

COVID-19 Monitor

COVID-19 cases, variants, vaccines, hospitalisations and deaths

3 February 2022

Table 1: NSW key indicators, as at 30 January 2022*

Key indicators	Date: 30 Jan (change from: 23 Jan)
7-day average daily COVID-19 cases, week to 30 Jan	15,538 (-2,908)
Growth factor for cases	0.98
7-day average daily COVID-19 deaths, week to 30 Jan	28 (-5)
COVID-19 patients under the care of NSW Health, as at 30 Jan	9,920 (-1,533)
COVID-19 patients in hospital, as at 30 Jan	2,779 (-37)
Percentage who were unvaccinated	26.1%
Percentage with two or more doses	71.4%
COVID-19 patients in intensive care units (ICUs), as at 30 Jan	185 (-11)
Percentage who were unvaccinated	30.3%
Percentage with two or more doses	68.1%
Percentage of total occupied ICU beds with COVID-19 patients	36.3% (-3.1%)
Rates per million	
7-day average daily COVID-19 cases, week to 30 Jan	1,846.5 (-345.6)
COVID-19 patients under the care of NSW Health, as at 30 Jan	1178.9
COVID-19 patients in hospital, as at 30 Jan	330.2
Hospital rate among unvaccinated / two dose vaccinated population (aged 12+)	1,624.2/ 299.8
COVID-19 patients in ICU, as at 30 Jan	22.0
ICU rate among unvaccinated / two dose vaccinated population (aged 12+)	133.7 / 18.0
COVID-19 vaccination, as at 30 Jan	
Percentage of population aged 16+ with two or more doses	94.0%
Percentage of population aged 12-15 with two or more doses	78.5%
Percentage of total population with two or more doses	79.3%

*See [NSW key indicators: notes and sources](#) at the end of this document.

International reflections

- Cases of COVID-19 are increasing in Denmark and Israel; decreasing in Australia, Canada, the United States and the United Kingdom.
- A [new subvariant of Omicron](#), BA.2, has been detected in at least 55 countries. Early evidence suggests there is no difference in hospitalisation rates or protection from vaccines compared to the original Omicron variant.¹
- In the US, the [seven-day rolling average for new daily COVID-19 deaths](#) has passed the September 2021 peak when Delta was the dominant variant.²
- The UK is reporting a [levelling off of daily COVID-19 cases](#). In England, at-risk children between five and 11 years of age are now eligible for the Pfizer vaccine.³

Table 2: Summary of public health, healthcare and vaccination measures (select countries, Canadian provinces and NSW), as at 30 January 2022*

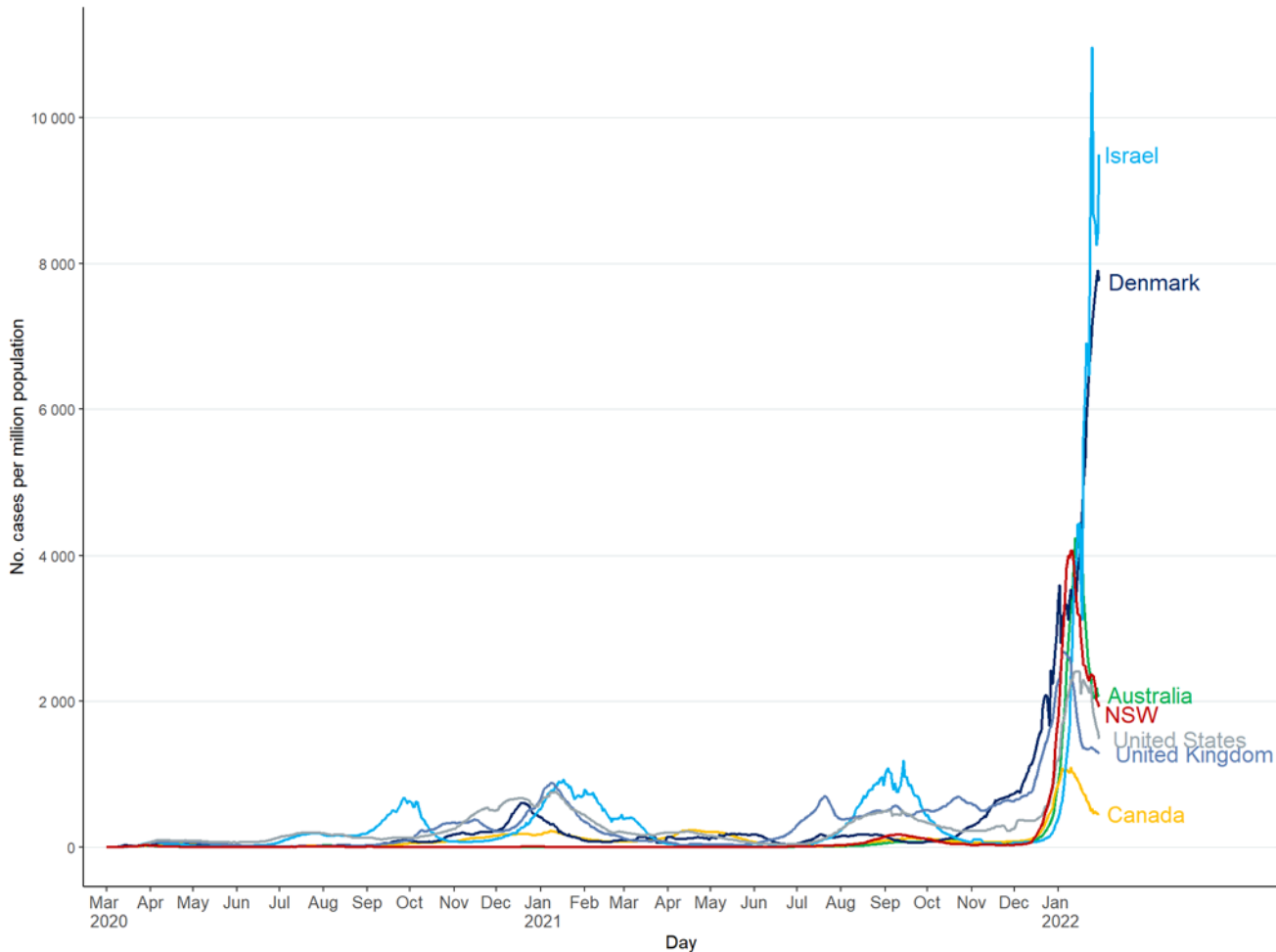
	7-day average confirmed cases	7-day average confirmed cases (per million)	7-day average deaths (per million)	% total population with two or more doses	COVID-19 patients in hospital	COVID-19 patients in hospital (per million)	COVID-19 patients in ICU	COVID-19 patients in ICU (per million)
NSW	15,538	1,846.5	3.3	79.3%	2,779	330.2	185	22.0
Australia	54,020	2,094.7	3.4	78.3%	4,954	192.1	369	14.3
Belgium	51,241	4,405	2.2	76.1%	3,821	328.5	371	31.9
Canada	17,509	459.9	4.4	79.1%	9,962	261.7	1,189	31.2
Ontario	5,066	341.7	4.3	79.1%	2,983	201.2	583	39.3
Quebec	3,747	435.5	6.6	80.0%	2,888	335.6	223	25.9
Denmark	45,093	7,756.9	3.2	81.2%	948	163.1	31	5.3
Israel	88,224	9,495.6	5.1	65.5%	2,670	287.4	333	35.8
Japan	71,698	568.8	0.3	79.1%	17,269	137.0	1,126	8.9
Singapore	4,937	905.2	0.2	87.1%	701	128.5	8	1.5
United Kingdom	87,421	1,281.7	3.9	70.9%	16,149	236.8	549	8.0
United States	493,041	1,481.0	7.1	63.5%	128,111	384.8	23,391	70.3

*See [Summary of public health: notes and sources](#) at the end of this document.

COVID-19 daily rates of confirmed cases

Figure 1 shows the daily rate per million population (rolling seven-day average) of confirmed COVID-19 cases in NSW, Australia, United Kingdom, United States, Canada, Denmark and Israel, from March 2020 to January 2022.

Figure 1: Daily rates of COVID-19 cases (select countries and NSW), March 2020 – January 2022

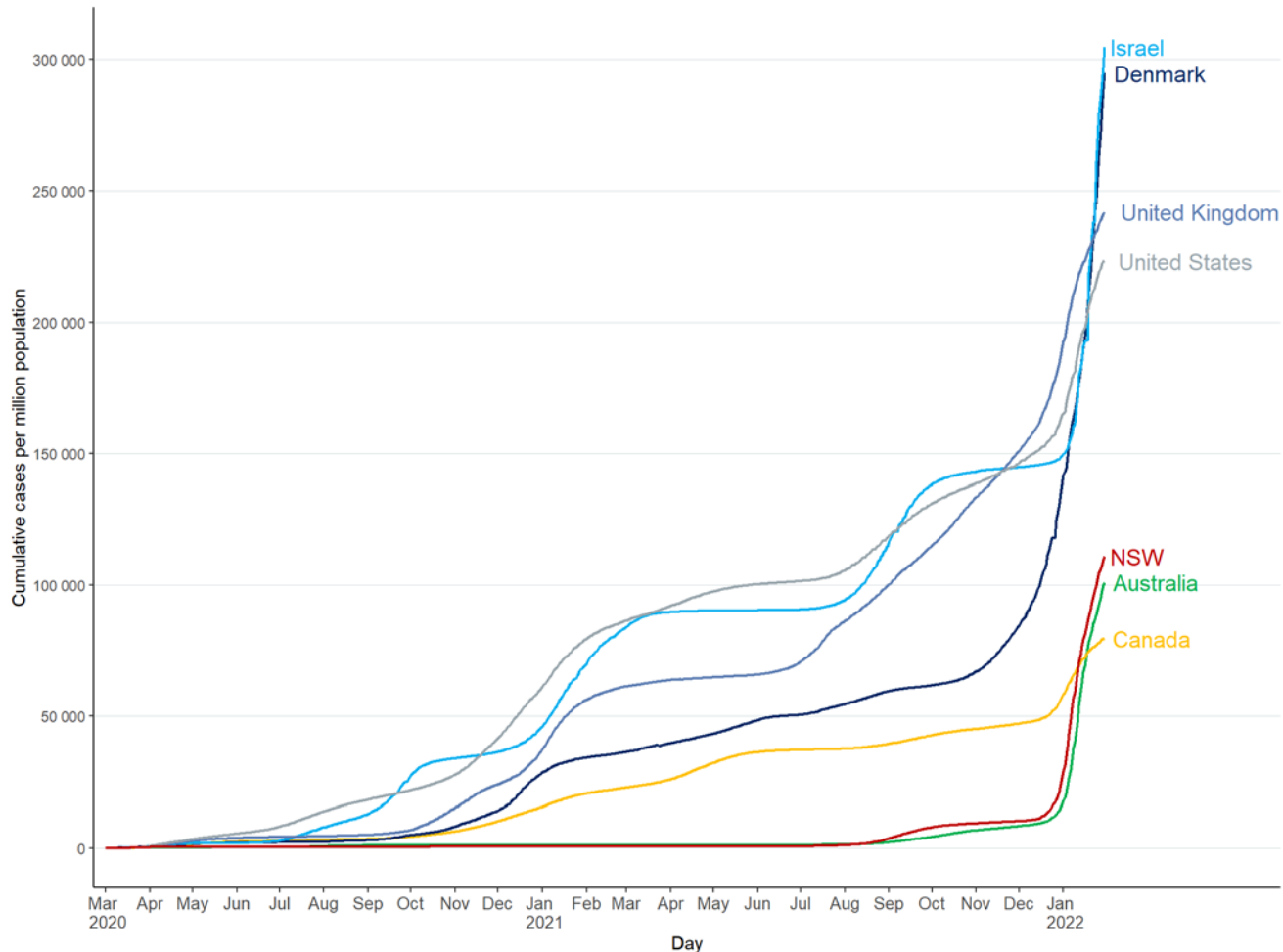


Note: See [COVID-19 daily rates: notes and sources](#) at the end of this document.

COVID-19 cumulative confirmed cases

Figure 2 shows the cumulative rate per million population of confirmed COVID-19 cases in NSW, Australia, United Kingdom, United States, Canada, Denmark and Israel, from March 2020 to January 2022.

Figure 2: Cumulative confirmed COVID-19 cases per million population, (select countries and NSW), March 2020 – January 2022

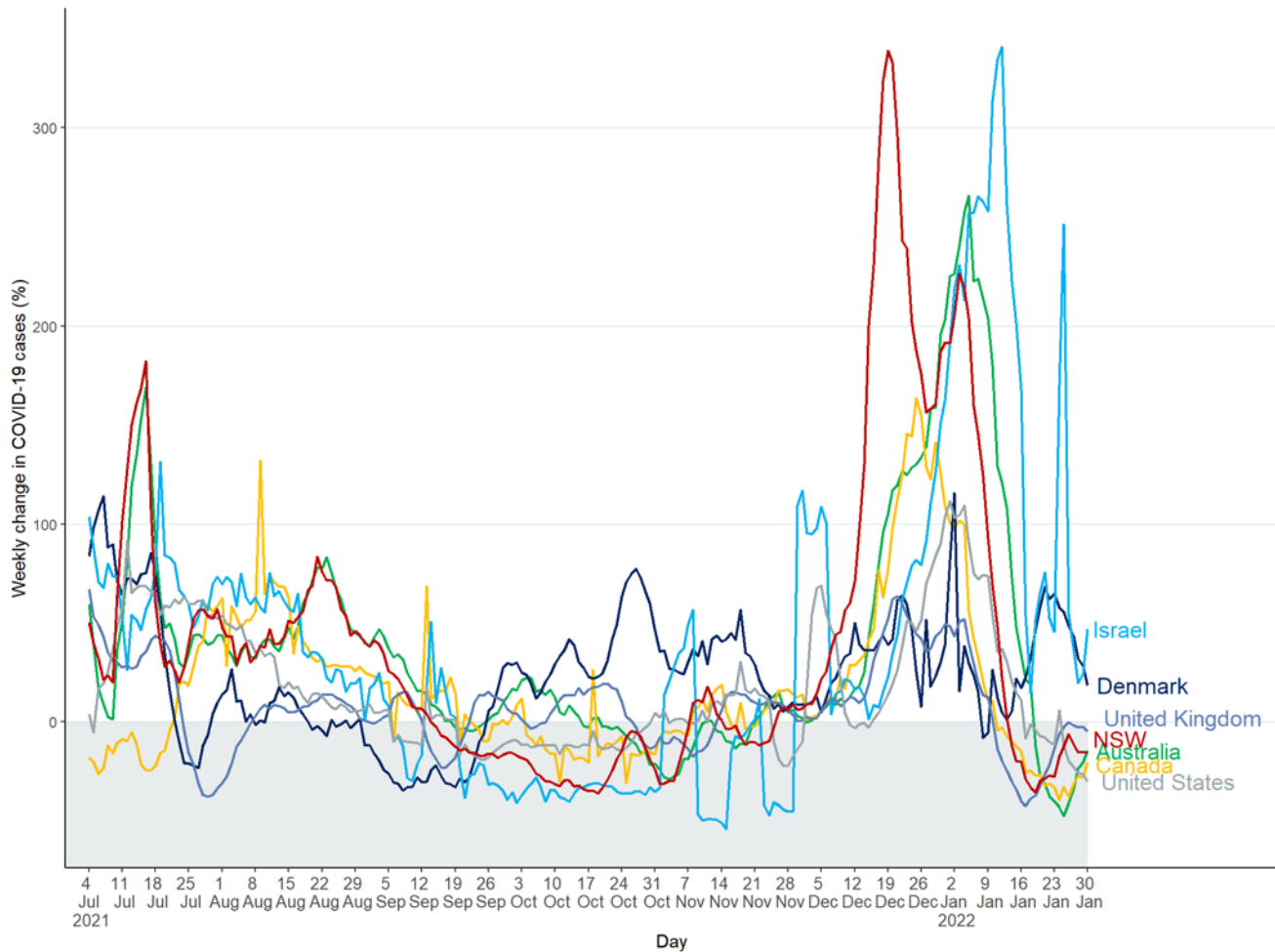


Note: See [COVID-19 daily rates: notes and sources](#) at the end of this document.

Weekly change in COVID-19 confirmed cases

Figure 3 shows the weekly percentage change of COVID-19 cases for NSW, Australia, United Kingdom, United States, Canada, Denmark and Israel, from July 2021 to January 2022. The weekly change of COVID-19 cases on any given day is measured as the percentage change in the number of confirmed cases in the last seven days, compared with the number in the previous seven days.

Figure 3: Weekly change in COVID-19 cases (select countries and NSW), July 2021 – January 2022

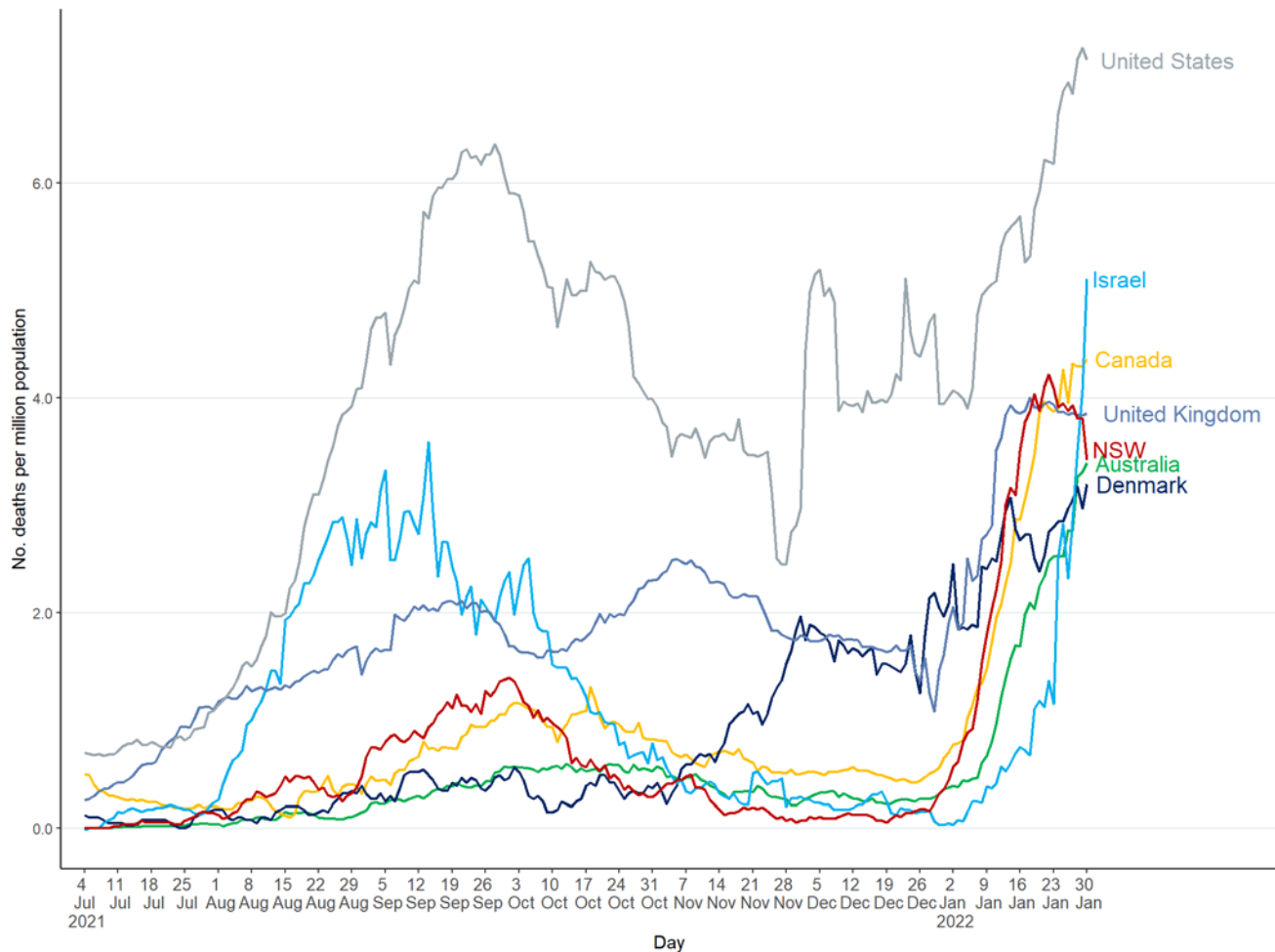


Note: See [COVID-19 daily rates: notes and sources](#) at the end of this document.

COVID-19 daily mortality rates

Figure 4 shows the daily mortality rate per million population (rolling seven-day average) in NSW, Australia, United Kingdom, United States, Canada, Denmark and Israel, from July 2021 to January 2022.

Figure 4: Daily mortality rates (select countries and NSW), July 2021 – January 2022

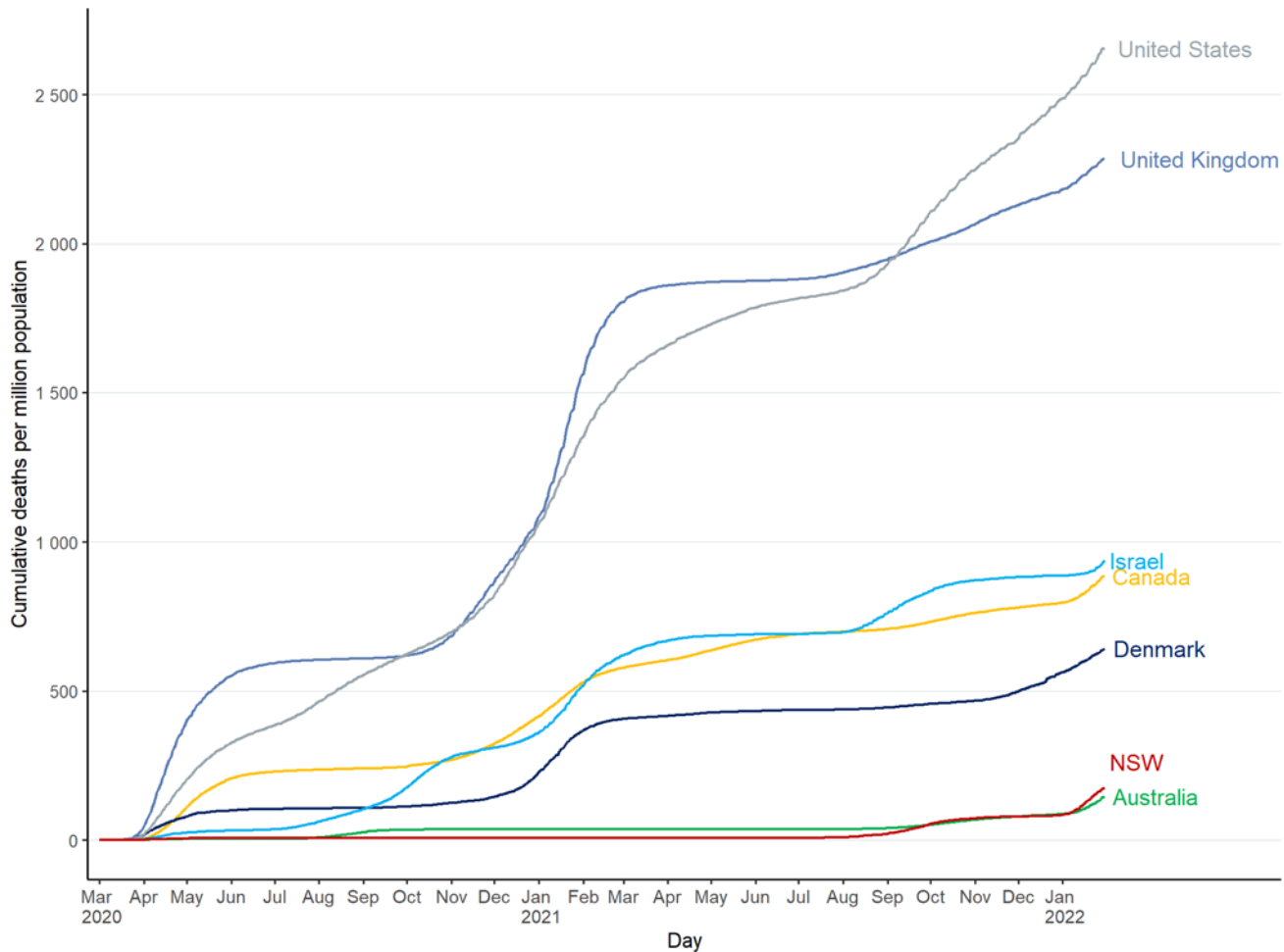


Note: See [COVID-19 daily rates: notes and sources](#) at the end of this document.

COVID-19 cumulative mortality rates

Figure 5 shows the cumulative mortality rate per million population in NSW, Australia, United Kingdom, United States, Canada, Denmark and Israel, from March 2020 to January 2022.

Figure 5: Cumulative mortality rates (select countries and NSW), March 2020 – January 2022

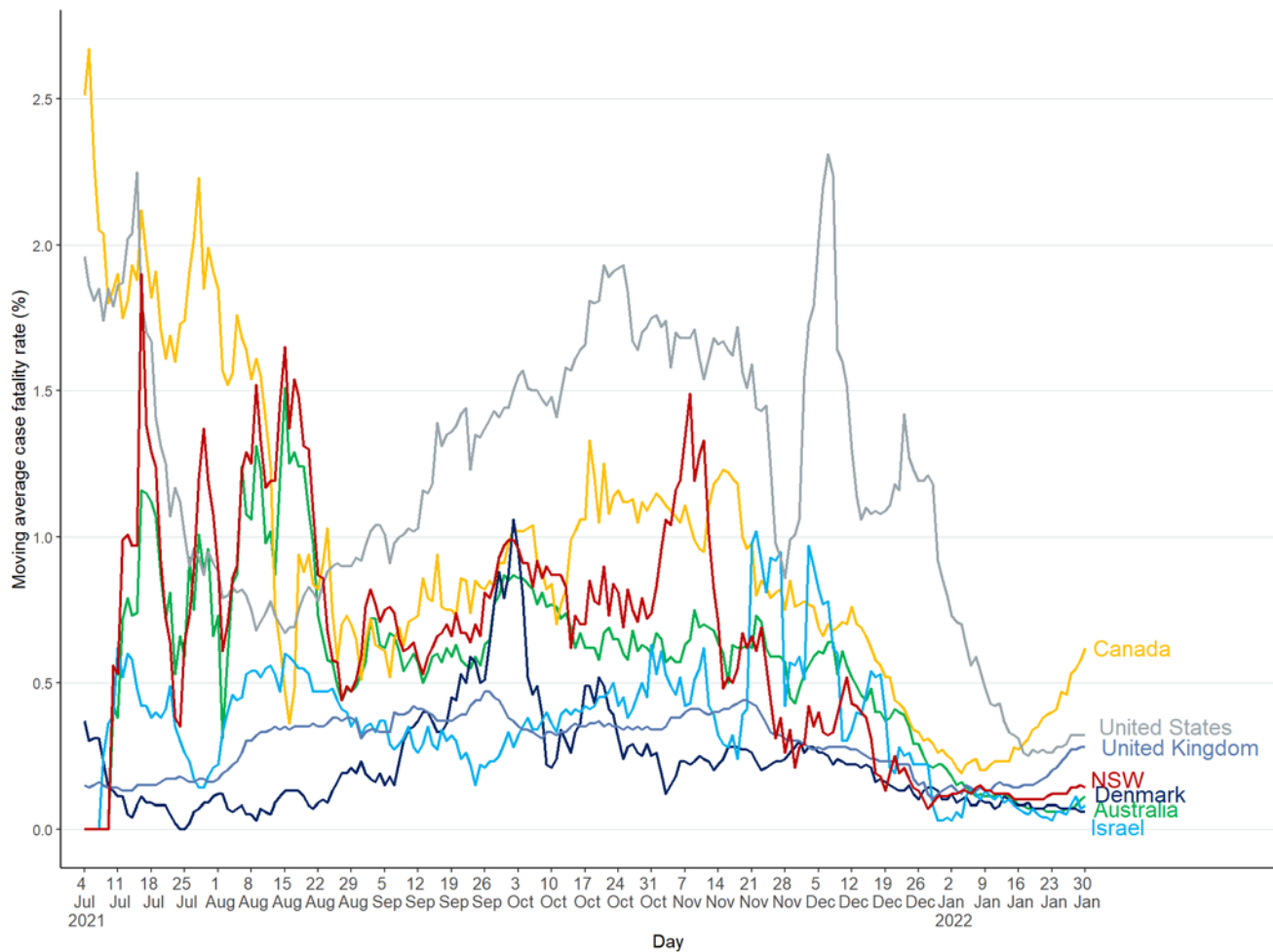


Note: See [COVID-19 daily rates: notes and sources](#) at the end of this document.

Case fatality rate for COVID-19

Figure 6 shows the case fatality rate (moving average) of COVID-19 in NSW, Australia, United Kingdom, United States, Canada, Denmark and Israel, from July 2021 to January 2022. The moving average case fatality rate on any given day is calculated as the ratio between the 7-day average number of confirmed deaths and the 7-day average number of confirmed cases 10 days earlier.

Figure 6: Case fatality rate of COVID-19 (select countries and NSW), July 2021 – January 2022

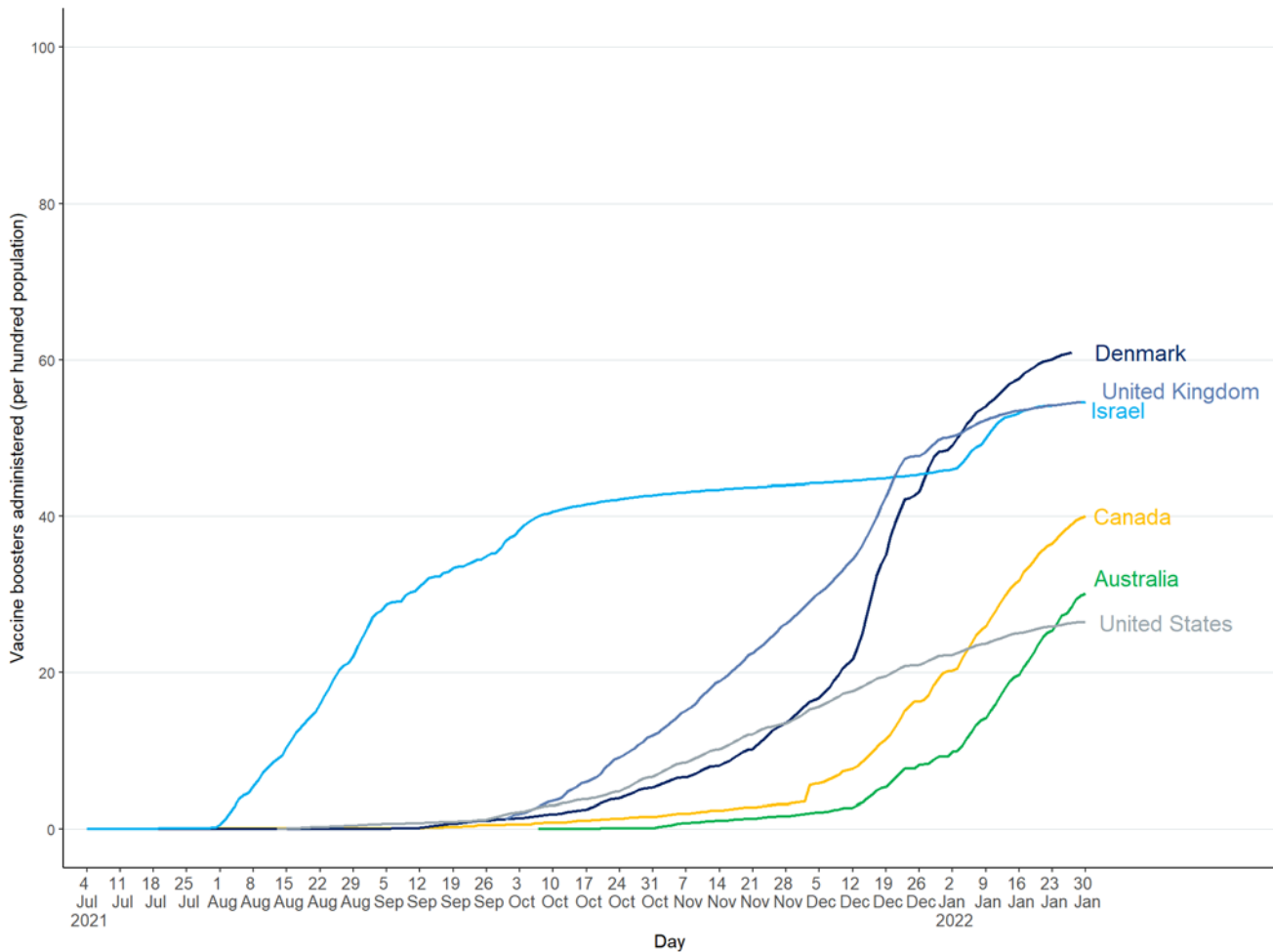


Note: See [COVID-19 daily rates: notes and sources](#) at the end of this document.

COVID-19 vaccine boosters

Figure 7 shows the total number of COVID-19 vaccine booster doses administered per hundred population in Australia, United Kingdom, United States, Canada, Denmark and Israel, from July 2021 to January 2022. Booster doses are defined as doses administered in addition to the original vaccination protocol of two doses.

Figure 7: Number of COVID-19 vaccine boosters administered (select countries), July 2021 – January 2022

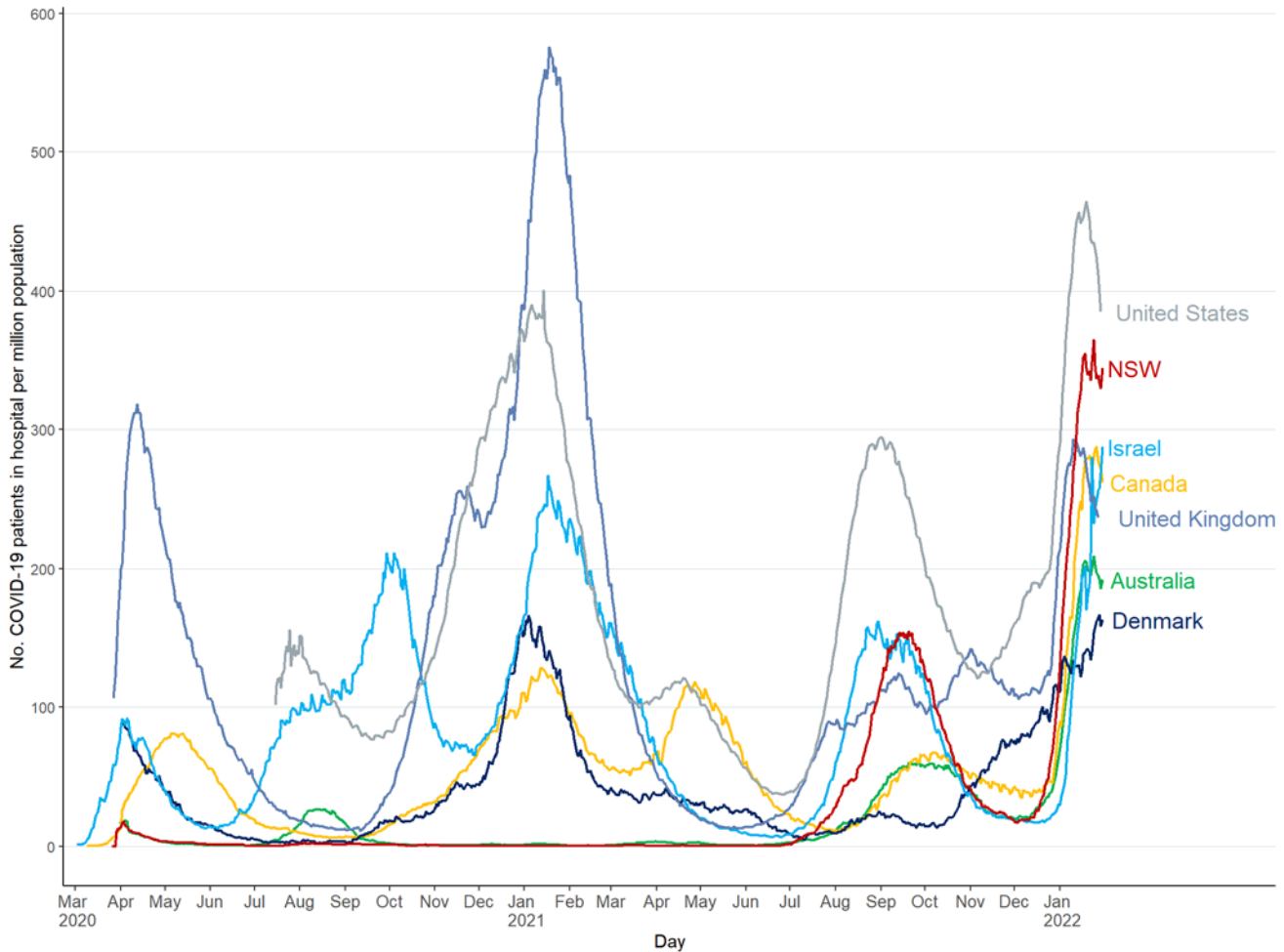


Note: See [COVID-19 daily rates: notes and sources](#) at the end of this document.

COVID-19 patients in hospital

Figure 8 shows the daily number of COVID-19 patients in hospital per million population in NSW, Australia, United Kingdom, United States, Canada, Denmark and Israel, from March 2020 to January 2022.

Figure 8: Number of COVID-19 patients in hospital (select countries and NSW), March 2020 – January 2022

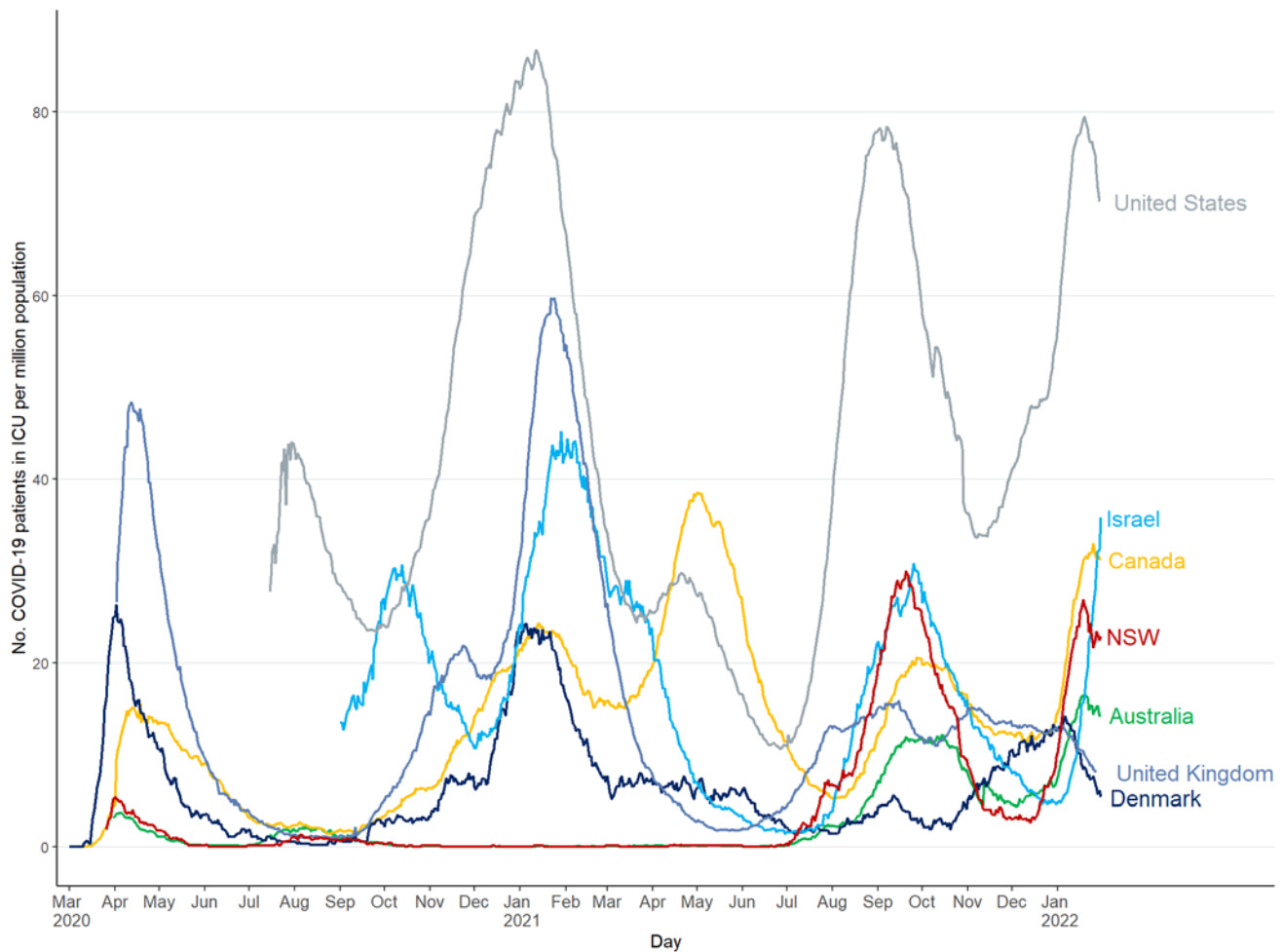


Note: See [COVID-19 daily rates: notes and sources](#) at the end of this document.

COVID-19 patients in intensive care units

Figure 9 shows the daily number of COVID-19 patients in intensive care units per million population in NSW, Australia, United Kingdom, United States, Canada, Denmark and Israel, from March 2020 to January 2022.

Figure 9: Number of COVID-19 patients in intensive care units (select countries and NSW), March 2020 – January 2022



Note: See [COVID-19 daily rates: notes and sources](#) at the end of this document.

COVID-19 cases, testing, variants, vaccines, hospitalisations and deaths*

The following graphs (figures 10 to 16) show COVID-19 cases and vaccination rates; hospitalisation and death rates; and the variant distribution for NSW, Australia, United Kingdom, United States, Canada, Denmark and Israel.

Series a: COVID-19 cases and vaccinations

The graphs in series 'a' show COVID-19 cases and vaccination rates for NSW and each of these countries from March 2020 to January 2022. They include the:

- daily rate per million population (rolling seven-day average) of confirmed COVID-19 cases
- cumulative number of people with one or more vaccine doses (per 100 population)
- cumulative number of people with two or more vaccine doses (per 100 population).

These graphs should be interpreted with caution as there are other factors that may influence the number of cases in addition to vaccination rates, including the level of social restrictions.

The cumulative number of people vaccinated per hundred population (one or more doses or two or more doses) is based on the full population (all ages) for all locations and countries, including NSW, to enable accurate comparability.

Note, there is variation in both 'x' axis and 'y' axis scales, and some gaps in time series across these graphs due to missing data.

Series b: COVID-19 hospitalisation and death rates

The graphs in series 'b' show COVID-19 hospitalisation and death rates for NSW and each of these countries. Specifically, they show the daily number of hospitalised patients (per million population) and the daily number of new deaths (rolling seven-day average and per million population), from March 2020 to January 2022.

Note, there is variation in both 'x' axis and 'y' axis scales and some gaps in time series across these graphs due to missing data.

Series c: COVID-19 variant distribution

The stacked area graphs in series 'c' show the COVID-19 variant distribution for each of these countries. Specifically, they show COVID-19 variant distribution for cases that have been sequenced, and the percentage of total COVID-19 cases that have been sequenced, from July 2021 to January 2022.

For most countries, weekly counts are shown; however, only monthly counts are available for Canada.

Note, there is variation in both 'x' axis and 'y' axis scales and some gaps in time series across these graphs due to missing data.

*See further [COVID-19 cases: notes and sources](#) at the end of this document.

NSW

Figure 10a: COVID-19 cases and vaccinations, NSW, March 2020 – January 2022

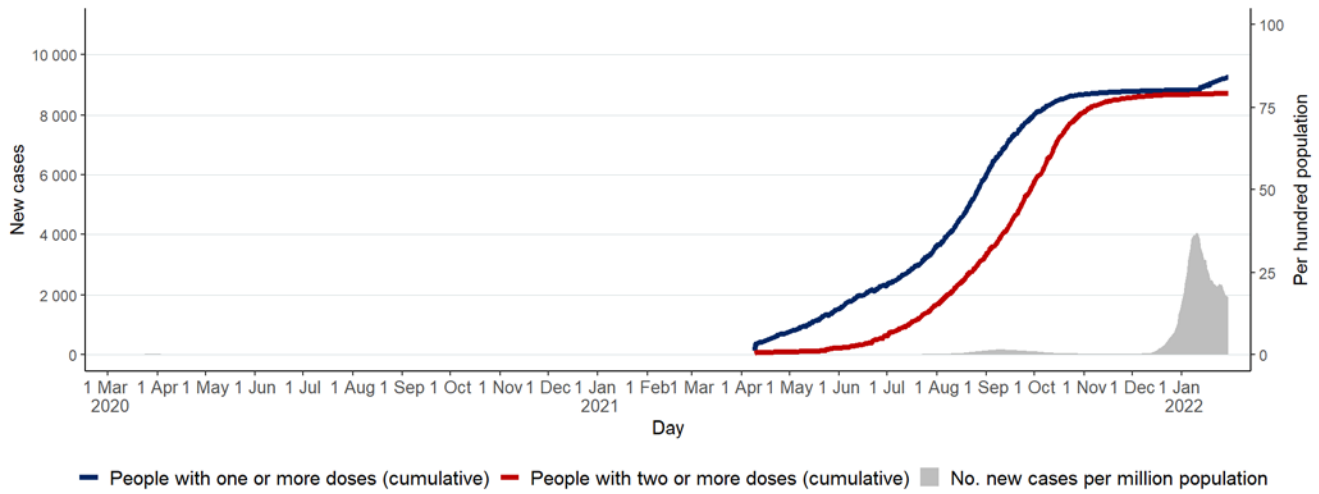
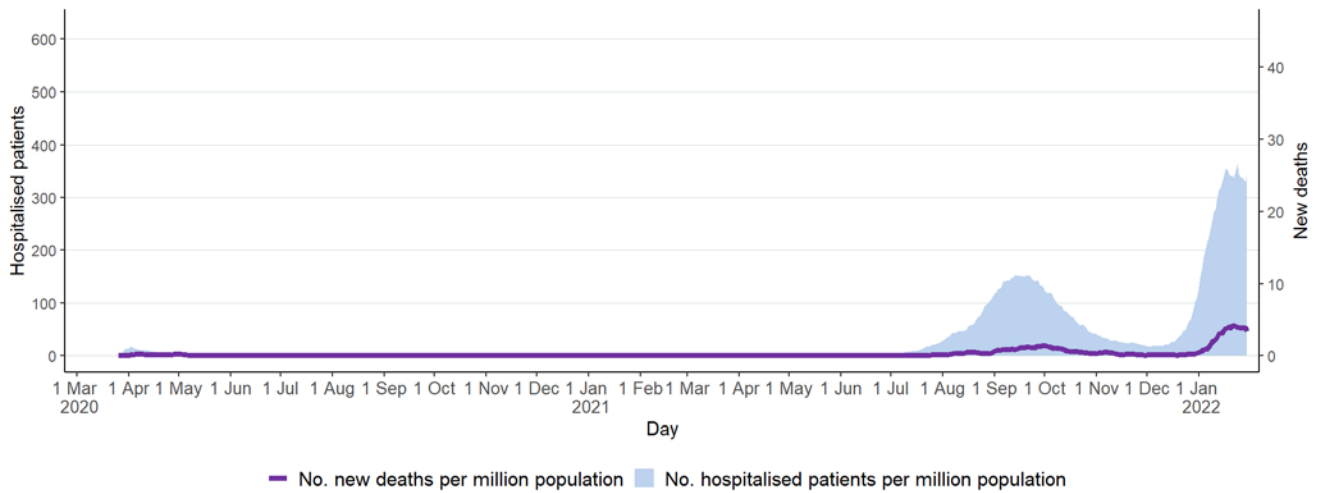


Figure 10b: COVID-19 hospitalisation and mortality rates, NSW, March 2020 – January 2022



Australia

Figure 11a: COVID-19 cases and vaccinations, Australia, March 2020 – January 2022

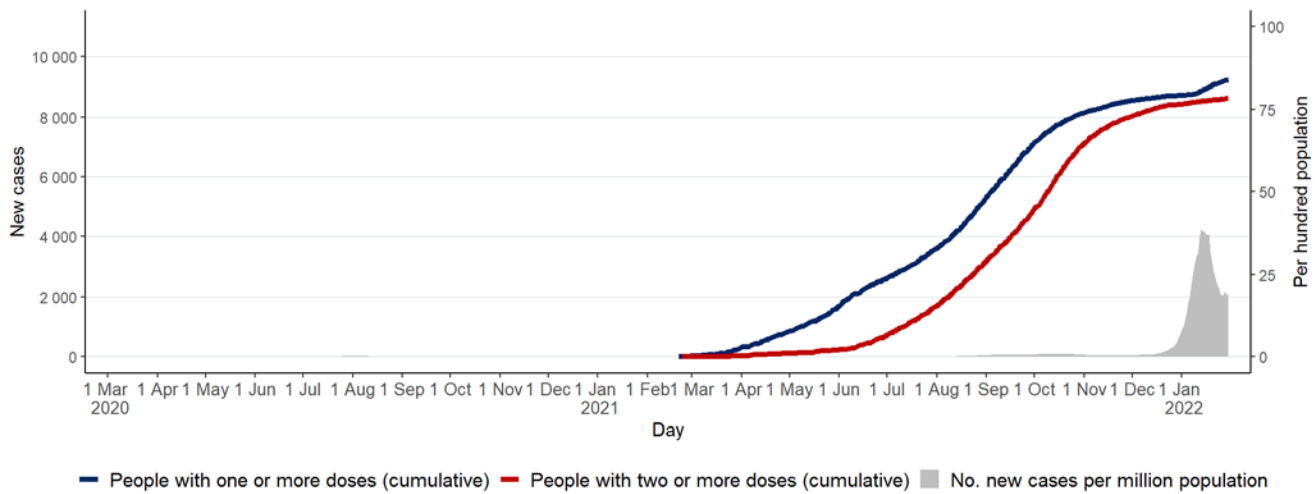


Figure 11b: COVID-19 hospitalisation and mortality rates, Australia, March 2020 – January 2022

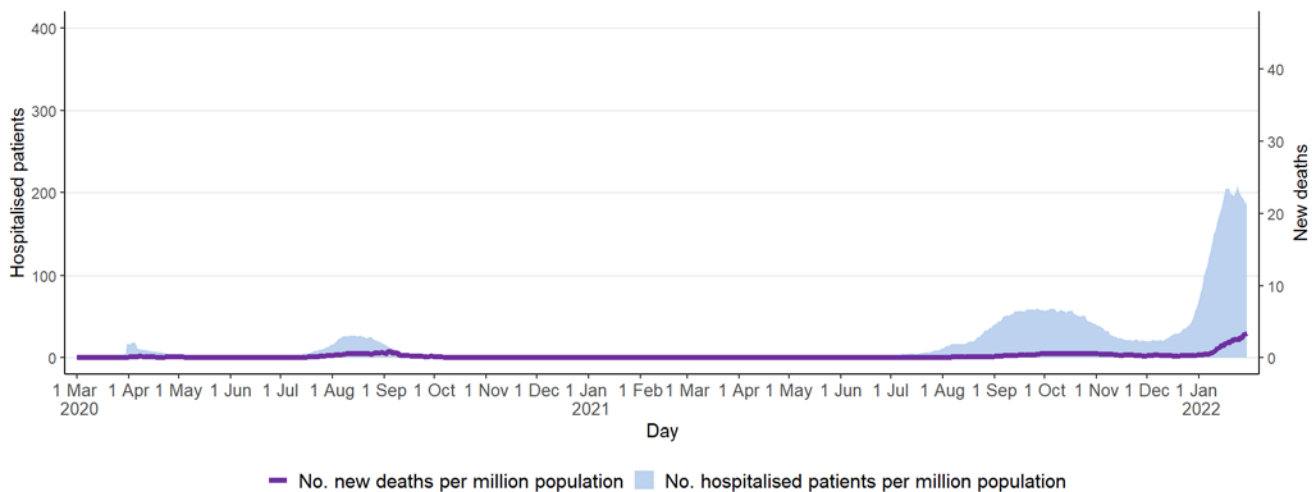
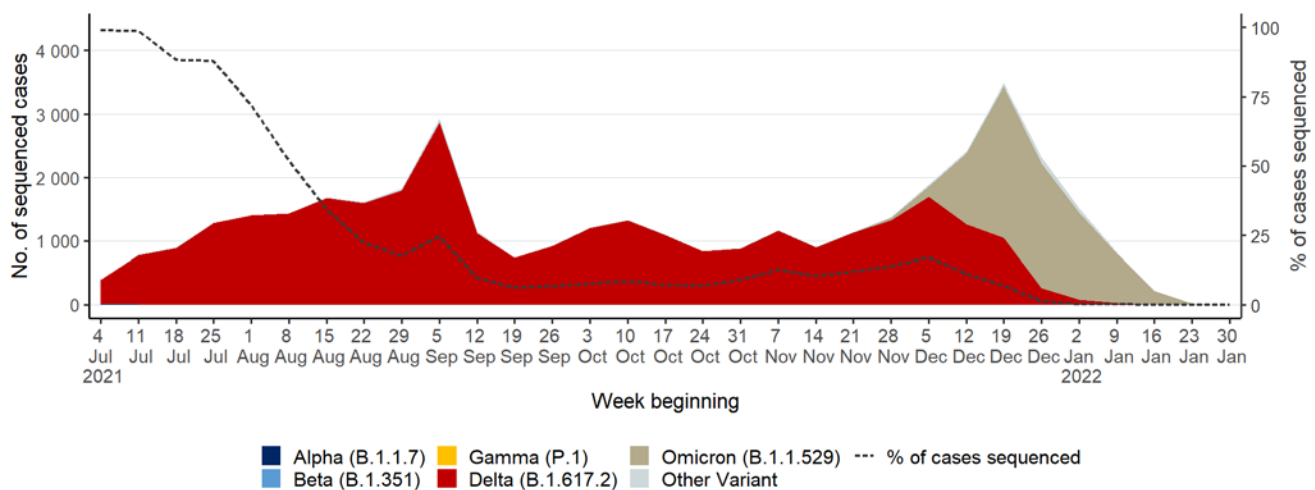


Figure 11c: COVID-19 variant distribution for sample of cases that have been sequenced, Australia, June 2021 – January 2022



United Kingdom

Figure 12a: COVID-19 cases and vaccinations, United Kingdom, March 2020 – January 2022

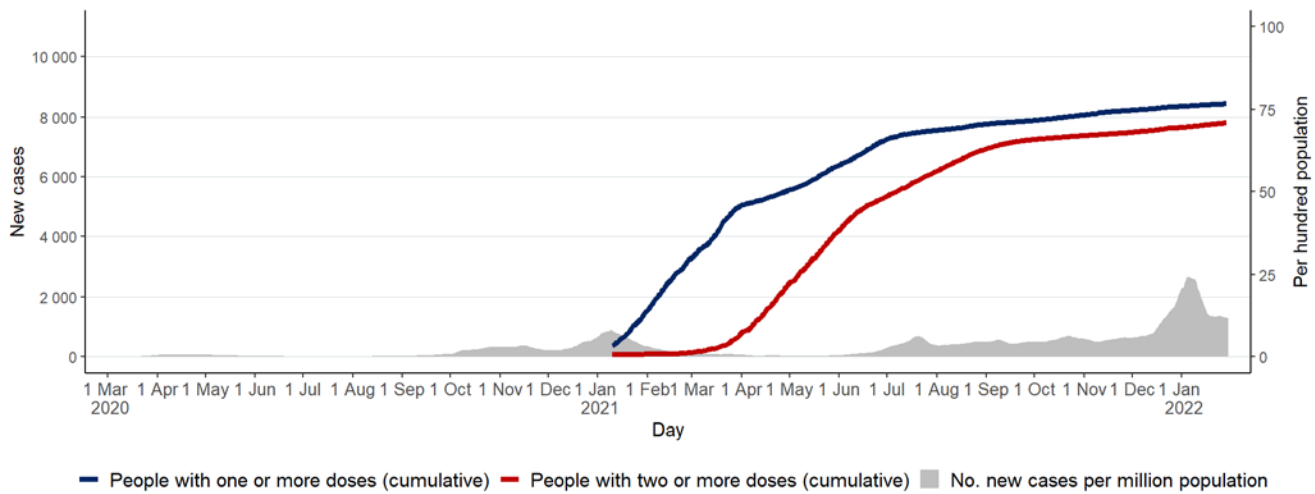


Figure 12b: COVID-19 hospitalisation and mortality rates, United Kingdom, March 2020 – January 2022

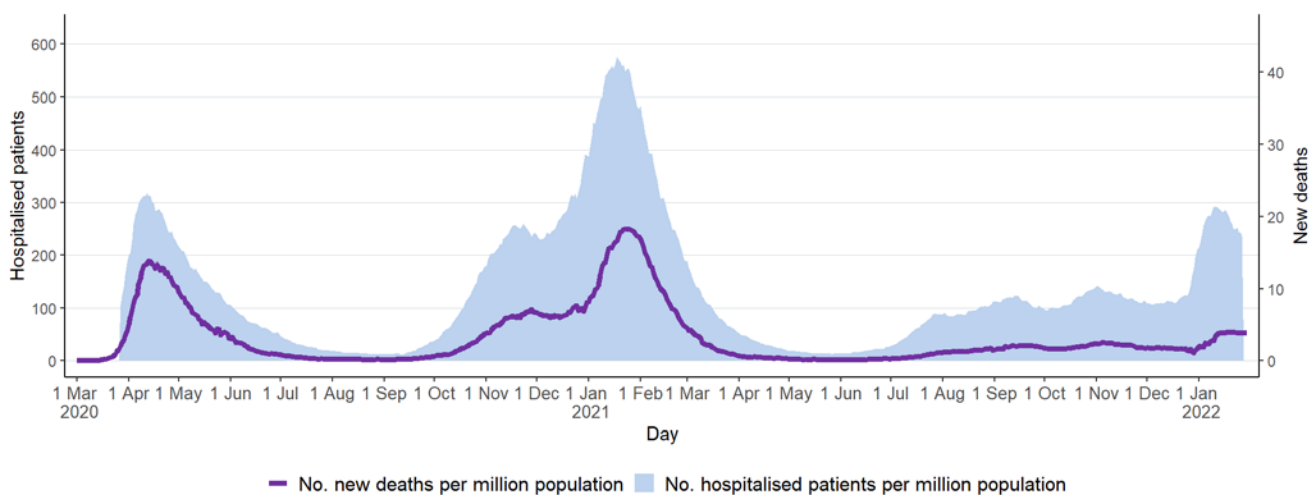
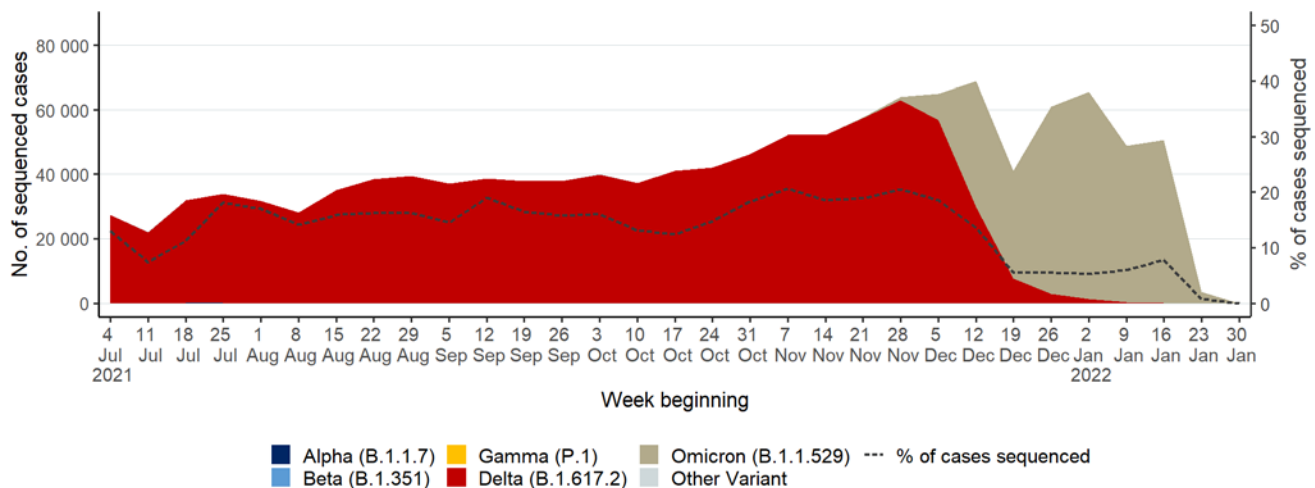


Figure 12c: COVID-19 variant distribution for sample of cases that have been sequenced, United Kingdom, July 2021 – January 2022



United States

Figure 13a: COVID-19 cases and vaccinations, United States, March 2020 – January 2022

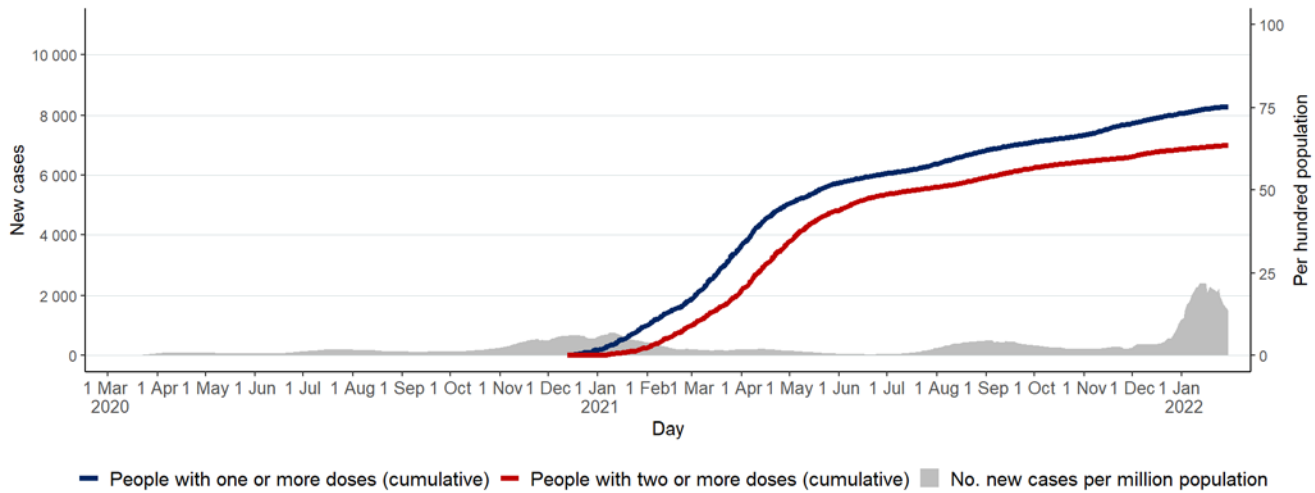


Figure 13b: COVID-19 hospitalisation and mortality rates, United States, March 2020 – January 2022

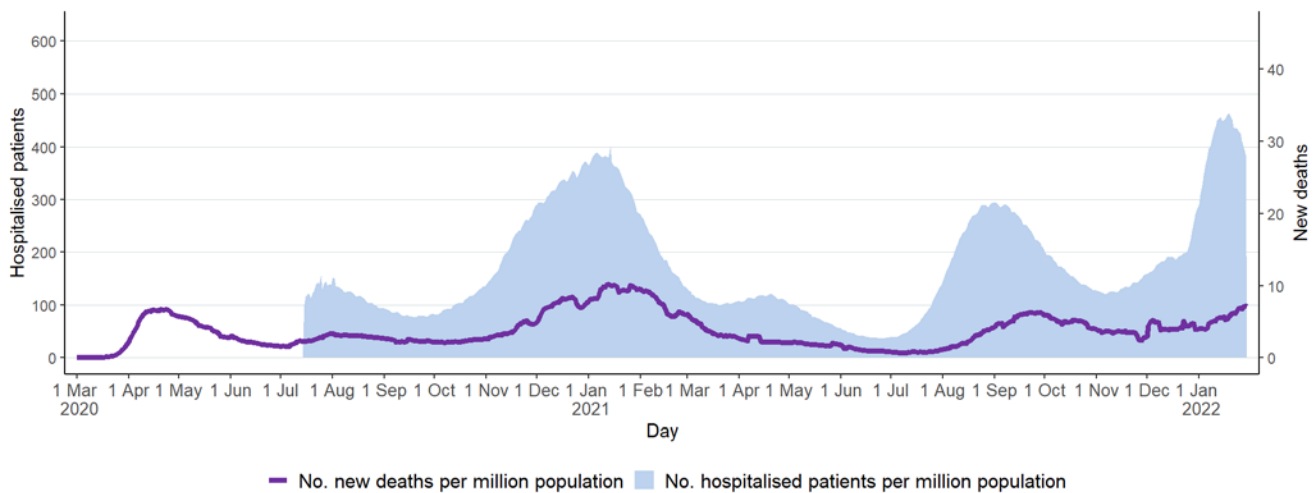
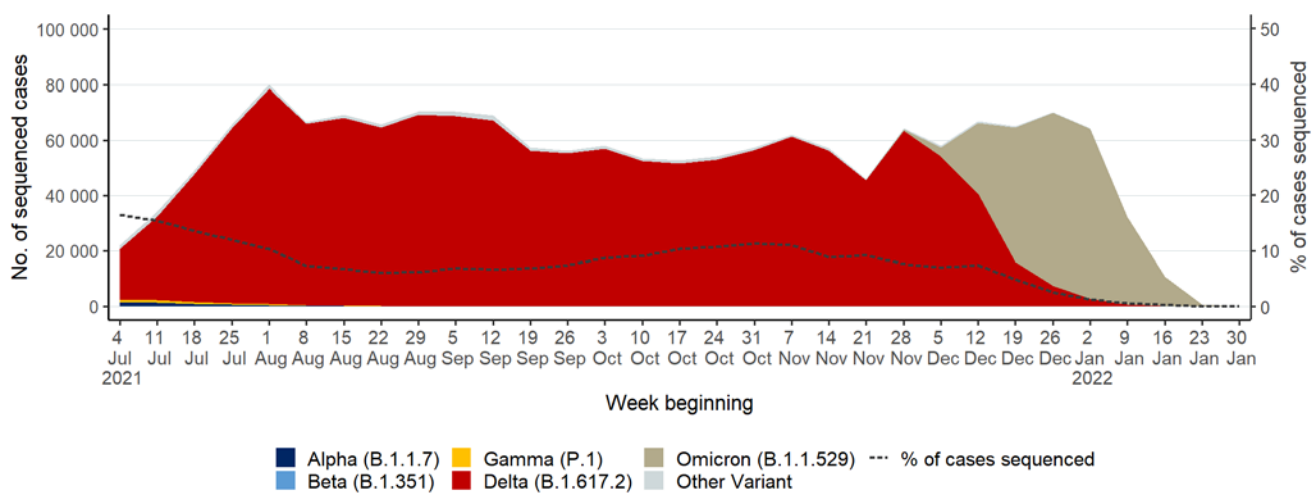


Figure 13c: COVID-19 variant distribution for a sample of cases that have been sequenced, United States, July 2021 – January 2022



Canada

Figure 14a: COVID-19 cases and vaccinations, Canada, March 2020 – January 2022

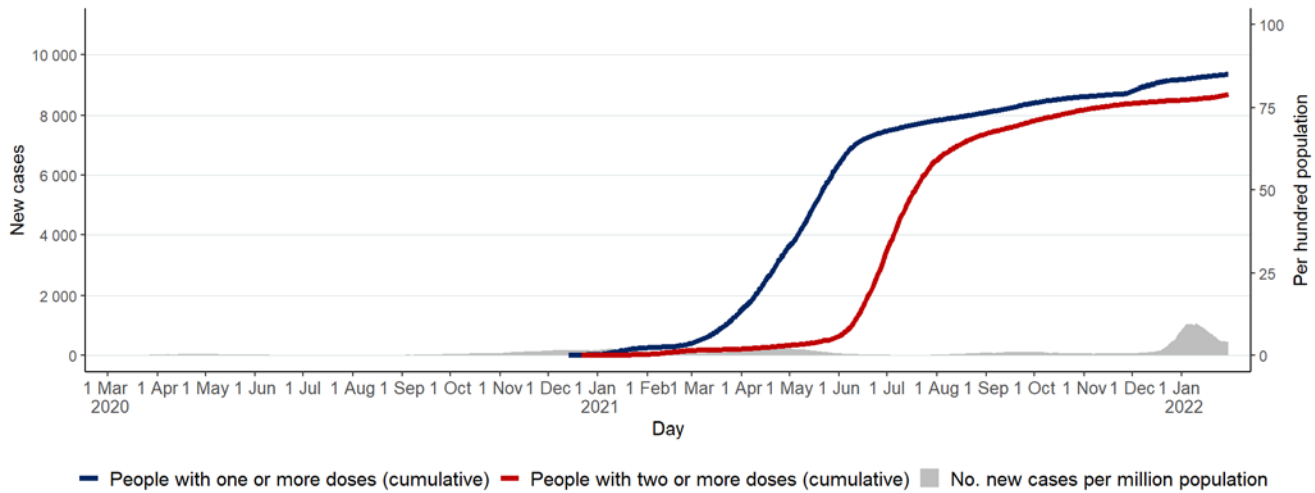


Figure 14b: COVID-19 hospitalisation and mortality rates, Canada, March 2020 – January 2022

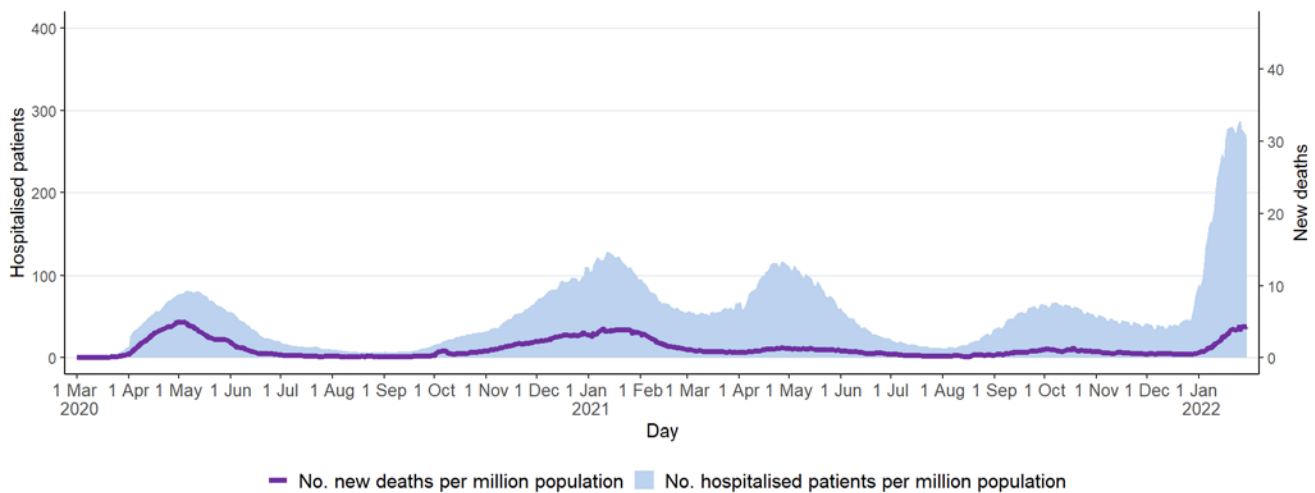
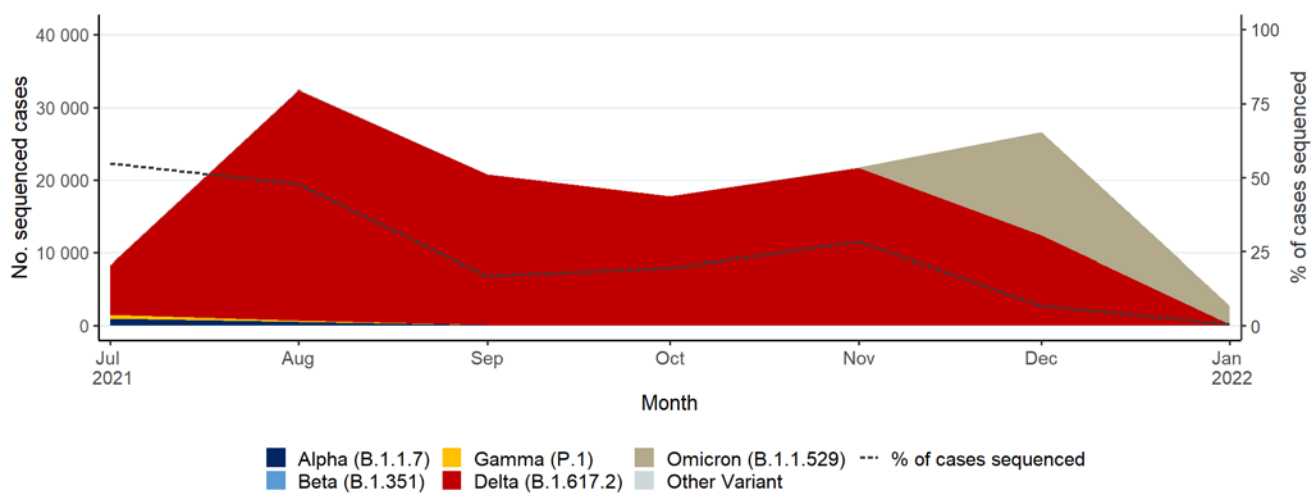


Figure 14c: COVID-19 variant distribution for a sample of cases that have been sequenced, Canada, July 2021 – January 2022



Denmark

Figure 15a: COVID-19 cases and vaccinations, Denmark, March 2020 – January 2022

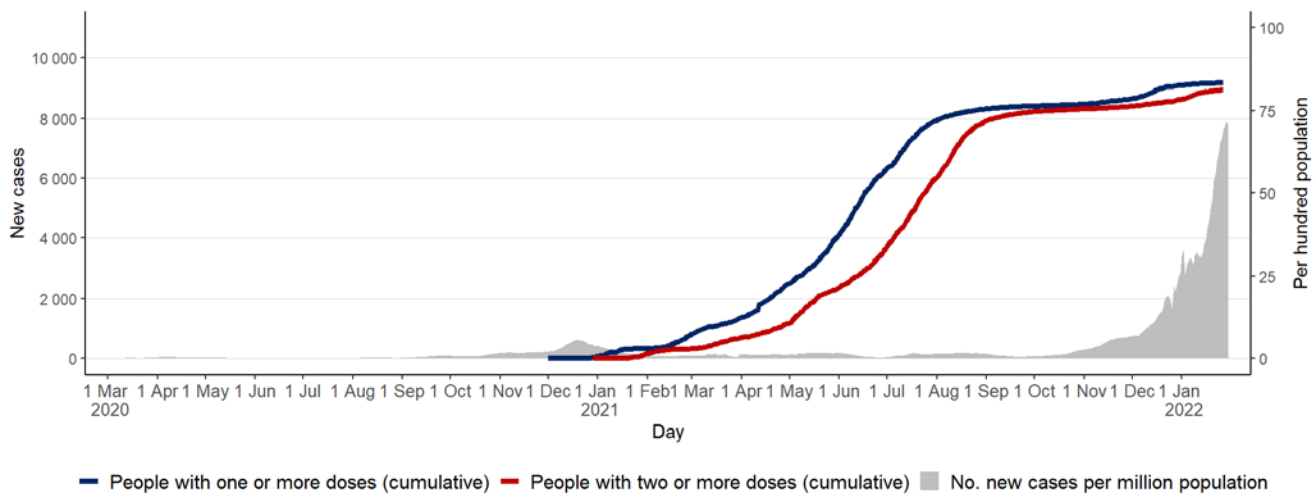


Figure 15b: COVID-19 hospitalisation and mortality rates, Denmark, March 2020 – January 2022

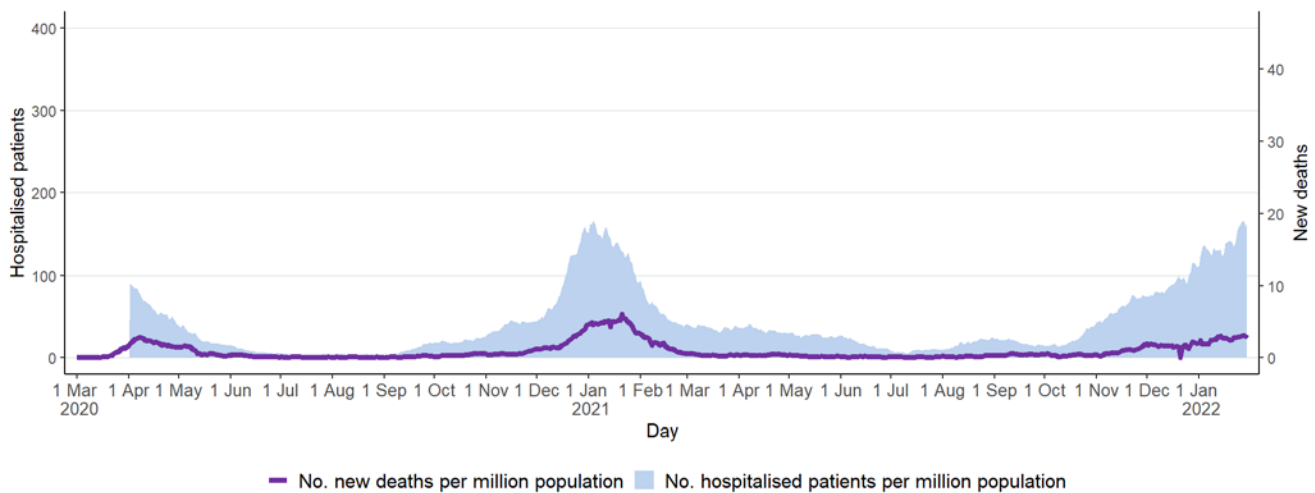
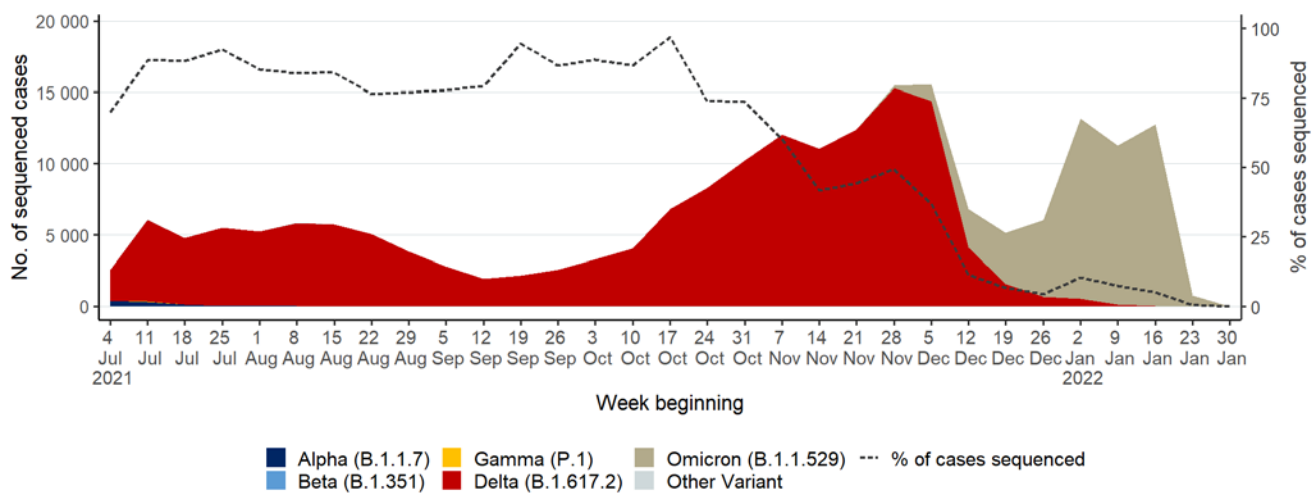


Figure 15c: COVID-19 variant distribution for a sample of cases that have been sequenced, Denmark, July 2021 – January 2022



Israel

Figure 16a: COVID-19 cases and vaccinations, Israel, March 2020 – January 2022

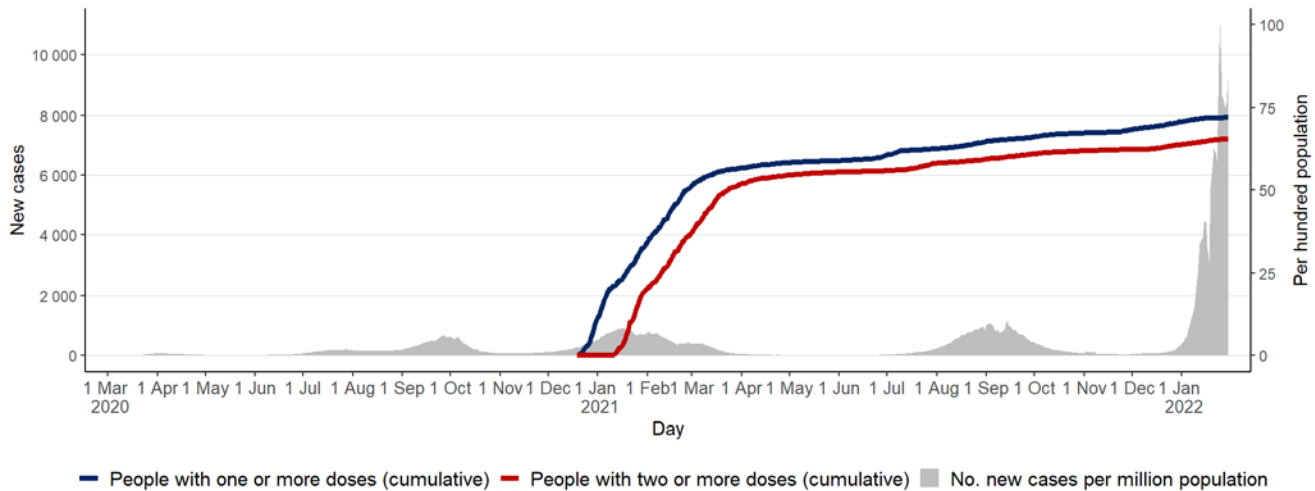


Figure 16b: COVID-19 hospitalisation and mortality rates, Israel, March 2020 – January 2022

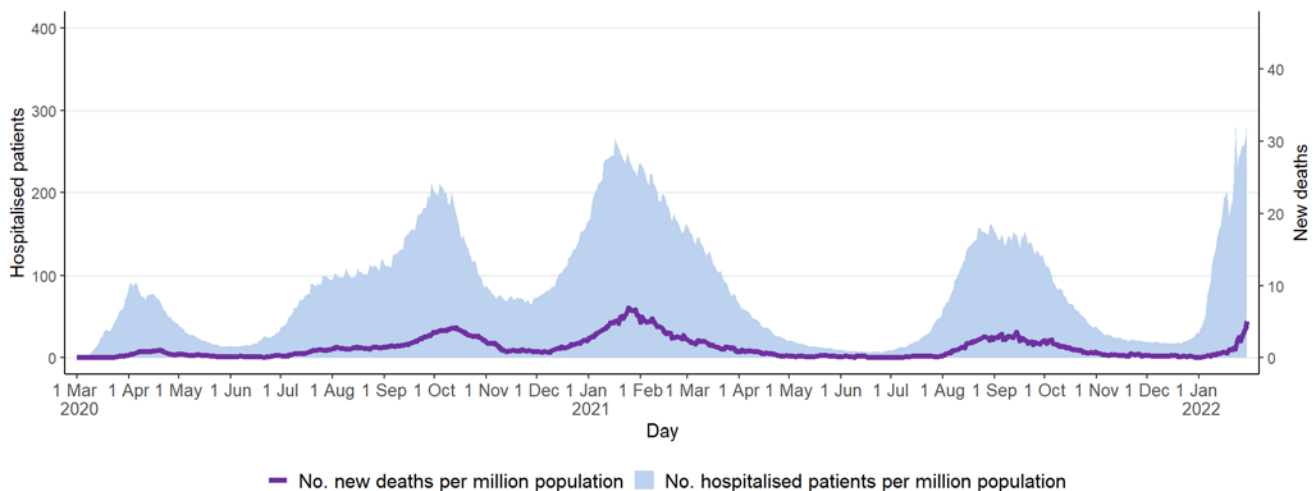
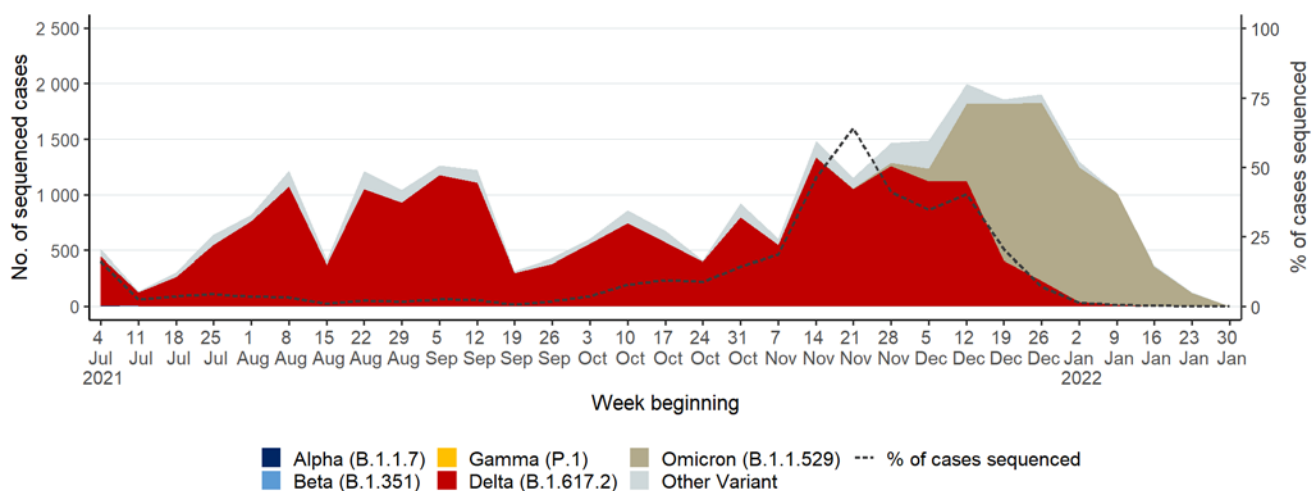


Figure 16c: COVID-19 variant distribution for a sample of cases that have been sequenced, Israel, July 2021 – January 2022



NSW key indicators

Notes

- Data are presented for all indicators as at 30 January 2022 (previous week, 23 January 2022)
- Cases identified via rapid antigen tests (RATs) are included from 21 January 2022 onwards; comparisons with historical data should be made with care.
- Average daily cases and average daily deaths are based on the seven days to 30 January 2022 (previous week, seven days to 23 January 2022).
- For any given day, the growth factor for COVID-19 cases is a ratio of cases notified in the seven days ending that day, to the cases notified in the seven days ending the day before.
- Patients in hospital include cases on the ward and in ICUs.
- Vaccination rates for the total population are estimated using the number of second doses available through public sources. This figure may be underestimated by up to 1% from that reported elsewhere due to differences in timing of reporting.
- Estimated per million population rates for all indicators other than vaccination are calculated using population estimates at 30 June 2021. For vaccination, population estimates at 30 June 2020 are used. This is based on the Australian Bureau of Statistics estimated resident population and population projections, based on data from the NSW Department of Planning, Industry and Environment.⁴
- The rate of hospitalisation and ICU admission (per million) among the unvaccinated population is calculated as the number of unvaccinated COVID-19 cases in hospital against the estimated total number of the unvaccinated population. The rate of hospitalisation and ICU admission (per million) among the vaccinated population is calculated as the number of COVID-19 cases in hospital who have received two or more vaccine doses, against the estimated total number of the population with two or more doses. Rolling seven-day average was applied. Rates were age-standardised to NSW 2021 population estimates.

Sources

- New cases for NSW sourced from NSW Health via Notifiable Conditions Information Management System; accessed 1 February 2022.⁵
- Vaccination data sourced from [COVID Live](#), which verifies data against Australian State and Territory Government Health Departments⁶ and the [NSW Health twitter updates](#); accessed 1 February 2022.⁷
- Data for hospital capacity, admissions and proportion of vaccinated cases are sourced from NSW Health via the Patient Flow Portal and taken from a 7pm snapshot, 30 January 2022; accessed 1 February 2022.⁸

Summary of public health, healthcare and vaccination measures (select countries, Canadian provinces and NSW)

Notes

- Data are presented for all indicators as at 30 January 2022. If unavailable, the latest available data are shown.
- Data on confirmed COVID-19 cases may include both cases identified via PCR tests and cases identified via RAT, depending on differences in reporting procedures in the selected locations. For NSW, cases identified via RATs are included from 21 January 2022 onwards; comparisons with historical data should be made with care.
- Average daily confirmed cases and average daily deaths are based on a seven-day average.

- Proportions for the population with two or more doses are based on the full population.
- For NSW, estimated per million population rates for all indicators other than vaccination are calculated using population estimates at 30 June 2021. For vaccination, population estimates at 30 June 2020 are used. This is based on the Australian Bureau of Statistics estimated resident population and population projections, based on data from the NSW Department of Planning, Industry and Environment.⁴
- Patients in hospital include both cases on the ward and in ICUs. For Ontario and Quebec, patients in hospital may be lower than patients in ICU, as the in-hospital numbers only include people still testing positive for COVID-19, while patients in ICU also include those who are in ICU due to COVID-19 but have since tested negative.
- Cell colouring has been applied according to the following criteria:
 - For 7-day average cases per million, rates over 3,000 per million are highlighted in red, and the lowest three rates highlighted in green.
 - For 7-day average deaths per million, rates over 4.0 per million are highlighted in red, and rates under 0.5 per million are highlighted in green.
 - For percentage of total population with two or more doses, percentages greater than or equal to 80% are highlighted in green.
 - For patients in hospital per million, rates over 300 per million are highlighted in red, and the lowest three rates highlighted in green.
 - For patients in ICU per million, rates over 30 per million are highlighted in red, and the lowest three rates highlighted in green.

Sources

- New cases for selected countries sourced from [Our World in Data](#).⁹ New cases for NSW sourced from NSW Health via the Notifiable Conditions Information Management System.⁵ New cases for Ontario and Quebec sourced from [COVID-19 Tracker Canada](#).¹⁰ All accessed 1 February 2022.
- COVID-19 deaths for selected countries sourced from [Our World in Data](#).⁹ COVID-19 deaths for NSW sourced from NSW Health via the Notifiable Conditions Information Management System.⁵ COVID-19 deaths for Ontario and Quebec sourced from [COVID-19 Tracker Canada](#).¹⁰ All accessed 1 February 2022.
- Vaccination data for selected countries sourced from [Our World in Data](#).⁹ Vaccination data for NSW sourced from [COVID Live](#), which verifies data against Australian State and Territory Government Health Departments.⁶ Vaccination data for Ontario and Quebec sourced from [COVID-19 Tracker Canada](#).¹⁰ All accessed 1 February 2022.
- Data on the number of COVID-19 patients in hospital and ICUs were sourced on 1 February 2022 from:
 - [Our World in Data](#) for all countries⁹
 - NSW Health via the Patient Flow Portal for NSW, taken from a 7pm snapshot, 30 January 2022⁸
 - [COVID-19 Tracker Canada](#) for Ontario and Quebec.¹⁰

COVID-19 daily rates of cases, deaths, hospitalisations and vaccination

Notes

- Limited testing and delayed reporting likely result in underestimated actual number of confirmed cases.
- Data on confirmed COVID-19 cases may include both cases identified via PCR tests and cases identified via RATs, depending on differences in reporting procedures in the selected locations. For NSW, cases identified via RATs are included from 21 January 2022 onwards; comparisons with historical data should be made with care.

- Challenges in the attribution of the cause of death means the number of confirmed deaths may not be an accurate count of the true number of deaths from COVID-19.
- Patients in hospital include cases on the ward and in ICUs.
- Data for some countries may appear unstable at times (e.g. over the Christmas and New Year period) due to reasons such as reduced testing and unavailability of accurate data from the various countries.

Sources

- Cases and deaths data for selected countries sourced from [Our World in Data](#).⁹ Cases and deaths data for NSW sourced from NSW Health via the Notifiable Conditions Information Management System.⁵ Both accessed 1 February 2022.
- Vaccination data for selected countries sourced from [Our World in Data](#); accessed 1 February 2022.⁹
- Hospital and ICU data for selected countries sourced from [Our World in Data](#).⁹ Hospital and ICU data for NSW sourced from NSW Health via the Patient Flow Portal.⁸ Both accessed 1 February 2022.

COVID-19 cases, variants, vaccines, hospitalisations and deaths

Notes

- Data on confirmed COVID-19 cases may include both cases identified via PCR tests and cases identified via RATs, depending on differences in reporting procedures in the selected locations. For NSW, cases identified via RATs are included from 21 January 2022 onwards; comparisons with historical data should be made with care.
- With regards to the figures on COVID-19 variants, all severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) sequences were downloaded from the [GISAID EpiCOV™ Database](#). PANGO lineage (variant) classification for each individual sequence was provided by GISAID.¹¹
- Dates are based on the sample collection date. Sequences with dates specifying the year only were excluded, while collection dates specifying the year and month were assigned to the 15th of that month.
- Sequences with lengths $\leq 20,000$ base pairs were removed from the analysis, as were non-human hosts.
- Only a non-random sample of cases are sequenced. For many countries, the proportion of cases sequenced and submitted to GISAID may be very low. As a result, this report does not indicate the true prevalence of the variants but rather a best estimate currently available. Furthermore, variant frequencies may differ from numbers reported in media releases which may be based on detection of the variant using faster alternate methodologies (such as PCR testing).
- All data used to generate these graphs is subject to the GISAID [terms and conditions](#).¹²

Sources

- Data on variants enabled by [GISAID](#); accessed 1 February 2022.¹¹
- Data on total number of cases and vaccinations for the selected countries are sourced from [Our World in Data](#).⁹ Data on total number of cases for NSW are sourced from NSW Health via the Notifiable Conditions Information Management System.⁵ Vaccination data for NSW sourced from [COVID Live](#), which verifies data against Australian State and Territory Government Health Departments.⁶ All accessed 1 February 2022.
- Data on the number of hospitalisations and new deaths for the selected countries were sourced from [Our World in Data](#).⁹ Data on the number of hospitalisations for NSW were sourced from NSW Health via the Patient Flow Portal.⁸ Data on the number of deaths for NSW are sourced from NSW Health via the Notifiable Conditions Information Management System.⁵ All accessed 1 February 2022.

Method

The NSW Health COVID-19 Critical Intelligence Unit maintains living evidence tables on [COVID-19 vaccines](#) and [SARS-CoV-2 variants](#).^{13, 14} To inform this brief, a review of the daily evidence digest and Google searches were undertaken on 17 and 18 December 2021.

Countries were chosen based on contemporary relevance with regards to the variables of interest in the NSW and Australian context (cases, variants, vaccines and patient outcomes).

References

1. ABC News. The Omicron BA.2 COVID variant is in Australia. This is what we know [Internet]. Australia: ABC News; 28 Jan 2022 [cited 31 Jan 2022]. Available from: <https://www.abc.net.au/news/2022-01-28/what-we-know-about-ba2-covid-omicron-virus-variant/100789342>
2. The Guardian. Australia news live updates: 35 Covid deaths in Victoria and NSW; students go back to school; NSW treasurer condemns lack of federal support [Internet]. Australia: The Guardian; 31 Jan 2022 [cited 31 Jan 2022]. Available from: <https://www.theguardian.com/australia-news/live/2022/jan/31/australia-news-live-updates-students-head-back-to-school-aged-care-group-says-booster-program-too-slow-scott-morrison-omicron-covid-anthony-albanese-rapid-antigen-tests>
3. BBC News. Covid: Covid jabs offered to at-risk five to 11-year-olds in England, and National Insurance hike confirmed [Internet]. United Kingdom: BBC News; 30 Jan 2022 [cited 31 Jan 2022]. Available from: <https://www.bbc.com/news/uk-60185896>
4. NSW Department of Planning, Industry and Environment. Population [Internet]. Australia: NSW Department of Planning, Industry and Environment; 2020 [cited 30 Nov 2021]. Available from: <https://www.planning.nsw.gov.au/Research-and-Demography/Population-projections>
5. NSW Ministry of Health. Notifiable Conditions Information Management System (NCIMS) [unpublished dataset]. Sydney: NSW Ministry of Health; 2021 [cited 30 Nov 2021].
6. COVID LIVE [Internet]. Australia: COVID LIVE; 2 Feb 2022 [cited 2 Feb 2022]. Available from: <https://covidlive.com.au/>
7. NSW Health. Healthy People - now and in the future. [Internet]. 25 Jan 2022 [cited 27 Jan 2022]. Available from: <https://twitter.com/NSWHealth>
8. NSW Ministry of Health. Patient flow portal [unpublished dataset]. Sydney: NSW Ministry of Health; 2021 [cited 30 Nov 2021].
9. Our World in Data. Latest publication [Internet]. United Kingdom: Our World in Data; 2022 [cited 2 Feb 2022]. Available from: <https://ourworldindata.org/>
10. COVID-19 Tracker Canada. Updated Wednesday, February 2nd at 10:05 am CST [Internet]. Canada; 2 Feb 2022 [cited 3 Feb 2022]. Available from: <https://covid19tracker.ca/index.html>.
11. GISAID. In focus [Internet]. Germany: GISAID; 2022 [cited 2 Feb 2022]. Available from: <https://www.gisaid.org/>
12. GISAID. GISAID EpiFlu™ Database Access Agreement [Internet]. Germany: GISAID; 2022 [cited 2 Feb 2022]. Available from: <https://www.gisaid.org/registration/terms-of-use/>
13. COVID-19 Critical Intelligence Unit. Living evidence - SARS-CoV-2 variants [Internet]. Sydney: NSW Agency for Clinical Innovation; 1 Feb 2022 [cited 2 Feb 2022]. Available from: <https://aci.health.nsw.gov.au/covid-19/critical-intelligence-unit/sars-cov-2-variants>
14. COVID-19 Critical Intelligence Unit. Living evidence - COVID-19 vaccines [Internet]. Sydney, Australia: NSW Agency for Clinical Innovation; 2 Feb 2022 [cited 2 Feb 2022]. Available from: <https://aci.health.nsw.gov.au/covid-19/critical-intelligence-unit/covid-19-vaccines>

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