COVID-19 Weekly Epidemiological Update

Edition 78, published 8 February 2022

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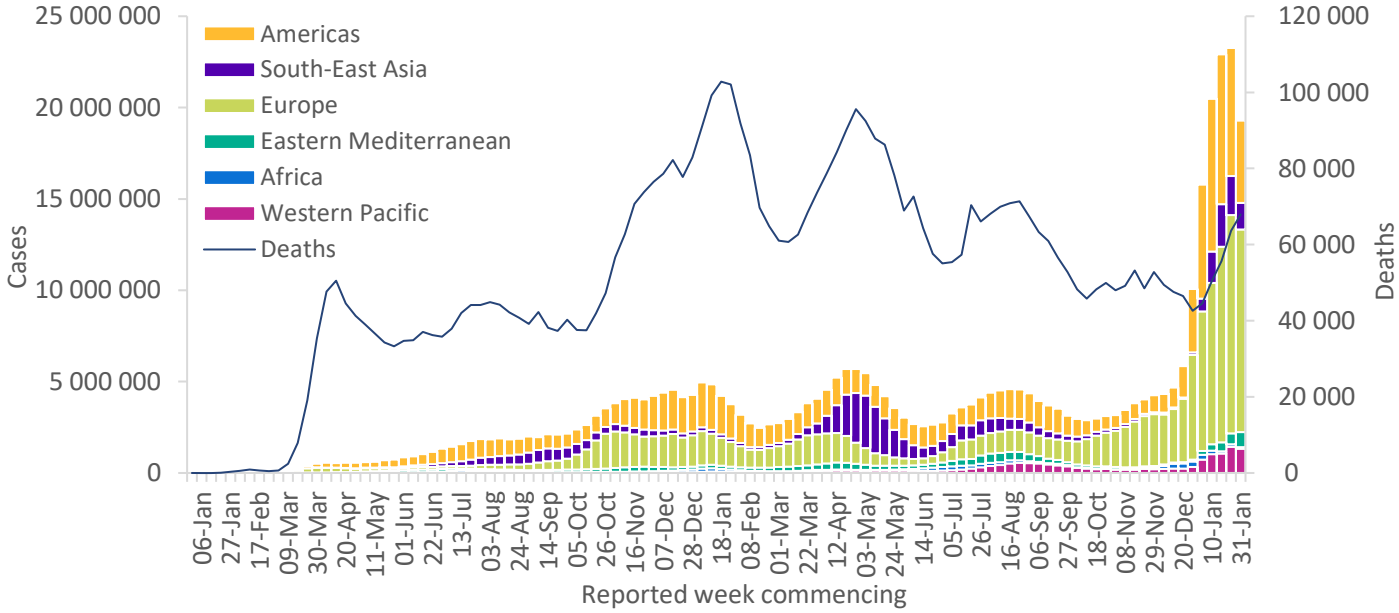
Global overview

Data as of 6 February 2022

Globally, during the week of 31 January to 6 February 2022, the number of new COVID-19 cases decreased by 17% as compared to the number reported during the previous week, while the number of new deaths increased by 7% (figure 1). Across the six WHO regions, over 19 million new cases and just under 68 000 new deaths were reported (table 1). As of 6 February 2022, over 392 million confirmed cases and over 5.7 million deaths have been reported globally.

At the regional level, the Eastern Mediterranean Region reported an increase of 36% in the number of new weekly cases while all other regions reported decreases: The Region of the Americas (36%), the South-East Asia Region (32%), the African Region (22%), the Western Pacific Region (8%) and the European Region (7%). The number of new weekly deaths continued to increase in the South-East Asia (67%) and Eastern Mediterranean Regions (45%), while the number remained similar to that of the previous week in the Region of the Americas and the European Region and decreased in the African (14%) and Western Pacific Regions (5%).

Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 6 February 2022**



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

At the country level, the highest numbers of new cases were reported from the United States of America (1 874 006 new cases; a 50% decrease), France (1 738 189 new cases; a 26% decrease), Germany (1 285 375 new cases; a 22% increase), Brazil (1 241 025 new cases; similar to the previous week's figures) and India (1 095 616 new cases; a 41% decrease). The highest number of new deaths were reported from the United States of America (14 090 new deaths; a 15% decrease), India (7888 new deaths; a 69% increase), the Russian Federation (4686 new deaths; similar to the previous week's figures), Brazil (4610 new deaths; an 39% increase) and Mexico (2910 new deaths; a 48% increase).

Table 1. Newly reported and cumulative COVID-19 confirmed cases and deaths, by WHO Region, as of 6 February 2022**

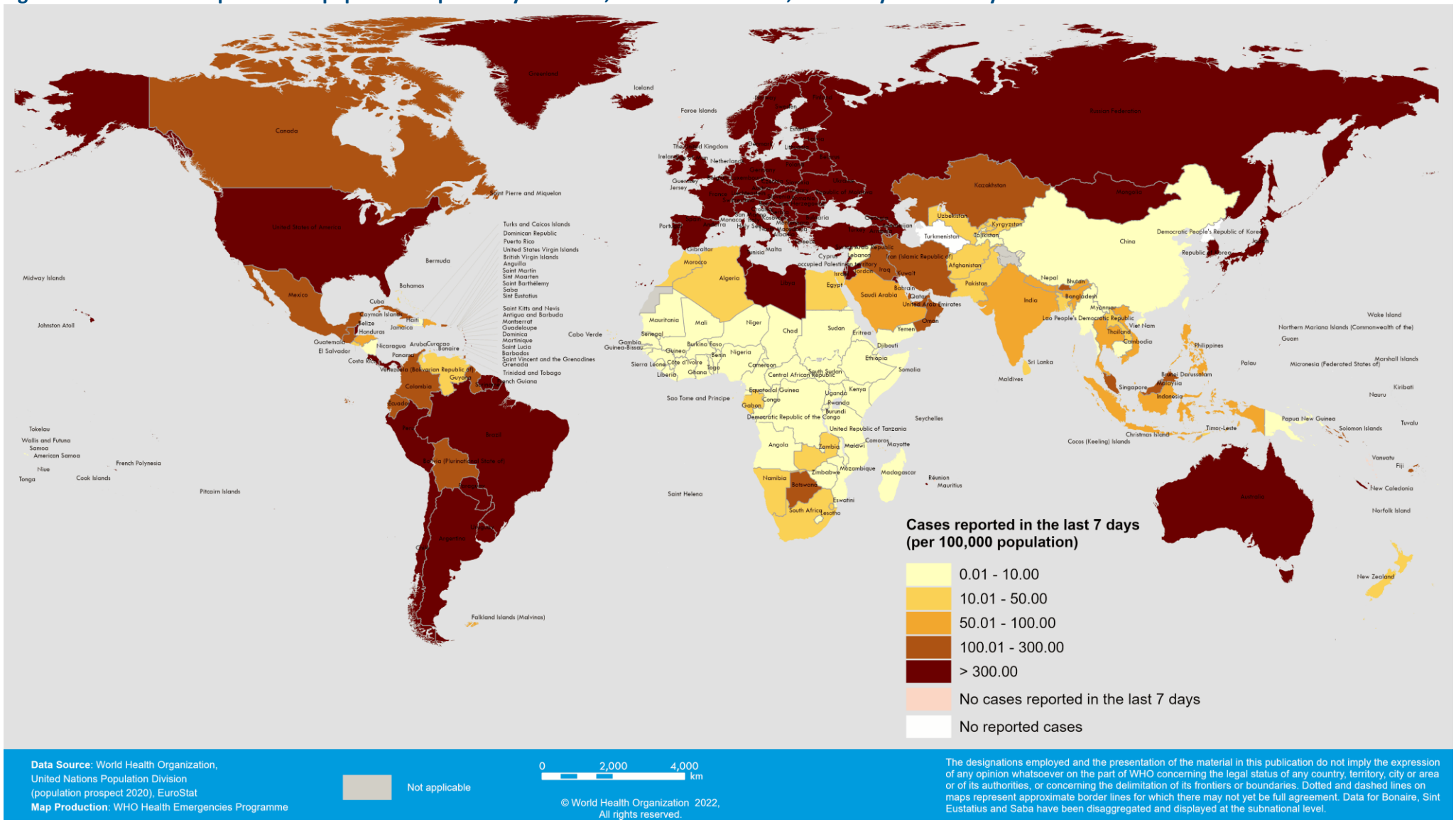
WHO Region	New cases in last 7 days (%)	Change in new cases in last 7 days *	Cumulative cases (%)	New deaths in last 7 days (%)	Change in new deaths in last 7 days *	Cumulative deaths (%)
Europe	11 106 661 (58%)	-7%	154 414 207 (39%)	23 446 (35%)	2%	1 789 169 (31%)
Americas	4 487 367 (23%)	-36%	139 283 017 (36%)	29 560 (44%)	0%	2 531 968 (44%)
South-East Asia	1 452 690 (8%)	-32%	53 362 809 (14%)	8 761 (13%)	67%	744 541 (13%)
Western Pacific	1 323 186 (7%)	-8%	17 291 386 (4%)	2 427 (4%)	-5%	169 777 (3%)
Eastern Mediterranean	808 497 (4%)	36%	19 636 359 (5%)	2 357 (3%)	45%	323 481 (6%)
Africa	98 071 (1%)	-22%	8 157 159 (2%)	1 402 (2%)	-14%	165 404 (3%)
Global	**19 276 472 (100%)**	**-17%**	**392 145 701 (100%)**	**67 953 (100%)**	**7%**	**5 724 353 (100%)**

**Percent change in the number of newly confirmed cases/deaths in the 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:

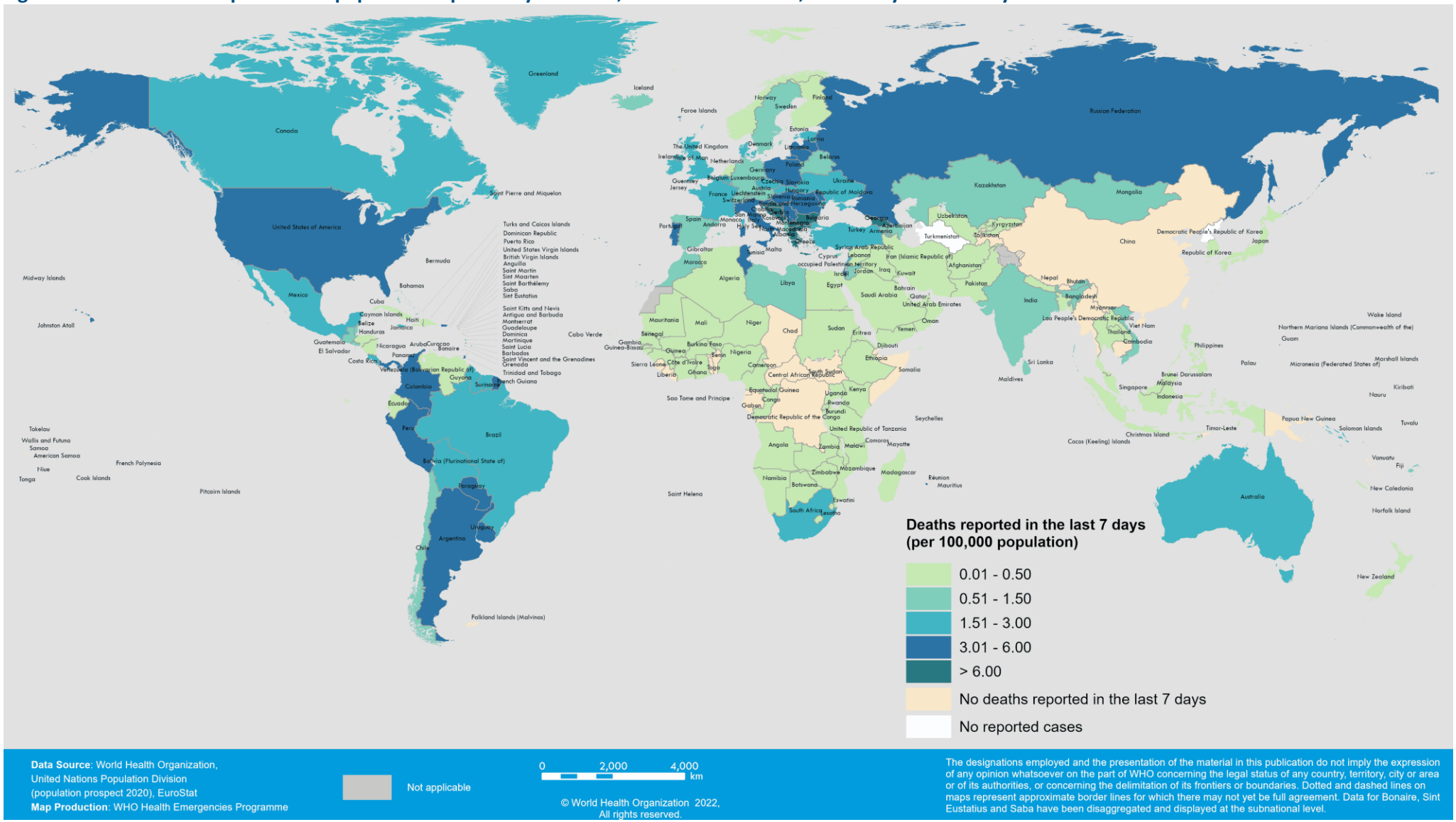
- WHO COVID-19 Dashboard
- WHO COVID-19 Weekly Operational Update and previous editions of the Weekly Epidemiological Update

Figure 2. COVID-19 cases per 100 000 population reported by countries, territories and areas, 31 January – 6 February 2022**



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

Figure 3. COVID-19 deaths per 100 000 population reported by countries, territories and areas, 31 January – 6 February 2022**



**See *Annex 2: 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 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 epidemiology of SARS-CoV-2 is characterized by the continued rapid global spread of the Omicron variant. All other variants, including VOCs (Alpha, Beta, Gamma and Delta) and VOIs (Lambda and Mu) continue to decline in all six WHO regions. Among the 426 363 sequences uploaded to GISAID with specimens collected in the last 30 days[i], 412 265 (96.7%) were Omicron, 13 972 (3.3%) were Delta, two (<0.1%) were Gamma, and two (<0.1%) were Alpha. There were no sequences reported for any other variant, including for VOIs Mu and Lambda. To note, 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.

The spread and prevalence of the Omicron variant

Since the designation of B.1.1.529 as a VOC on 26 November 2021, several lineages have been identified. These include Pango lineages BA.1, BA.1.1, BA.2 and BA.3, which are all being monitored by WHO under the umbrella of 'Omicron'. BA.2 shares many mutations with BA.1, but also has a number of differences, including in the Spike protein – critically, it does not carry the Spike 69-70 deletion associated with S-gene target failure, used as a proxy for detecting BA.1, BA.1.1, B.1.1.529 and BA.3. BA.1.1 carries an additional R346K mutation, which is suspected to provide additional immune escape potential.

Most of the current evidence describing the phenotypic characteristics of the Omicron variant is based on the BA.1 Pango lineage. However, a relative increase in the BA.2 lineage has been observed in multiple countries and investigations into the characteristics of BA.2, including its transmissibility, immune escape properties and virulence, need to be prioritized independently (and comparatively) to BA.1 (WHO Tracking SARS-CoV-2 variants website). Additionally, it is important to consider the relative proportions of the BA.1 and BA.2 sequences in the context of the case incidence when interpreting the spread and relative growth of different lineages.

The prevalence of the Omicron variant has increased globally and is now detected in almost all countries. However, many of the countries which reported an early rise in the number of cases due to the Omicron variant have now reported a decline in the total number of new cases since the beginning of January 2022. Figure 4, plot A shows a decrease in the proportion of BA.1 sequences compared to the other lineages since epidemiological week 2 (10-16 January 2022) with a proportional increase in BA.1.1 and BA.2 sequences. Figure 4, plot B shows an increase in the

[i] Includes sequences submitted to with sample collected dates from 7 January to 5 February 2022 (last reported sample at the time of data extraction, excluding low coverage sequences)

number of sequences of the Omicron lineages submitted to GISAID in December 2021 and a decrease since the beginning of January 2022. This global trend has been observed in several countries, including some with high sequencing capacity; the pattern may be different in others. These trends should be interpreted with due consideration of the limitations of surveillance systems, including differences in sequencing capacity and sampling strategies between countries, as well as laboratory turn-around times for sequencing and delays in reporting.

Figure 4. Global distribution and relative proportion of Omicron lineages for sequences submitted to GISAID presented by epidemiological week of specimen collection

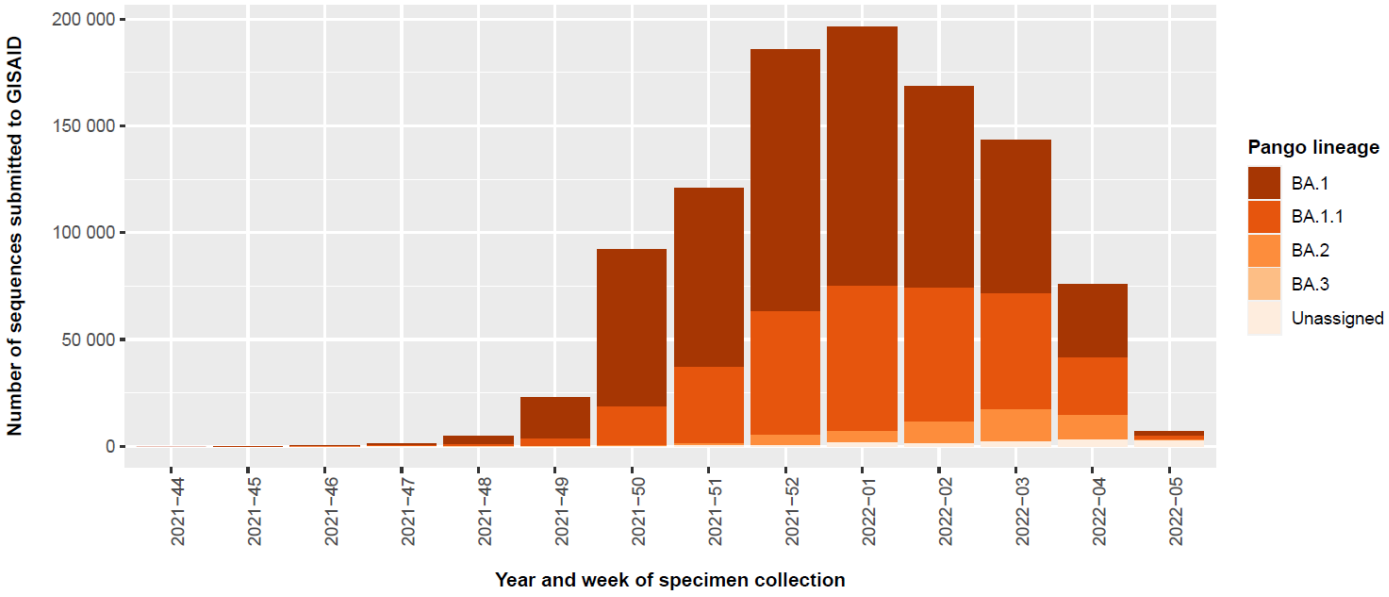
A.

				Overall (%)	Last 4 weeks by collection date (%)			
Lineage	Countries	Sequences[a]	SGTF[b]	Total	2022-02	2022-03	2022-04	2022-05
BA.1	140	655 702	96.51	62.07	56.17	50.32	45.19	30.55
BA.1.1	125	339 667	95.63	32.15	37.12	37.90	35.48	28.57
BA.2	69	49 835	0.07	4.72	5.96	10.43	15.56	7.68
BA.3	16	288	98.96	0.03	0.04	0.05	0.01	0.06
Unassigned	37	10 945	0.05	1.04	0.70	1.30	3.76	33.15

[a]Data source: sequences and metadata from GISAID

[b]Percentage of sequences with Spike H 69-70 deletion associated with S gene target failure

B.



Global distribution of Omicron lineages from sequences and metadata submitted to GISAID.

Panel A: Relative proportions of Omicron lineages over the last 4 weeks by specimen collection week.

Panel B: Incidence of Omicron lineages by week of specimen collection.

Data was extracted from GISAID on 8 February 2022 at 14:00 CET; figures are correct at the time of printing.

WHO continues to monitor circulating and emerging variants and to identify and address relevant knowledge gaps through the development of coordinated, multi-layered surveillance, preparedness, and response strategies for addressing COVID-19.

Differences in the phenotypic characteristics of VOCs

Available evidence on the phenotypic impacts of the VOCs is summarized in Table 2, as well as in previous editions of the COVID-19 Weekly Epidemiological Update. Since the 25 January 2022 update there are several new publications on the phenotypic characteristics of VOCs, including recent literature on the Omicron variant. Some of the studies reported have not been peer-reviewed and the findings must therefore be interpreted with due consideration of this limitation.

Detailed information on Omicron variant and related recommended priority actions for Member States can be found in the updated Technical Brief and Priority Actions for Member States which can be found under the Country and Technical Guidance – Coronavirus Disease (COVID-19). Based on the currently available evidence, the overall risk related to the Omicron variant remains very high.

Table 2: Summary of phenotypic impacts* of variants of concern

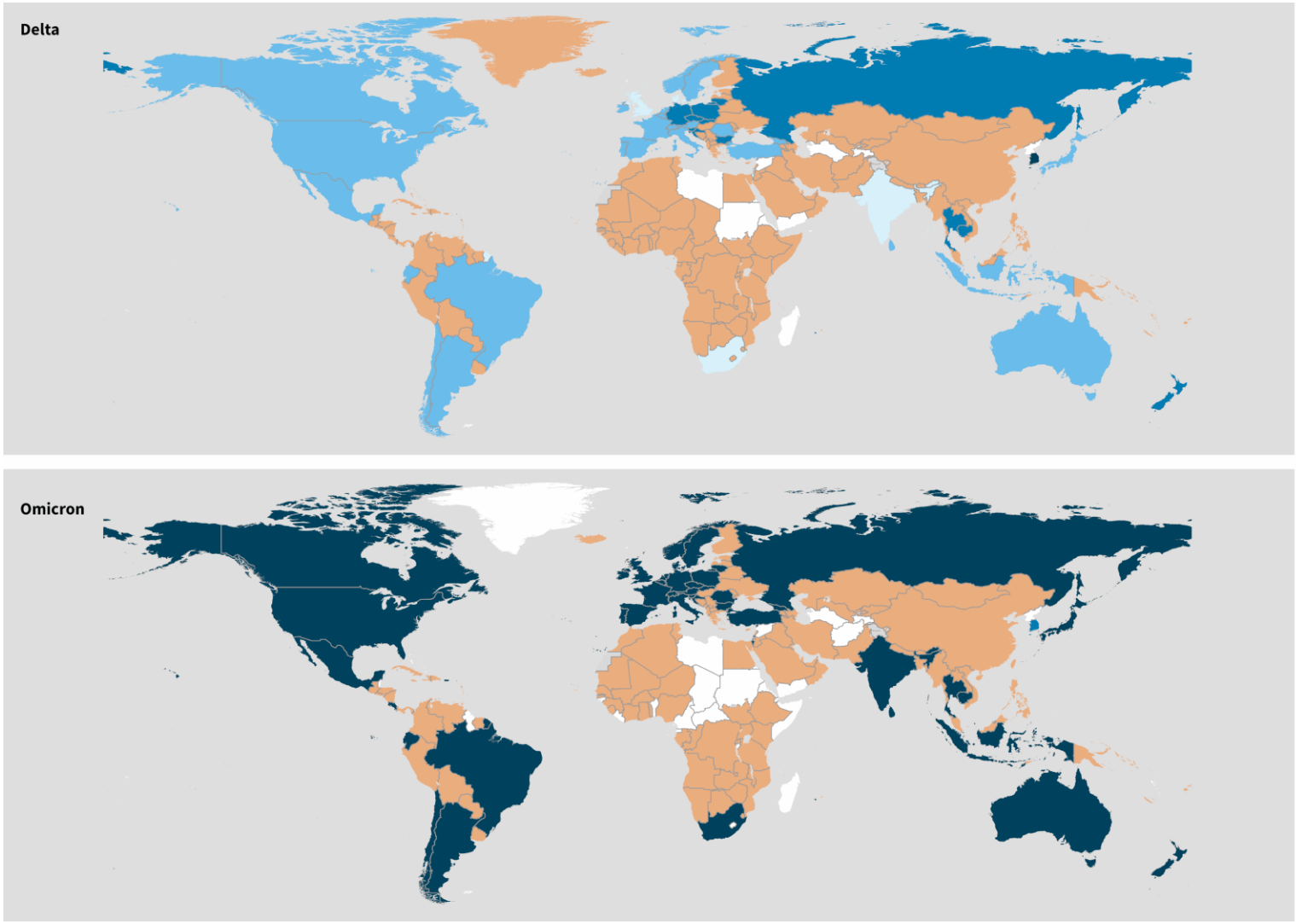
WHO label	Alpha	Beta	Gamma	Delta	Omicron
Transmissibility	Increased transmissibility[1]	Increased transmissibility[2,3]	Increased transmissibility[3,4]	Increased transmissibility [3,5,6]	Increased transmissibility.[7–10]
Disease severity	Possible increased risk of hospitalization[11,12], possible increased risk of severe disease and death[13,14]	Possible increased risk of hospitalization[12], possible increased in-hospital mortality[15]	Possible increased risk of hospitalization[12], possible increased risk of severe disease[16]	Possible increased risk of hospitalization[17,18]	Reduced risk of hospitalization and severe disease [19–22]
Risk of reinfection	Neutralizing activity retained[23], risk of reinfection remains similar[24]	Reduction in neutralizing activity reported; T cell response elicited by D614G virus remains effective[25]	Moderate reduction in neutralizing activity reported[26]	Reduction in neutralizing activity reported[27–29]	Increased risk of reinfection [30,31]
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[32]	No impact on RT-PCR or Ag RDTs observed[29]	None reported to date	No impact on RT-PCR or Ag RDTs observed[33]	PCR continues to detect Omicron. Impact on Ag-RDTs is under investigation: Results are mixed as to whether or not there may be decreased sensitivity to detect Omicron. [7,22,34–36]

**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.

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 5. Prevalence of variants of concern (VOCs) Delta and Omicron in the last 30 days, data as of 8 February 2022



See also Annex 2 for reported VOC detections by country/territory/area

Figure 6. Vaccine effectiveness (VE) of primary series and booster vaccination against the Omicron variant of concern

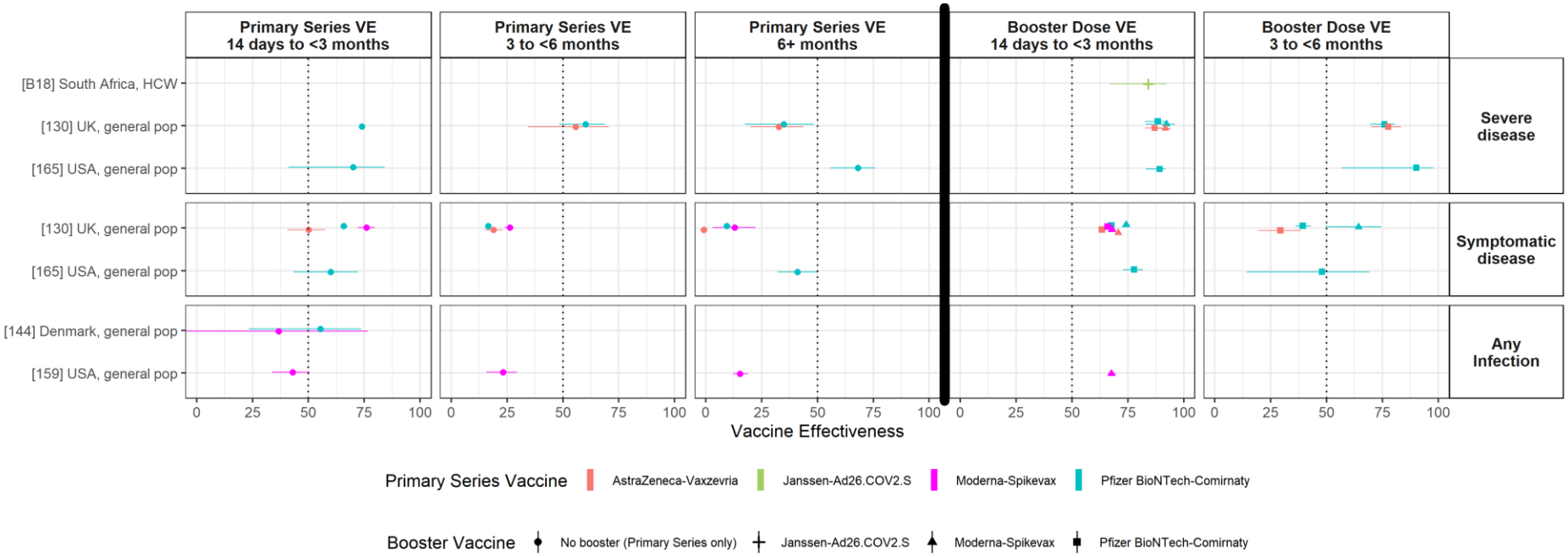
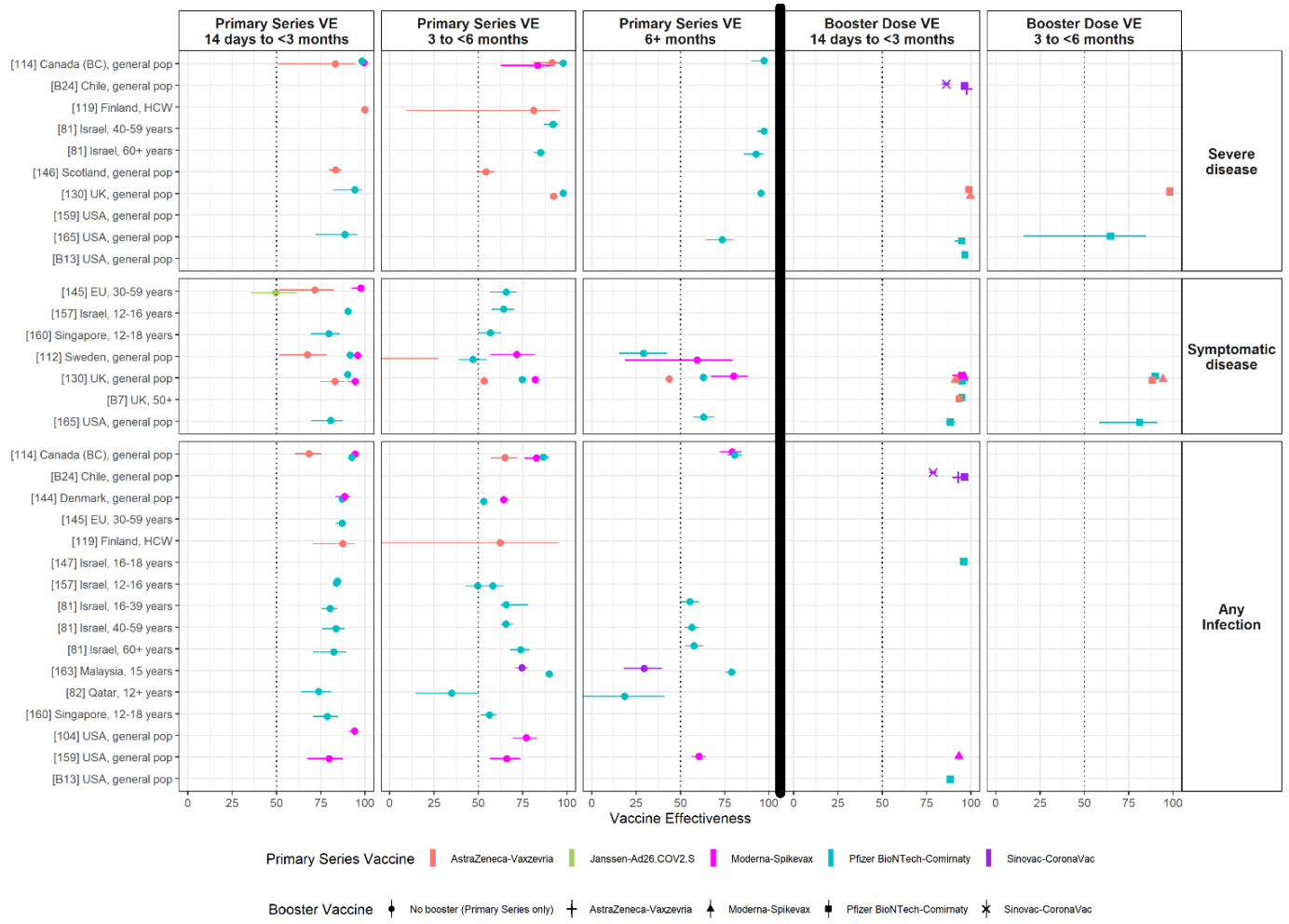


Figure 7. Vaccine effectiveness (VE) of primary series and booster vaccination against the Delta variant of concern



Abbreviations: pop=population; HCW=healthcare workers; EU=European Union. Dots represent point estimates of vaccine effectiveness; horizontal lines represent the 95% confidence intervals. Labels along left side of plot indicate reference numbers [], country, and study population. Reference numbers identify the study and link to the summary table of VE effectiveness studies on view-hub.org (Table 1 in summary table); references starting with a 'B' are studies found in the booster VE table only (Table 2 in summary table). Primary series refers to the completion of two doses of vaccines for Astra-Zeneca-Vaxzevria; Moderna-Spikevax, Pfizer BioNTech-Comirnaty and Sinovac-CoronaVac and one dose of Janssen-Ad26.COV2.S. Severe disease includes hospitalization; symptomatic disease includes both mild and severe disease; any infection includes both asymptomatic infections and any symptomatic disease. Additional details on the methods for inclusion of the estimates in the plots provided in Annex 3. Note, one negative point estimate for AstraZeneca-Vaxzevria VE against Delta symptomatic disease (reference 112) with 95% CIs crossing 0 is not fully visible in the plot.

Figures 6 and 7 summarize the impact of Omicron and Delta variants, respectively, on product-specific vaccine effectiveness (VE) over time for both primary series vaccines and booster vaccines. The methods for including estimates in the plot are described below. Additional information on vaccine performance against VOCs can also be found in Annex 4.

Interpretation of the results of the VE for the Omicron variant

Limited data are available for the VE for the Omicron variant. However, available estimates show reduced protection of the primary series COVID-19 vaccines against the Omicron variant for all outcomes (*severe disease*, *symptomatic disease*, and *infection*) than has been observed previously for other variants of concern. Importantly, VE estimates against the Omicron variant remains highest for *severe disease*, while they are lower for s*ymptomatic disease and infection.* Booster vaccination substantially improves VE for all outcomes for all products with available data. More data are needed on the duration of the VE following a booster dose.

VE estimates for the Pfizer BioNTech-Comirnaty vaccine against *severe disease* due to the Omicron variant within the first three months following the primary series (without a booster dose) range from 70-74% and decrease over time since vaccination, with VE estimates of 60% between three and six months, and 35-68% at six months or more. Between three and six months and six months and over, VE estimates for the AstraZeneca-Vaxzevria vaccine against *severe disease* reduced from 56% to 33%, with relatively wide confidence intervals (see Figure 5 for details).

Early VE estimates (measured from 14 days up to three months after vaccination) of the primary series against *symptomatic disease* are generally lower than those for *severe disease*, though it remains at or above 50% for AstraZeneca-Vaxzevria, Moderna-Spikevax, and Pfizer BioNTech-Comirnaty vaccines. In contrast, most estimates of VE against *infection* at 14 days up to three months after the primary series are below 50%. All available estimates against both *symptomatic disease* and *infection* measured three or more months after completion of the primary series indicate VE estimates of less than 50% for the three vaccines (Pfizer BioNTech-Comirnaty, Moderna-Spikevax and AstraZeneca-Vaxzevria).

A booster dose increases VE estimates against *severe disease* to above 75% for all vaccines for which data are available, with this effect maintained up to six months after the booster dose. A booster dose increased VE estimates against *symptomatic disease* in the first three months following vaccination to 63%-78% for all vaccines, however, these decreased to 29-64% at 3-6 months. Limited evidence is available for VE against *infection* due to the Omicron variant following a booster dose, with only one study showing a VE of 68% within the first 3 months of a booster dose of Moderna-Spikevax.

Interpretation of the results of the VE for the Delta variant

Most of the evidence to date supports effectiveness of the mRNA vaccines (Pfizer BioNTech-Comirnaty and Moderna-Spikevax) remains high against *severe disease* associated with Delta variant infection at six or more months after the primary series, with three of four studies reporting VE estimates of >90% and one study reporting a VE of 74% at six months or more. Three studies report high VE (>80%) of the AstraZeneca-Vaxzevria vaccine three to six months following the primary series, while one study reports a lower VE (54%), compared to the first three months (84%).

VE estimates against *symptomatic disease* and *infection* range from 73-96% following the primary series of one of the two mRNA vaccine from 14 days up to three months after vaccination and 68-88% following the primary series of the AstraZeneca-Vaxzevria vaccine during the same time period. There is, however, consistent evidence of decreasing VE against *symptomatic disease* and *infection* over time following the primary series for all of the vaccines for which data are available. Despite this, most of the evidence still report VE estimates of >50% (59-80%) at six months or more following either mRNA vaccine, with two estimates falling below 50%. Three of the four studies of evaluating the AstraZeneca-Vaxzevria vaccine also showed a VE >50% (54-65%) at three to six months, though in one of these studies the VE decreased

to 43%. A single study of Sinovac-CoronaVac (an inactivated vaccine) conducted in Malaysia reported a VE against *infection* of 74% three to six months following the primary series, which decreased to 30% beyond six months.

Receipt of a booster dose of mRNA, vector-based and inactivated vaccines, for which there is data available, resulted in a VE of >79% for *all outcomes* within the first three months. At three to six months following the booster dose, the VE of an mRNA booster vaccine against *severe disease* remained >95% in a single study conducted in the United Kingdom, but decreased to 65% from 95% in a single study conducted in the United States of America in the same time period. The VE against *symptomatic disease* at three months or more following a booster dose with an mRNA vaccine was >75% after a primary series of either the AstraZeneca-Vaxzevria or the Pfizer BioNTech-Comirnaty vaccines.

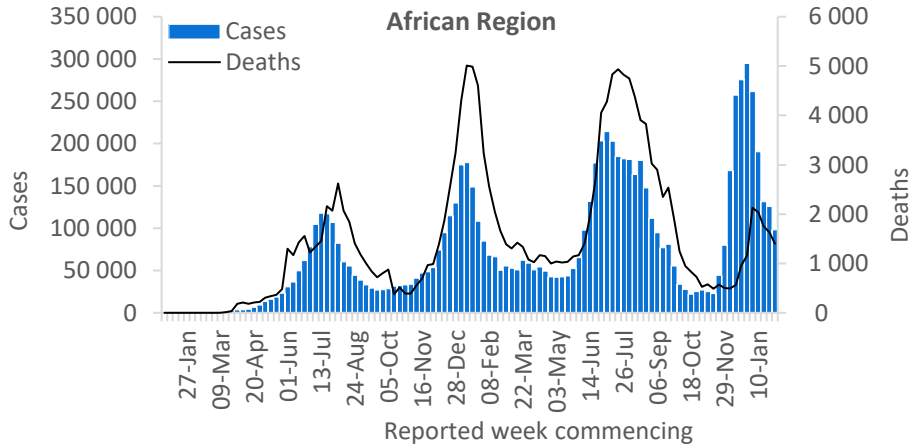
WHO regional overviews

Epidemiological week 31 January – 6 February 2022**

African Region

The African Region reported over 98 000 new cases, a 22% decrease as compared to the previous week. This follows the declining trend observed since early January 2022. Despite this, two countries still reported increases in new cases of over 20%; Comoros (101 vs 34 new cases, a 197% increase) and Guinea (250 vs 155 new cases; a 61% increase). The highest numbers of new cases were reported from Réunion (45 474 new cases; 5079.1 new cases per 100 000 population; similar to the previous week's figures), South Africa (20 580 new cases; 34.7 new cases per 100 000; a 7% decrease) and Algeria (8288 new cases; 18.9 new cases per 100 000; a 44% decrease).

This week, over 1400 new deaths were reported in the Region, corresponding to a 14% decrease as compared to the previous week. The highest numbers of new deaths were reported from South Africa (912 new deaths; 1.5 new deaths per 100 000 population; an 8% increase), Algeria (85 new deaths; <1 new death per 100 000; a 15% increase) and Uganda (34 new deaths; <1 new death per 100 000; a 31% decrease).

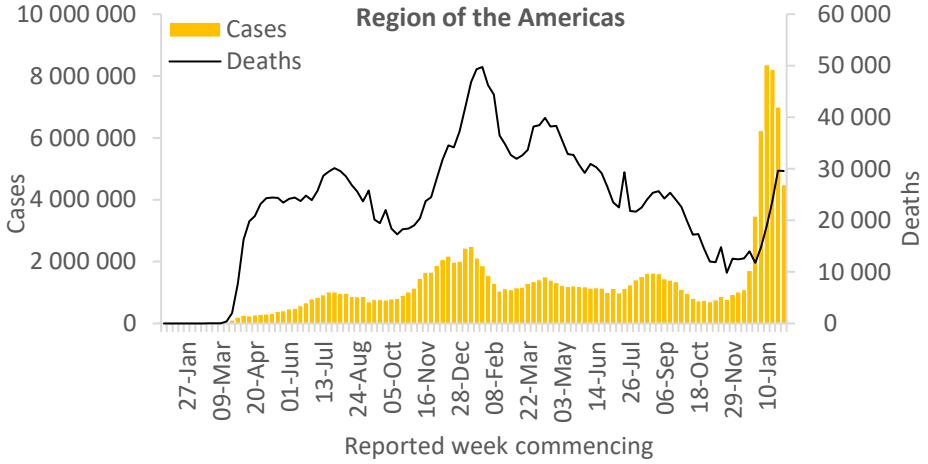


Updates from the African Region

Region of the Americas

The Region of the Americas reported over 4.4 million new cases, a 36% decrease as compared to the previous week, a trend that has continued since mid-January. However, eight countries reported increases in new cases of 20% or greater, with the highest proportional increases reported from the Dominica (968 vs 515 new cases; an 88% increase) and Honduras (5674 vs 3438 new cases; a 65% increase). The highest numbers of new cases were reported from the United States of America (1 874 006 new cases; 566.2 new cases per 100 000; a 50% decrease), Brazil (1 241 025 new cases; 583.8 new cases per 100 000; similar to the previous week's figures) and Argentina (283 743 new cases; 627.8 new cases per 100 000; a 51% decrease).

This week the number of new deaths remained similar to that of last week with over 29 000 new deaths reported in the Region. The highest numbers of new deaths were reported from the United States of America (14 090 new deaths; 4.3 new deaths per 100 000; a 15% decrease), Brazil (4610 new deaths; 2.2 new deaths per 100 000; a 39% increase) and Mexico (2910 new deaths; 2.3 new deaths per 100 000; a 48% increase).

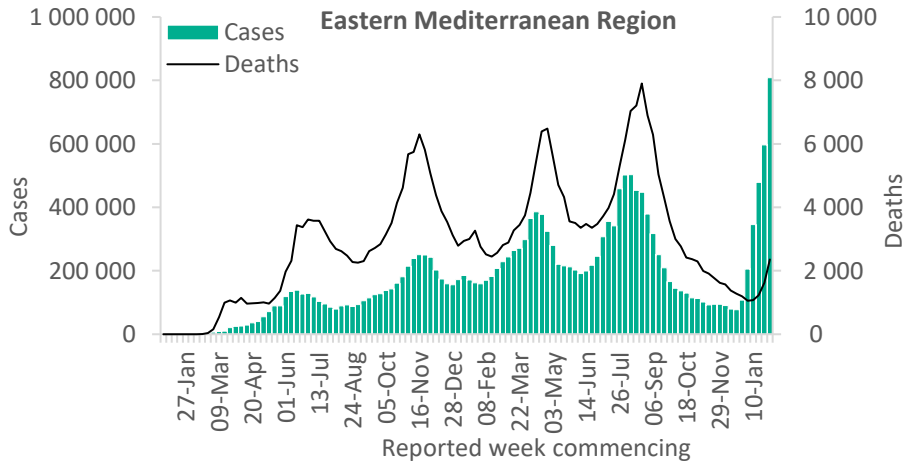


Updates from the Region of the Americas

Eastern Mediterranean Region

The number of new weekly cases has continued to increase in the Eastern Mediterranean Region this week, with over 808 000 new cases reported, a 36% increase as compared to the previous week. Increasing numbers of new cases have been reported in the Region since the end of December 2021. This week, nine countries reported increases of 20% or greater, with the highest relative increases reported from the Islamic Republic of Iran, Afghanistan (4046 vs 2118 new cases; a 91% increase) and Jordan. The highest numbers of new cases were reported from the Islamic Republic of Iran (221 654 new cases; 263.9 new cases per 100 000; a 188% increase), Jordan (116 993 new cases; 1146.6 new cases per 100 000; an 85% increase) and the occupied Palestinian territory (58 046 new cases; 1137.8 new cases per 100 000; a 75% increase).

Over 2300 new deaths were reported in the Region this week, corresponding to a 45% increase as compared to the previous week. The highest numbers of new deaths were reported from Tunisia (383 new deaths; 3.2 new deaths per 100 000; a 39% increase), the Islamic Republic of Iran (365 new deaths; <1 new death per 100 000; a 105% increase) and Egypt (311 new deaths; <1 new death per 100 000; a 32% increase).

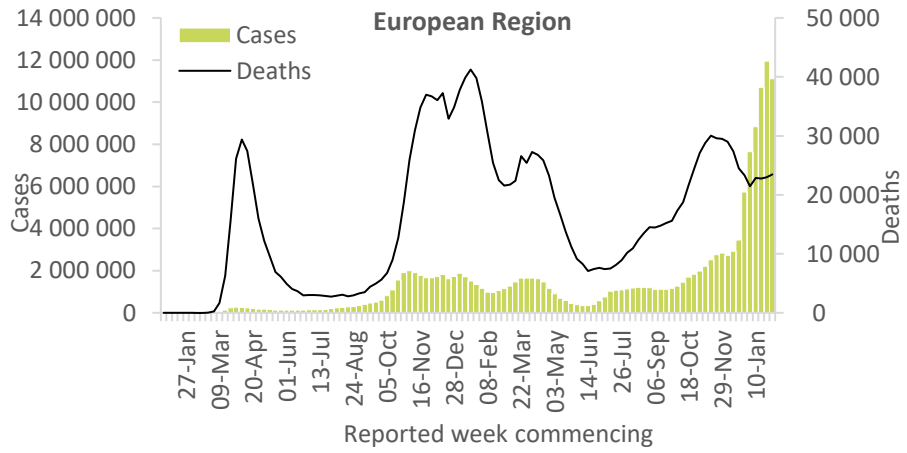


Updates from the Eastern Mediterranean Region

European Region

Following an increase in the incidence of weekly cases since mid-December 2021, the European Region reported over 11.1 million new cases this week, a 7% decrease as compared to the previous week. However, eleven countries reported an increase in new cases of 20% or greater in the past week. Those reporting the highest relative increase were Belarus (30 475 vs 13 698 new cases; a 122% increase), Azerbaijan (39 839 vs 19 307 new cases; a 106% increase) and the Russian Federation. The highest numbers of new cases were reported from France (1 738 189 new cases; 2672.5 new cases per 100 000; a 26% decrease), Germany (1 285 375 new cases; 1545.5 new cases per 100 000; a 22% increase), and the Russian Federation (1 073 111 new cases; 735.3 new cases per 100 000; a 71% increase).

Over 23 000 new deaths were reported, in the Region, similar to the previous week's number. The highest numbers of new deaths were reported from the Russian Federation (4686 new deaths; 3.2 new deaths per 100 000; similar to the previous week), Italy (2628 new deaths; 4.4 new deaths per 100 000; similar to the previous week), and France (1867 new deaths; 2.9 new deaths per 100 000; similar to the previous week's figures).

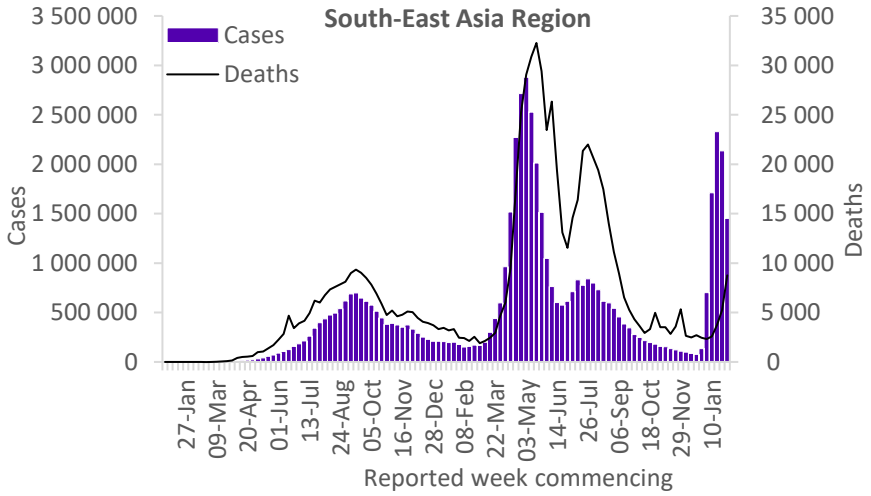


Updates from the European Region

South-East Asia Region

The South-East Asia Region reported a marked decline of 32% in new cases in the past week, with over 1.4 million new cases reported. However, half of the countries in the Region (5/10) still reported increases in new cases of 20% or greater, with the countries reporting the highest proportional increase including: Timor-Leste (466 vs 69 new cases; a 575% increase), Indonesia and Myanmar (2647 vs 1183 new cases; a 124% increase). The highest numbers of new cases were reported from India (1 095 616 new cases; 79.4 new cases per 100 000; a 41% decrease), Indonesia (173 295 new cases; 63.4 new cases per 100 000; a 205% increase), and Bangladesh (76 200 new cases; 46.3 new cases per 100 000; a 24% decrease).

Conversely, the Region reported a 67% increase in the number of newly reported deaths as compared to the previous week, with over 8700 new deaths reported. This is largely due to reporting of back-dated deaths in India. The highest numbers of new deaths were reported from India (7888 new deaths; <1 new death per 100 000; a 68% increase), Indonesia (251 new deaths; <1 new death per 100 000; a 202% increase), and Bangladesh (226 new deaths; <1 new death per 100 000; a 61% increase).

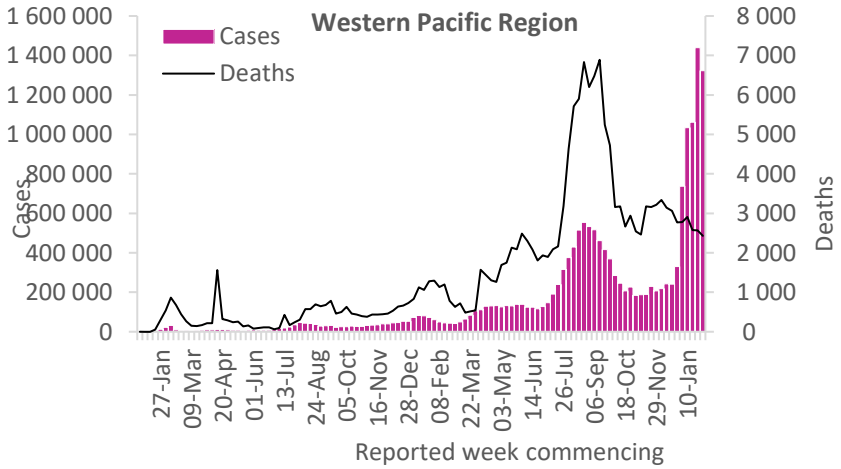


Updates from the South-East Asia Region

Western Pacific Region

Following an increase in the number new cases last week, the Western Pacific Region reported over 1.3 million new cases, an 8% decrease as compared to the previous week. However, nearly half (13/28; 46%) of the countries in the Region reported increases in new cases of 20% of greater with the highest increases reported from Kiribati (1206 vs 142 new cases; a 749% increase), Brunei Darussalam (1059 vs 261 new cases; a 306% increase) and the Solomon Islands (1892 vs 609 new cases; a 211% increase). The highest numbers of new cases were reported from Japan (623 128 new cases; 492.7 new cases per 100 000; a 34% increase), Australia (215 234 new cases; 844.1 new cases per 100 000; a 57% decrease), and the Republic of Korea (181 053 new cases; 353.1 new cases per 100 000; a 91% increase).

The number of new deaths also declined in the Region with over 2400 new deaths reported, a 5% decrease as compared to the previous week. The highest numbers of new deaths were reported from Viet Nam (714 new deaths; <1 new death per 100 000; a 25% decrease), Australia (528 new deaths; 2.1 new deaths per 100 000; a 7% decrease), and Japan (528 new deaths; <1 new death per 100 000; a 121% increase).



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 8 February, highlights include the following:

- Donating SD Biosensor Test Kits to support Belize's COVID-19 response
- Enhancing risk communication and community engagement activities in Thailand
- Italy joins other European Union Member States to increase pledge of COVID-19 vaccines to Syria
- Integration and expansion: Leveraging influenza systems for the COVID-19 response
- Launching the SocialNet online course on OpenWHO
- Updates on WHO's financing to support countries on COVID-19 response implementation to suppress transmission, reduce exposure, and protect the vulnerable and save lives
- Progress on a subset of global indicators that demonstrate country and global progress to end the acute phase of the pandemic

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
- Open WHO 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
- EPI-WIN: tailored information for individuals, organizations, and communities
- Recommendations and advice for the public:
  - Protect yourself
  - Questions and answers
  - Travel advice

Annex 1. List of countries/territories/areas reporting variants of concern as of 8 February 2022

Country/Territory/Area	Alpha	Beta	Delta	Gamma	Omicron
Afghanistan	●	-	●	-	-
Albania	●	-	○	-	●
Algeria	●	-	●	-	●
American Samoa	-	-	○*	-	○*
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	●	●	●	●	●
Guernsey	-	-	-	-	●
Guinea	●	●	●	-	●
Guinea-Bissau	●	●	●	-	-
Guyana	-	-	●	●	-
Haiti	●	-	●	●	○*
Honduras	●	-	●	●	●
Hungary	●	○	○	●	●
Iceland	●	●	●	●	●
India	●	●	●	●	●
Indonesia	●	●	●	-	●
Iran (Islamic Republic of)	●	●	●	-	●
Iraq	●	●	●	●	●
Ireland	●	●	●	●	●
Israel	●	●	●	●	●
Italy	●	●	●	●	●
Jamaica	●	-	●	-	●
Japan	●	●	●	●	●
Jordan	●	●	●	●	●
Kazakhstan	●	○	●	-	●
Kenya	●	●	●	●	●
Kiribati	-	-	-	-	●
Kosovo[1]	●	○	○	-	●
Kuwait	●	●	●	-	●
Kyrgyzstan	●	●	●	-	●
Lao People's Democratic Republic	●	-	●	-	○
Latvia	●	●	○	●	●
Lebanon	●	-	●	-	●
Lesotho	●	●	●	-	-
Liberia	●	●	●	-	-
Libya	●	●	-	-	-
Liechtenstein	●	-	○	○	○
Lithuania	●	●	○	●	●
Luxembourg	●	●	●	●	●
Madagascar	●	●	-	○	-

Country/Territory/Area	Alpha	Beta	Delta	Gamma	Omicron
Malawi	●	●	●	-	●
Malaysia	●	●	●	-	●
Maldives	●	-	●	-	●
Mali	●	●	●	-	○
Malta	●	○	○	●	●
Martinique	●	●	●	●	●
Mauritania	●	●	●	-	●
Mauritius	●	●	●	-	●
Mayotte	●	●	○	-	●
Mexico	●	●	●	●	●
Monaco	●	●	●	-	-
Mongolia	●	-	●	-	○
Montenegro	●	-	○	○	○
Montserrat	●	-	●	●	●
Morocco	●	●	●	-	●
Mozambique	●	●	●	-	●
Myanmar	●	-	●	-	●
Namibia	●	●	●	●	●
Nepal	●	-	●	-	●
Netherlands	●	●	●	●	●
New Caledonia	●	-	●	-	●
New Zealand	●	●	●	●	●
Nicaragua	●	●	●	●	●
Niger	○	-	●	-	●
Nigeria	●	●	●	-	●
North Macedonia	●	●	○	-	○
Northern Mariana Islands (Commonwealth of the)	○	-	●	-	-
Norway	●	●	●	●	●
Occupied Palestinian Territory	●	●	●	-	●
Oman	●	●	●	-	●
Pakistan	●	●	●	●	●
Palau	-	-	○	-	-
Panama	●	●	●	●	●

Country/Territory/Area	Alpha	Beta	Delta	Gamma	Omicron
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	-	-	●	-	-
Saint Vincent and the Grenadines	-	-	●	●	●
Sao Tome and Principe	●	●	○	-	-
Saudi Arabia	●	●	●	-	●
Senegal	●	●	●	-	●
Serbia	●	-	●	○	○
Seychelles	●	●	●	-	●
Sierra Leone	●	●	●	-	●
Singapore	●	●	●	●	●
Sint Maarten	●	●	●	●	●
Slovakia	●	●	●	-	●
Slovenia	●	●	●	●	●
Solomon Islands	-	-	●	-	●
Somalia	●	●	●	-	-

Country/Territory/Area	Alpha	Beta	Delta	Gamma	Omicron
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	●	●	○	-	●
Vanuatu	-	-	●	-	-
Venezuela (Bolivarian Republic of)	●	-	●	●	●
Viet Nam	●	●	●	-	●
Wallis and Futuna	●	-	-	-	-
Yemen	●	●	-	-	-
Zambia	●	●	●	-	●
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 co untries, 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 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.

'Countries' may refer to countries, territories, areas or other jurisdictions of similar status. 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.

Annex 3. Methods for Figures 6 and 7

- Figures include five studies from Denmark, South Africa, the United Kingdom, and the United States of America evaluating the VE against the Omicron variant, and 19 studies of the VE against the Delta variant from various countries from the European Region and Region of the Americas, as well as Qatar, Malaysia and Singapore.
- VE studies included in the plot were identified from an ongoing systematic review of COVID-19 vaccine effectiveness studies. All studies were cohort or test-negative studies. Methods for the systematic review and inclusion/exclusion criteria are available on view-hub.org. The studies were conducted during a period when either Delta or Omicron was the predominant circulating variant. Estimates were included if they were of laboratory-confirmed cases of the Omicron or Delta variant. In addition, for the primary series VE, only studies providing VE estimates for discrete time intervals since vaccination, which evaluate changes in VE over time, are included.
- For the primary series VE, estimates are only included in the plot for studies that report VE for more than one time period.

- When the time interval post vaccination spanned two intervals in the plot, the estimate was placed in the time period (panel in the plot) based on the median time point of the interval.
- Estimates are not plotted if different vaccine products are combined to produce the VE estimate. Heterologous schedules are included if all individuals in the study received the vaccine products in the same order (for example, VE estimates of AstraZeneca-Vaxzevria primary series followed by Pfizer BioNTech-Comirnaty booster are included; VE estimates of AstraZeneca-Vaxzevria primary series followed by any mRNA booster are excluded).

Annex 4. Summary of primary series vaccine performance against Variants of Concern (data as of 4 February 2022)

	WHO Emergency Use Listing (EUL) Qualified Vaccines+								Vaccines without WHO EUL+	
	AstraZeneca-Vaxzevria/SII - Covishield	Beijing CNBG-BBIBP-CorV	Bharat-Covaxin	Janssen-Ad26.COV 2.S	Moderna-mRNA-1273	Novavax-Covavax	Pfizer BioNTech-Comirnaty	Sinovac - CoronaVac	Anhui ZL-Recombinant	Gamaleya-Sputnik V
Alpha, Beta, Gamma										
Summary of VE*	*(see update from 11 January 2022 for details of vaccine performance against Alpha, Beta, and Gamma variants of concern*									
Delta										
Summary of VE*	Protection retained against severe disease; possible reduced protection against symptomatic disease and infection									
- Severe disease+	↔3	-	-	↓1	↔ 4	-	↔ 7	-	-	-
- Symptomatic disease	↔to ↓↓6	-	↓1	-	↔2	-	↔ to ↓5	-	-	-
- Infection	↔to ↓5	-	-	↓↓↓1	↔ 6	-	↔ to ↓6	-	-	-
Neutralization	↓13	↓2	↔ to ↓4	↔ to ↓↓10	↓13	-	↔ to ↓39	↓to ↓↓9	↔ to ↓2	↓to ↓↓↓3
Omicron										
Summary of VE*	Reduced protection against infection and symptomatic disease; possible reduced protection against for severe disease but limited evidence									
- Severe disease+	-	-	-	-	-	-	↓↓/ ↓↓↓2	-	-	-
- Symptomatic disease	↓↓↓1	-	-	-	↓↓1	-	↓↓↓1	-	-	-
- Infection	↓↓↓1	-	-	-	↓↓↓3	-	↓↓↓3	-	-	-
Neutralization	↓↓↓6	↔to ↓↓↓3	↓↓1	↓↓2	↓↓↓15	-	↓↓↓3 2	↓↓to ↓↓↓4	-	↓↓1

refers to vaccine effectiveness and vaccine efficacy. *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 percentage point (pp) reduction in VE, or VE >90% with no comparator, or that there was a <2-fold reduction in neutralization; "↓" 10 to <20 pp reduction in VE, or 2 to <5-fold reduction in neutralization; "↓↓" 20 to <30 pp reduction in VE, or 5 to <10-fold reduction in neutralization; "↓↓↓" ≥30 pp 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 study. The number of studies is shown as subscripts: vaccine effectiveness and neutralization studies informing this table can be found on the VIEW-hub Resources Library. References indicated by superscripts next to VOC name in column 1 are vaccine efficacy results from randomized controlled trials informing this table. + Severe disease is defined differently across studies and may include outcomes such as hospitalization, critical disease, and other forms of 'severe' disease.

Additional notes on VOC impacts on vaccines

- Reductions in VE do not necessarily mean a 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%. Likewise, vaccines have shown higher VE against severe disease; thus, small reductions in VE against severe disease due to VOCs may still mean substantial protection.
- 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 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 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 comparator). In some instances, a study may be included for severe disease or infection outcome 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.
- Neutralization studies that use samples collected >7 days and < 6 months after complete vaccination and that use an ancestral strain as the reference are included in the Table 3.

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