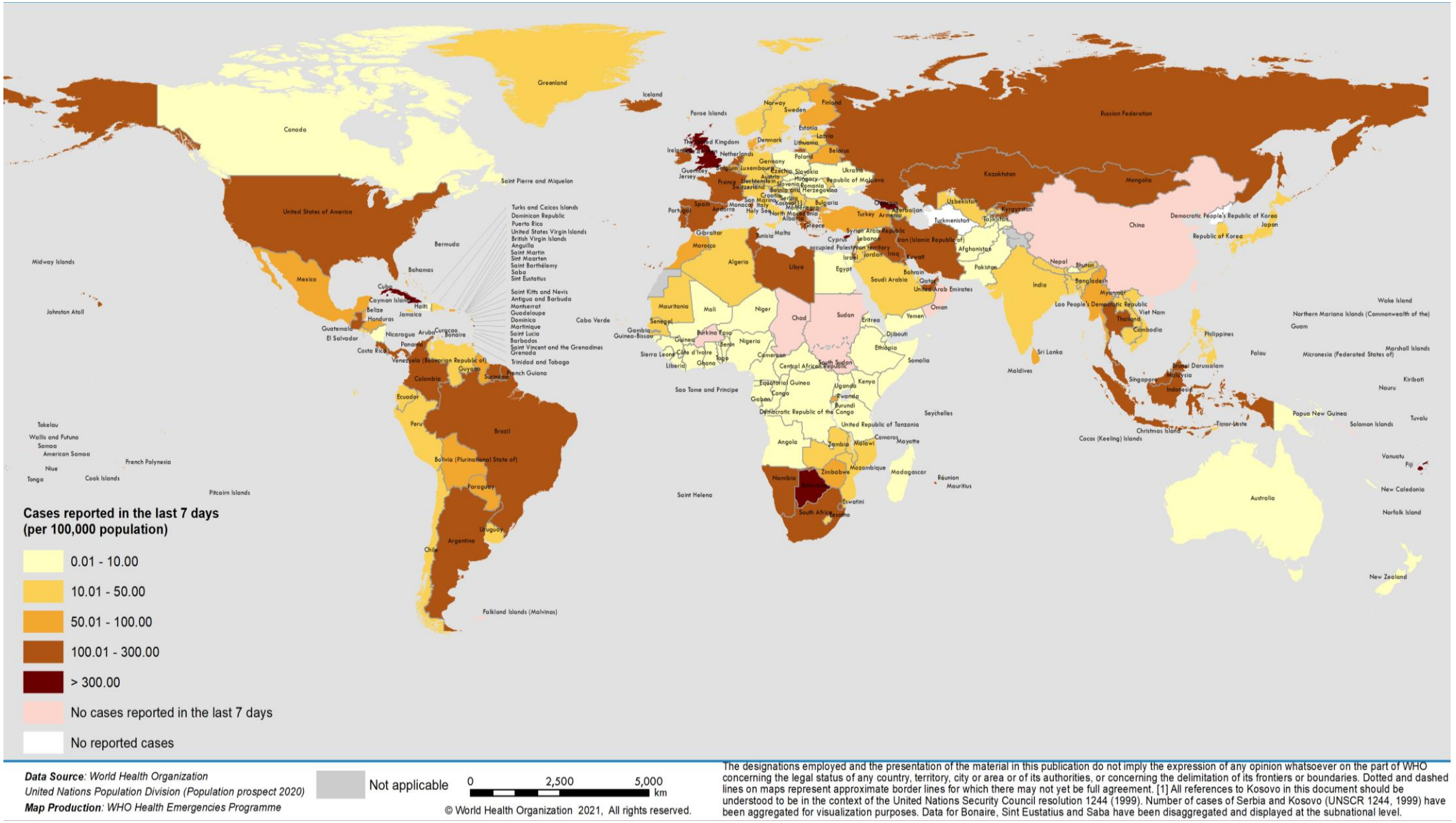
Percent change in the number of newly confirmed cases/deaths in past seven days, compared to seven days prior

**See *Annex 2: 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, 19 – 25 July 2021**

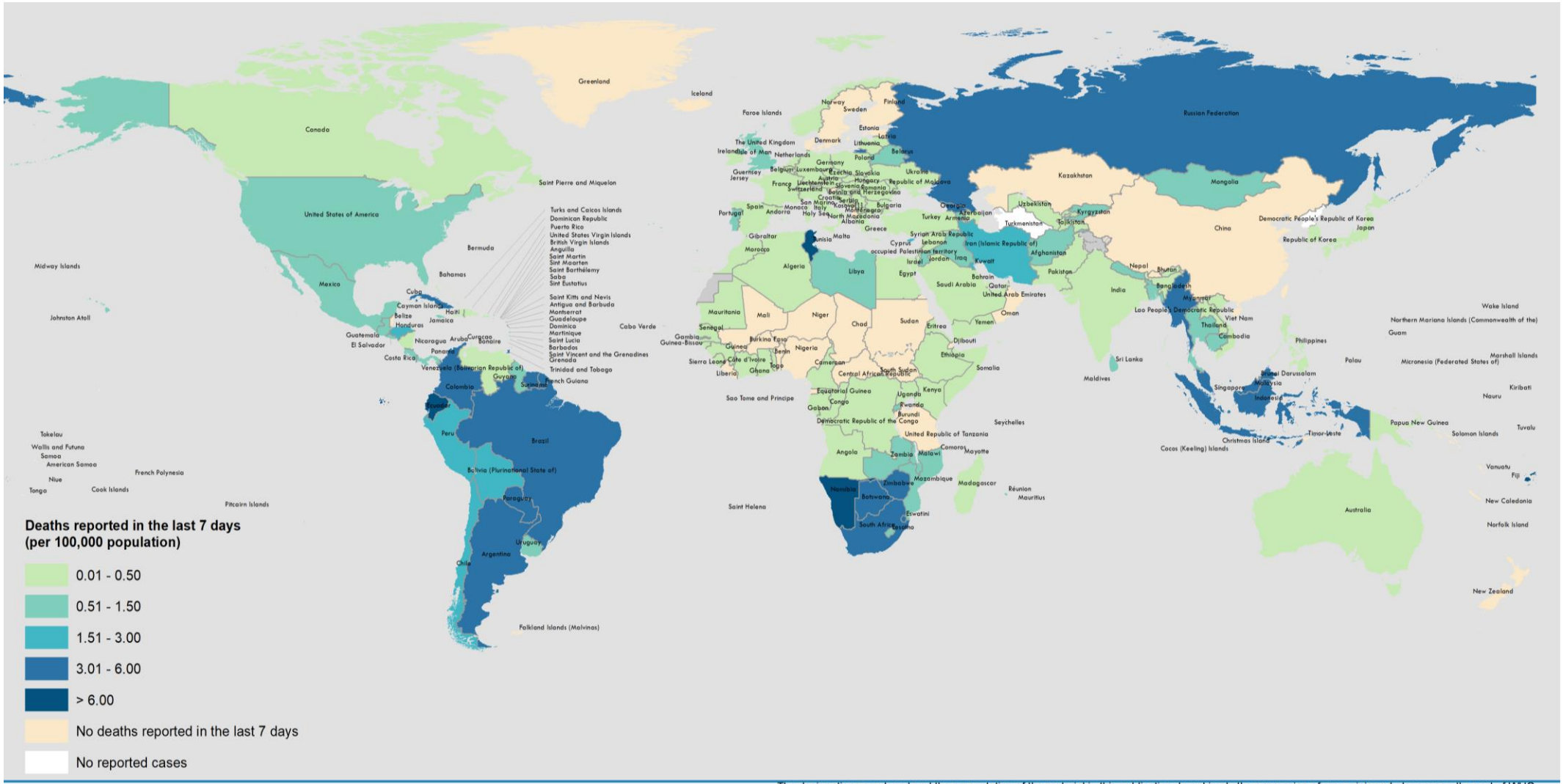


Data Source: World Health Organization
United Nations Population Division (Population prospect 2020)
Map Production: WHO Health Emergencies Programme

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. [1] All references to Kosovo in this document should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). Number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes. Data for Bonaire, Sint Eustatius and Saba have been disaggregated and displayed at the subnational level.

**See *Annex 2: Data, table and figure notes*

Figure 3. COVID-19 deaths per 100 000 population reported by countries, territories and areas, 19 – 25 July 2021**



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**See *Annex 2: Data, table and figure notes*

Special Focus: Evaluations of the effectiveness of COVID-19 vaccines in real-world settings

As of 20 July 2021, six vaccine types (AstraZeneca-Vaxzevria, Janssen Ad26.COV 2.5, Moderna-mRNA-1273, Pfizer BioNTech-Comirnaty, COVID-19 vaccine BIBP, and Sinovac-CoronaVac) have received WHO emergency use listing (EUL) based, in part, on vaccine efficacy results from randomized controlled trials (RCTs). In contrast to vaccine efficacy, which is estimated in the controlled clinical trial setting, vaccine effectiveness, is estimated from observational (non-randomized) studies in real-world settings.

What is vaccine effectiveness?

Vaccine effectiveness (VE) is the percentage reduction in the risk or odds of disease or infection among vaccinated persons. It is important to note that breakthrough infections or disease (infection or symptomatic disease among individuals who have been fully vaccinated) are expected with all COVID-19 vaccines, even those with very high VE (such as greater than 90%), becoming more apparent as more of the population becomes vaccinated.

Evaluations of the effectiveness of multiple COVID-19 vaccines in different settings and populations are needed to assess how well these vaccines work in preventing symptomatic disease, severe disease, hospitalization, death, as well as infection and transmission, among other outcomes. Moreover, answers to some important public health questions can only be addressed by post-introduction VE studies, such as: whether additional doses would be needed to address declines in VE over time, or whether new vaccines or additional doses will be needed for SARS-CoV-2 variants of concern (VOCs). Vaccine effectiveness estimates may differ from the results of RCTs for valid reasons (e.g., different target populations, different vaccine schedule) or for invalid reasons (e.g., bias and confounding). However, biases and confounding can be minimized by careful planning, execution and analysis of VE studies.

How is vaccine effectiveness measured?

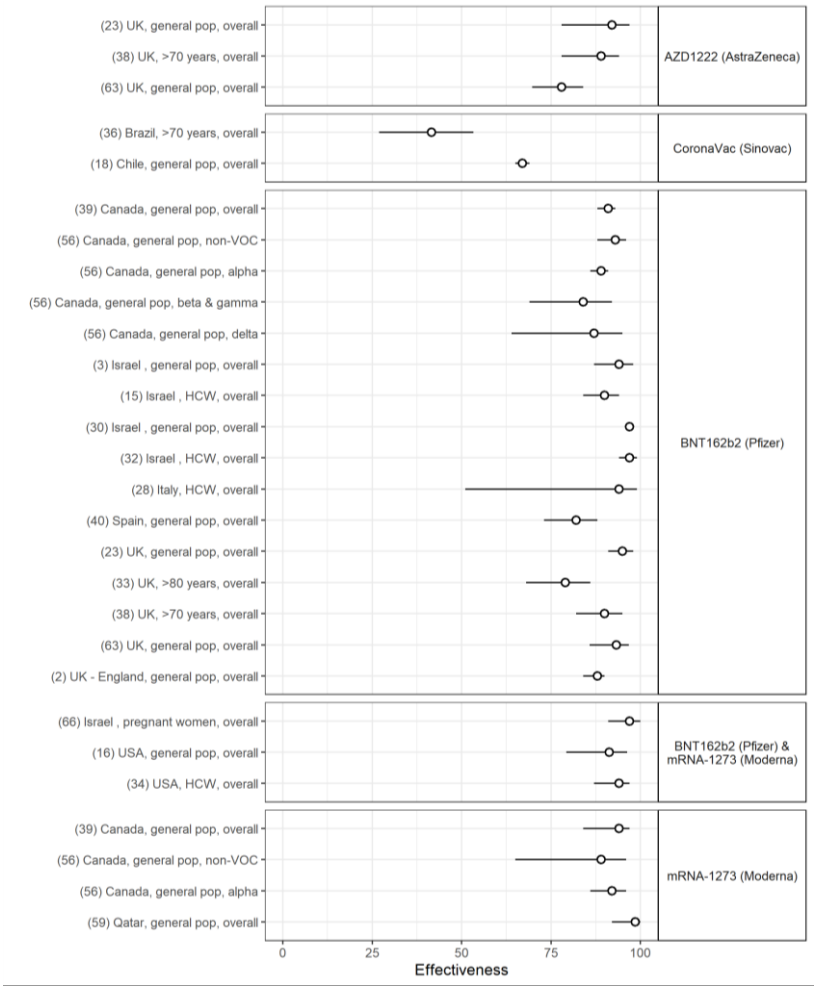
WHO has produced best practice guidance on how to undertake VE studies,[1] including for VOCs, and provides links to VE study protocols.[2] Two methodologies have been most widely used to evaluate COVID-19 VE to date[1]: the retrospective cohort and the test-negative design case-control study. Some of the largest COVID-19 VE studies have used a retrospective cohort design and linkable electronic databases that compare rates of infection or symptomatic disease between vaccinated and unvaccinated individuals.[3,4] Such large databases provide precise VE estimates and often allow adjustment for important confounders that can lead to bias, such as age, date of infection, geographic location and socioeconomic status.

The test-negative case-control design, where the vaccination status of persons testing positive for SARS-CoV-2 are compared to those who test negative, has also been widely deployed. The test-negative design is most often deployed among hospitalized patients or using an existing severe acute respiratory infection surveillance platform. This design minimizes confounding due to differences in healthcare- seeking behavior or access between vaccinated and unvaccinated persons, which can be present in traditional case-control studies.[1]

What evidence is available to date?

As of 20 July 2021, there have been over 90 VE studies made publicly available in peer-reviewed or pre-print literature, though the quality of these studies varies considerably.[5–7] The evidence base to date has been skewed, with 62% (58/93) of studies coming from three countries with early introduction of vaccination campaigns (i.e. Israel, the United Kingdom and the United States of America); and 71% (66/93) reporting on VE of only two vaccines - Pfizer BioNTech-Comirnaty and AstraZeneca-Vaxzevria. In general, symptomatic disease efficacy results from these studies, for fully vaccinated individuals, have been similar to the results of the RCTs that informed the WHO EUL decision (Figure 1). Overall, VE against severe disease, hospitalization and death has been higher than against non-severe symptomatic disease, with VE estimates for these more serious outcomes to be above 80% for AstraZeneca-Vaxzevria, Moderna-mRNA-1273, Pfizer BioNTech-Comirnaty, and Sinovac- CoronaVac. (See weekly summary table of Results of COVID-19 Vaccine Effectiveness Studies)

Figure 4. Vaccine effectiveness against COVID-19 symptomatic disease in fully vaccinated population



Note: Numbers in parentheses refer to references in the weekly summary table. Horizontal lines indicate the 95% confidence interval.

Although the VE against infection and asymptomatic infection are slightly lower than against symptomatic disease for AstraZeneca- Vaxzevria, Moderna-mRNA-1273, and Pfizer BioNTech-Comirnaty,[5,8–10] the VE estimates for these outcomes are almost uniformly ≥60%. Additionally, several studies have shown that the transmission to household members is reduced by approximately 50% when the infected household member was vaccinated with at least one dose as compared to unvaccinated.[5] Importantly, VE appears to be consistently higher for all outcomes after full vaccination, defined as at least 7-14 days after the final dose.

Vaccine effectiveness and VOCs

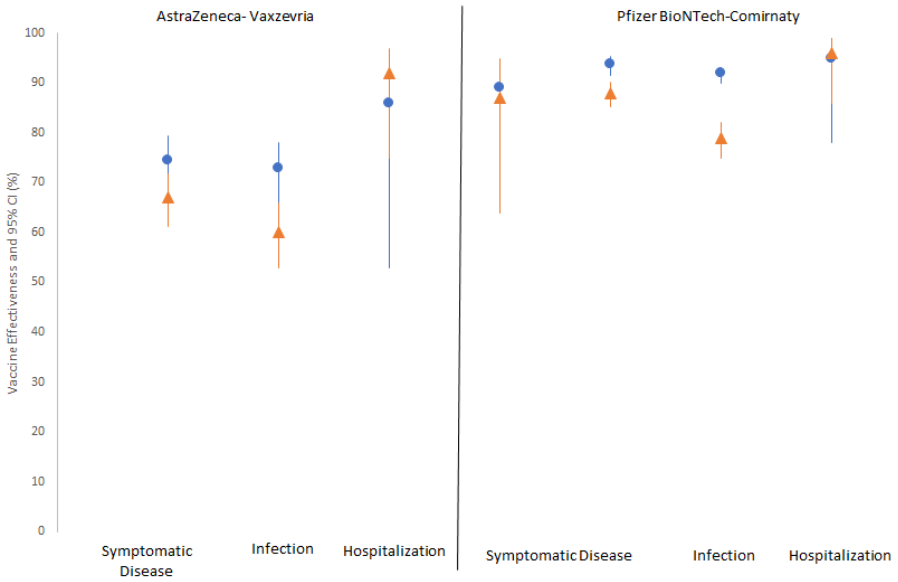
There is widespread concern that existing COVID-19 vaccines may have reduced VE against the four VOCs designated by WHO (see Tracking SARS-CoV-2 variants). Neutralization studies (laboratory studies of how well vaccine-induced antibodies reduce the effect of virus) have shown that there is a several-fold reduction in neutralization against the VOCs, specifically Beta, Gamma and Delta (see Weekly Epidemiological Update edition 49). However, a reduction in neutralization does not directly correlate with reduced VE. This can be explained by several reasons: 1) there is currently no known threshold of neutralization (i.e., correlate of protection) below which vaccines no longer protect; 2) some vaccines produce higher neutralizing antibody concentrations so reductions in neutralization will likely have a lesser effect on the VE for these vaccines[11]; 3) and other factors besides neutralizing antibody levels, such as cellular immunity, may maintain protection.

As an example, results of several studies evaluating VE of AstraZeneca-Vaxzevria and Pfizer BioNTech-Comirnaty against symptomatic disease and infection tend to be lower for the highly transmissible Delta variant as compared to the Alpha variant. However, this difference is reduced or not observed for severe disease outcomes, nor after receiving the second dose (Figure 2). More VE studies of additional vaccines against the Delta variant and other VOCs that look at multiple outcomes are needed to better characterize VE against VOCs (for more information on VOC impact on vaccines, see Weekly Epidemiological Update edition 49).

Conclusion

Although post-introduction VE studies are not a replacement for RCTs, they currently provide much of the rapidly emerging evidence for vaccine performance in real-world settings and can inform public health response and answer key public health questions that are not able to be answered by RCTs. WHO, along with its partners, will continue to track new evidence from published VE studies, as well as those that are ongoing and planned, to assure that they will contribute critical information for global, regional and national COVID-19 vaccine policy decisions.[5]

Figure 5. Comparison of Vaccine Effectiveness of Variants of Concern Alpha and Delta among fully vaccinated persons[3,4,12,13]



Variant Alpha is shown as a blue circle and variant Delta is shown as an orange arrow.

References

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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 vaccine, therapeutics, diagnostics or effectiveness of public health and social measures (PHSM) applied by national authorities to control disease spread. "Signals" of potential Variants of Concern (VOCs) or Variants of Interest (VOIs) are detected and assessed based on the risk posed to global public health. As these risks evolve, WHO will continue to update lists of global VOIs and VOCs to support setting priorities for surveillance and research, and ultimately guide response strategies (for more information, please see the 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 impacts of these variants.

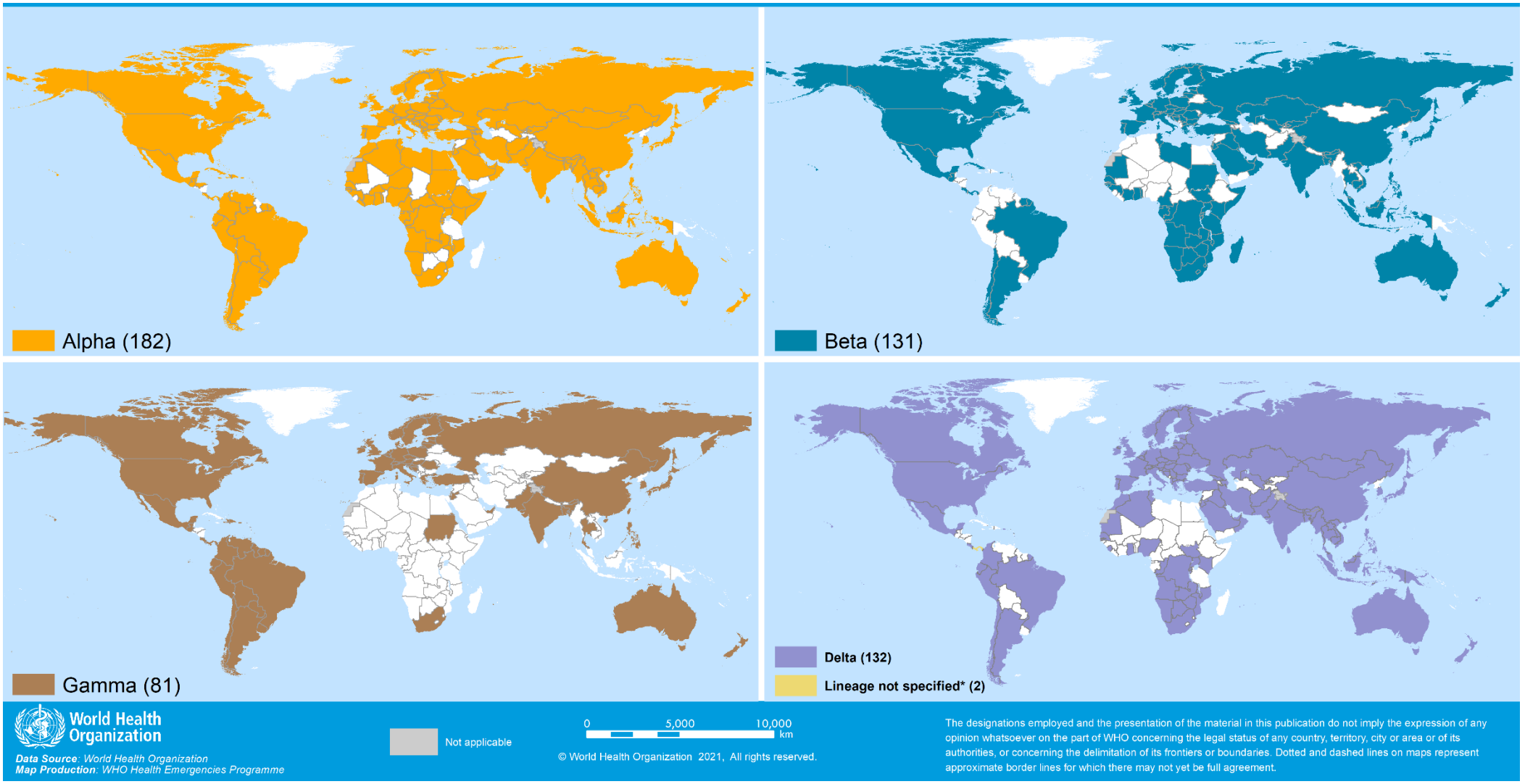
As surveillance activities to detect SARS-CoV-2 variants are strengthened at national and subnational levels, including through the expansion of genomic sequencing capacities, the number of countries/areas/territories (hereafter countries) reporting VOCs continues to increase (Figure 6, Annex 1). This distribution should nonetheless be interpreted with due consideration of surveillance limitations, including differences in sequencing capacities and sampling strategies between countries.

As countries gradually resume non-essential international travel, the introduction of risk mitigation measures aiming to reduce travel-associated exportation, importation and onward transmission of SARS-CoV-2 should be based on thorough risk assessments conducted systematically and routinely.

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

Figure 6. Countries, territories and areas reporting variants Alpha, Beta, Gamma and Delta, as of 27 July 2021**



**Includes countries/territories/areas reporting the detection of B.1.617 without further specification of lineage at this time. These will be reallocated as further details become available.*

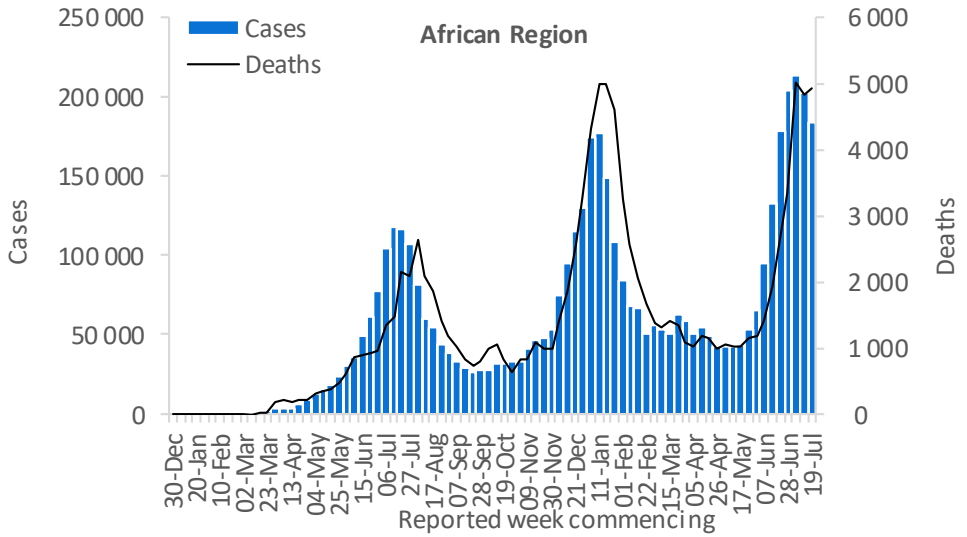
***Countries/territories/areas highlighted include both official and unofficial reports of VOC detections, and do not presently differentiate between detections among travellers (e.g., at Points of Entry) or local community cases. Please see Annex 2 for further details.*

WHO regional overviews - Epidemiological week 19 – 25 July 2021

African Region

The African Region reported over 184 000 new cases, a 9% decrease, and over 4900 new deaths, similar numbers as compared to the previous week. Over the past two weeks, weekly cases in the Region have begun to decrease after increasing sharply over the previous three weeks. This is largely driven by declines observed in South Africa as many other countries in the Region are still reporting increasing case incidences. The highest numbers of new cases were reported from South Africa (84 225 new cases; 142.0 new cases per 100 000 population; -19%), Zimbabwe (14 664 new cases; 98.7 new cases per 100 000; -7%), and Botswana (11 524 new cases; 490.0 new cases per 100 000; +7%).

The highest numbers of new deaths were reported from South Africa (2812 new deaths; 4.7 new deaths per 100 000 population; +11%), Zimbabwe (462 new deaths; 3.1 new deaths per 100 000; similar to the previous week), and Namibia (254 new deaths; 10.0 new deaths per 100 000; -57%).

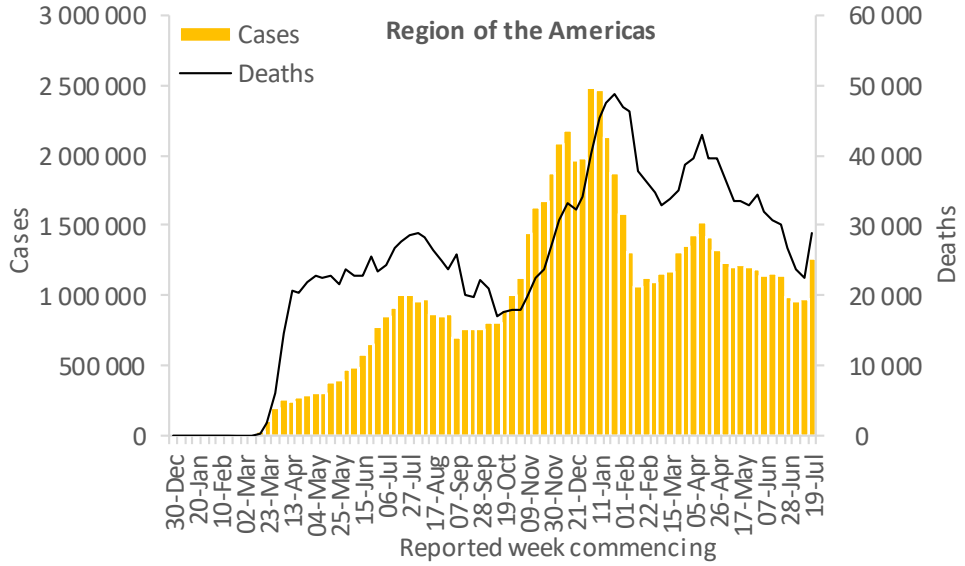


Updates from the African Region

Region of the Americas

After more than three months of overall declining trends in case and death incidence, in the past week the Region reported sharp increases in both. The Region of the Americas reported over 1.2 million new cases and just under 29 000 new deaths, a 30% and a 29% increase respectively as compared to the previous week. The highest numbers of new cases were reported from the United States of America (500 332 new cases; 151.2 new cases per 100 000; +131%), Brazil (324 334 new cases; 152.6 new cases per 100 000; +13%), and Colombia (104 399 new cases; 205.2 new cases per 100 000; -20%).

The highest numbers of new deaths were reported from Ecuador (8864 new deaths; 50.2 new deaths per 100 000; +7349%), Brazil (7942 new deaths; 3.7 new deaths per 100 000; -9%), and Colombia (2855 new deaths; 5.6 new deaths per 100 000; -21%).

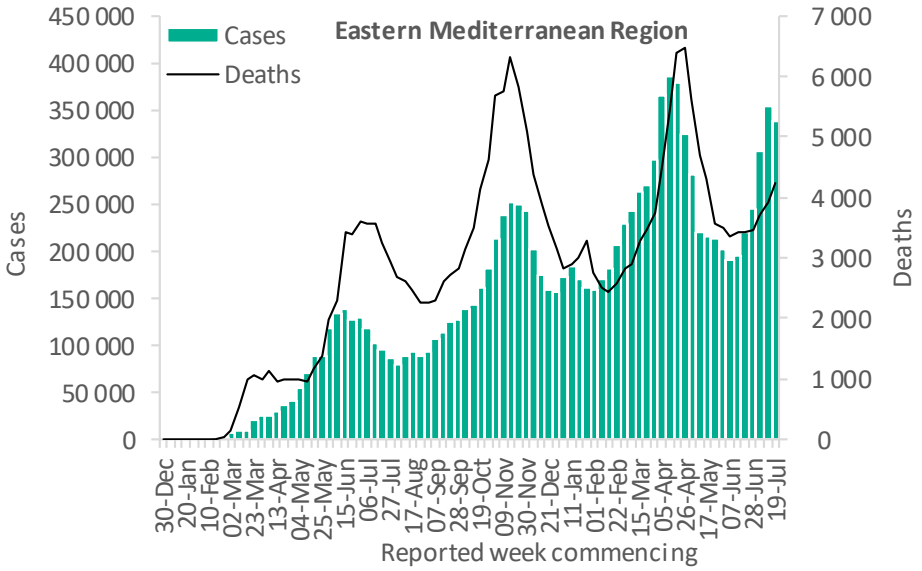


Updates from the Region of the Americas

Eastern Mediterranean Region

The number of weekly cases reported in the Eastern Mediterranean Region declined in the past week after increasing sharply from mid-June through to mid-July. The Region recorded over 338 000 new cases in the past week, a 4% decrease as compared to the previous week. Deaths, however, continued to increase this week by 8% as compared to the previous week with over 4200 new deaths reported. The highest numbers of new cases were reported from the Islamic Republic of Iran (163 207 new cases; 194.3 new cases per 100 000; +2%), Iraq (60 487 new cases; 150.4 new cases per 100 000; -1%), and Tunisia (28 491 new cases; 241.1 new cases per 100 000; -43%).

The highest numbers of new deaths were reported from the Islamic Republic of Iran (1566 new deaths; 1.9 new deaths per 100 000; +23%), Tunisia (1194 new deaths; 10.1 new deaths per 100 000; +3%), and Iraq (443 new deaths; 1.1 new deaths per 100 000; +62%).

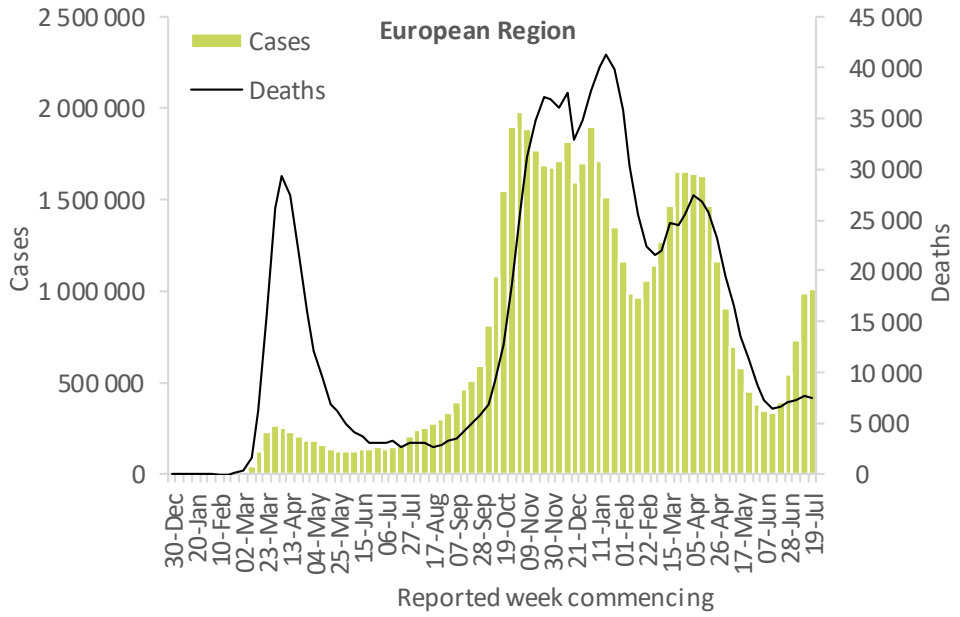


Updates from the Eastern Mediterranean Region

European Region

After reporting increases in weekly case and death incidence for the past month, the European Region this week reported numbers of cases and deaths similar to that of the past week (over 1.0 million cases and 7500 deaths reported). The highest numbers of new cases were reported from the United Kingdom (282 920 new cases; 416.8 new cases per 100 000; a 5% decrease), the Russian Federation (168 408 new cases; 115.4 new cases per 100 000; similar to the previous week), and France (117 832 new cases; 181.2 new cases per 100 000; a 178% increase).

The highest numbers of new deaths were reported from the Russian Federation (5455 new deaths; 3.7 new deaths per 100 000; a 1% increase), the United Kingdom (447 new deaths; 0.7 new deaths per 100 000; a 57% increase), and Turkey (391 new deaths; 0.5 new deaths per 100 000; a 32% increase).

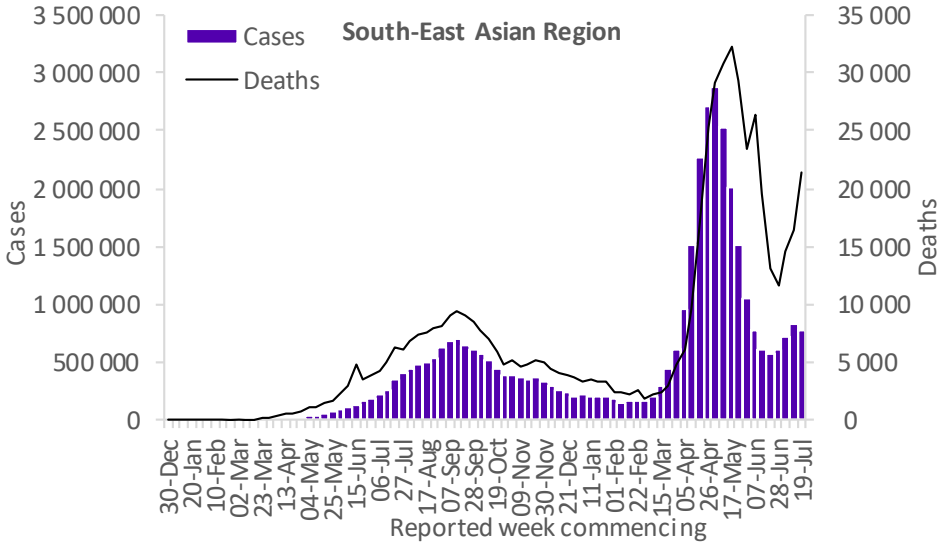


Updates from the European Region

South-East Asia Region

After reporting an increase in weekly cases for three consecutive weeks, the Region reported a slight decrease (-7%) in cases this week, with over 775 000 new cases reported. However, new weekly deaths have continued to increase for the past three weeks, with over 21 000 new deaths reported in the past week, a 30% increase as compared to the previous week. The highest numbers of new cases were reported from Indonesia (289 029 new cases; 105.7 new cases per 100 000; a 17% decrease), India (265 836 new cases; 19.3 new cases per 100 000; similar to the previous week), and Thailand (93 916 new cases; 134.6 new cases per 100 000; a 40% increase).

The highest numbers of new deaths were reported from Indonesia (9697 new deaths; 3.5 new deaths per 100 000; a 36% increase), India (6942 new deaths; 0.5 new deaths per 100 000; a 25% increase), and Myanmar (2111 new deaths; 3.9 new deaths per 100 000; an 82% increase).

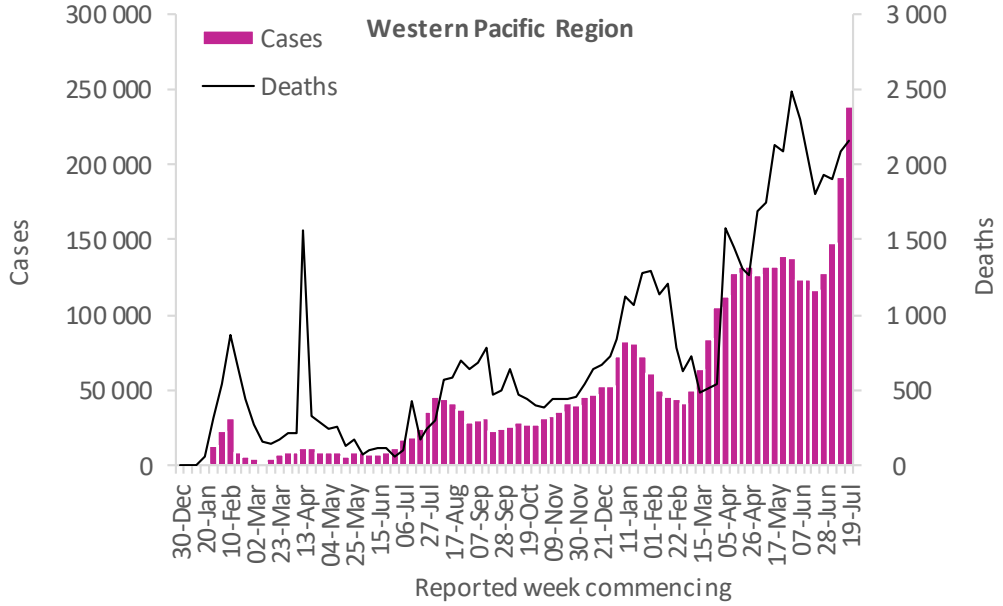


Updates from the South-East Asia Region

Western Pacific Region

In the Western Pacific Region, cases have continued to increase for a month, with over 238 000 new cases reported in the past week, a 25% increase compared to the previous week. Deaths have also shown an increasing trend for the past several weeks, with over 2100 new deaths reported in the past week, a 3% increase compared to the previous week's trend. The highest numbers of new cases were reported from Malaysia (90 542 new cases; 279.7 new cases per 100 000; a 15% increase), Viet Nam (43 911 new cases; 45.1 new cases per 100 000; a 95% increase), and the Philippines (40 932 new cases; 37.4 new cases per 100 000; a 16% increase).

The highest numbers of new deaths were reported from Malaysia (1036 new deaths; 3.2 new deaths per 100 000; a 30% increase), the Philippines (533 new deaths; 0.5 new deaths per 100 000; a 32% decrease), and Cambodia (178 new deaths; 1.1 new deaths per 100 000; a 9% decrease).



Updates from the Western Pacific Region

Key weekly updates

WHO Director-General's key messages

- In his opening remarks at the WTO - WHO High Level Dialogue: Expanding COVID-19 Vaccine Manufacture to Promote Equitable Access - 21 July, the Director-General highlighted:
    - Over 3.5 billion vaccines have been distributed globally, but more than 75% of those have gone to just ten countries. To reach at least 40% of the global population by the end of the year, and 70% by the middle of 2022, we need 11 billion doses of vaccine, and dose sharing is vital to fill our current supply gap.
    - In July, WHO and our COVAX partners announced the first COVID-19 mRNA vaccine technology transfer hub, to be set up in South Africa. Additionally, WHO has prequalified numerous health technologies including vaccines from manufacturers in middle-income countries. These manufacturers have shown that they can produce according to international standards of quality, safety and efficacy.
    - WHO continues to provide technical assistance to companies to build capacity, especially in Africa, Asia, and Latin America, through the COVID-19 Technology Access Pool.

- In his speech at the 138th International Olympic Committee Session, the Director-General emphasized:
    - A massive global push to vaccinate against COVID-19 is needed - at least 10% of the population of every country by September 2021, at least 40% by the end of the year, and 70% by the middle of 2022.
    - WHO's top priority is universal health coverage, so that all people can access the health services they need, where and when they need them, without facing financial hardship.

Updates and publications

- Vaccine inequity undermining global economic recovery
- Guidance on conducting vaccine effectiveness evaluations in the setting of new SARS-CoV-2 variants: Interim guidance, 22 July 2021. Addendum to Evaluation of COVID-19 vaccine effectiveness
- Global minimum estimates of children affected by COVID-19-associated orphanhood and deaths of caregivers: a modelling study

Annex

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.

As of 27 July, the WHO Coronavirus (COVID-19) Dashboard will be updated once per day and the daily case and death counts for all WHO regions will be published by 23:59 CET/CEST on weekdays. Data reported over the weekend will be published on the following Monday as soon as they become available.

Annex 1. List of countries/territories/areas reporting Variants of Concern as of 27 July 2021**

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Afghanistan	●	-	-	●	-
Albania	●	-	-	○	-
Algeria	●	-	-	●	-
Angola	●	●	-	●	-
Anguilla	●	-	-	●	-
Antigua and Barbuda	●	●	-	-	-
Argentina	●	●	●	●	-
Armenia	○	-	-	-	-
Aruba	●	●	●	●	-
Australia	●	●	●	●	-
Austria	●	●	●	●	-
Azerbaijan	●	-	-	○*	-
Bahamas	●*	-	-	-	-
Bahrain	●	●	-	●	-
Bangladesh	●	●	○	●	-
Barbados	●	-	●	●	-
Belarus	●	-	-	○	-
Belgium	●	●	●	●	-
Belize	●	-	-	-	-
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	●	-	-	-	-
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	●	-	-	-	-
Equatorial Guinea	●	●	-	-	-
Estonia	●	●	○	○	-
Eswatini	-	●	-	-	-
Ethiopia	○	-	-	-	-
Faroe Islands	●	-	●	-	-
Fiji	-	-	-	●	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Finland	●	●	●	●	-
France	●	●	●	●	-
French Guiana	●	●	●	●	-
French Polynesia	●	●	●	●	-
Gabon	●	○	-	-	-
Gambia	●	-	-	●	-
Georgia	●	○	-	●	-
Germany	●	●	●	●	-
Ghana	●	●	-	●	-
Gibraltar	●	-	-	-	-
Greece	●	●	●	●	-
Grenada	●	-	-	-	-
Guadeloupe	●	●	●	●	-
Guam	●	●	●	●	-
Guatemala	●	●	●	-	-
Guinea	●	●	-	-	-
Guinea-Bissau	●	●	-	-	-
Guyana	-	-	●	-	-
Haiti	●	-	●	-	-
Honduras	●	-	-	-	-
Hungary	●	○	●*	○	-
Iceland	●	-	-	-	-
India	●	●	●	●	-
Indonesia	●	●	-	●	-
Iran (Islamic Republic of)	●	●	-	●	-
Iraq	●	●	-	●	-
Ireland	●	●	●	●	-
Israel	●	●	●	●	-
Italy	●	●	●	●	-
Jamaica	●	-	-	-	-
Japan	●	●	●	●	-
Jordan	●	●	●	●	-
Kazakhstan	○	○	-	●	-
Kenya	●	●	-	●	-
Kosovo[1]	●	○	-	○	-
Kuwait	●	●*	-	●	-
Kyrgyzstan	●	●	-	-	-
Lao People's Democratic Republic	●	-	-	●	-
Latvia	●	●	●	○	-
Lebanon	●	-	-	●	-
Lesotho	-	●	-	-	-
Liberia	●	-	-	-	-
Libya	●	●	-	-	-
Liechtenstein	●	-	-	-	-
Lithuania	●	●	●	○	-
Luxembourg	●	●	●	●	-
Madagascar	-	●	-	-	-
Malawi	●	●	-	●	-
Malaysia	●	●	-	●	-
Maldives	●	-	-	●	-
Malta	●	○	●	○	-
Martinique	●	●	●	●	-
Mauritania	●	●	-	●	-
Mauritius	○	●	-	●	-
Mayotte	●	●	-	-	-
Mexico	●	●	●	●	-
Monaco	●	○	-	○	-
Mongolia	●	-	-	●	-
Montenegro	●	-	-	-	-
Montserrat	●	-	-	-	-
Morocco	●	-	-	●	-
Mozambique	○	●	-	●	-
Myanmar	●	-	-	●	-
Namibia	●	●	-	●	-
Nepal	●	-	-	●	-
Netherlands	●	●	●	●	-
New Caledonia	●	-	-	-	-
New Zealand	●	●	○	○	-
Niger	●	-	-	-	-
Nigeria	●	-	-	●	-
North Macedonia	●	●	-	○	-
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	●	-	-	-	-

Country/Territory/Area	Alpha	Beta	Gamma	Delta	Unspecified B.1.617
Saint Lucia	●	-	-	-	-
Saint Martin	●	●	-	-	-
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	●	●	●	●	-
Uruguay	●	-	●	-	-
Uzbekistan	●	●	-	○	-
Venezuela (Bolivarian Republic of)	●	-	●	-	-
Viet Nam	●	●	-	●	-
Wallis and Futuna	●	-	-	-	-
Zambia	●	●	-	●	-
Zimbabwe	-	●	-	●	-

**Newly reported in this update.*

"Unspecified B.1.617" reflects countries/territories/areas reporting detection of B.1.617 without further specification of lineage at this time. These will be reallocated as further details become available.

"●" 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.

*** Beta was excluded for Uruguay this week based on further information.*

****Includes countries/territories/areas reporting the detection of VOCs among travelers (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 2: Data, table and figure notes.

Annex 2. 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.

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

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