



# COVID-19 UPDATE

## Omicron variants in NSW

July 2022

### Inside this issue

- Surges in Omicron variants BA.4/5 are being reported around the world. We review the latest data from NSW on cases, age profiles and hospitalisations.
- Cases and hospitalisations are on the rise, but at a slower rate than in previous Omicron waves.

### Key facts

- BA.4/5 variants dominate cases.
- Currently, more than 14,000 cases are reported daily in NSW.
- Hospital occupancy continues to increase, with around 2,200 people in hospital who are positive for COVID-19.
- Overall, about 2% of COVID cases are hospitalised. This proportion is higher among older people (up to 16.5% in those aged 80+ years).
- The BA.4/5 wave is less pronounced than BA.1.

## Variants

BA.4/5 is clearly dominant in NSW with an estimated growth rate advantage of 10.5% per day over BA.2.<sup>1, 2</sup>

BA.4/5 can significantly escape neutralising antibodies induced by vaccination and infection.<sup>3</sup>

There is no clear indication of change in severity for BA.4 and BA.5 compared with previous Omicron variants.<sup>4</sup>

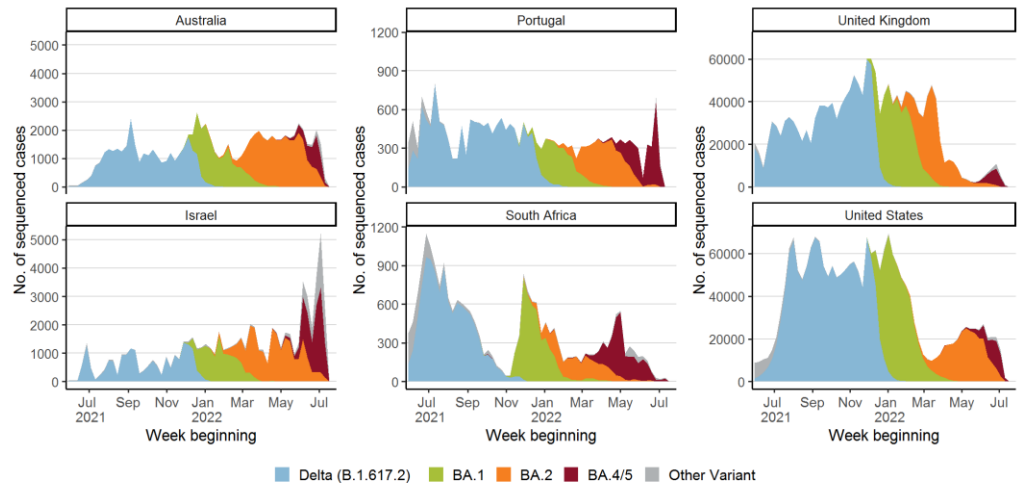
The Australian Technical Advisory Group on Immunisation recommends a winter dose of COVID-19 vaccine for those aged 50 to 64 years. People aged 30 to 49 years are eligible; however, the benefit for this group is less certain.

The Australian Health Protection Principal Committee advises that reinfections may occur as early as 28 days after recovery from a previous COVID-19 infection.

NSW guidance on the use of monoclonal antibodies and antivirals is updated as evidence emerges.

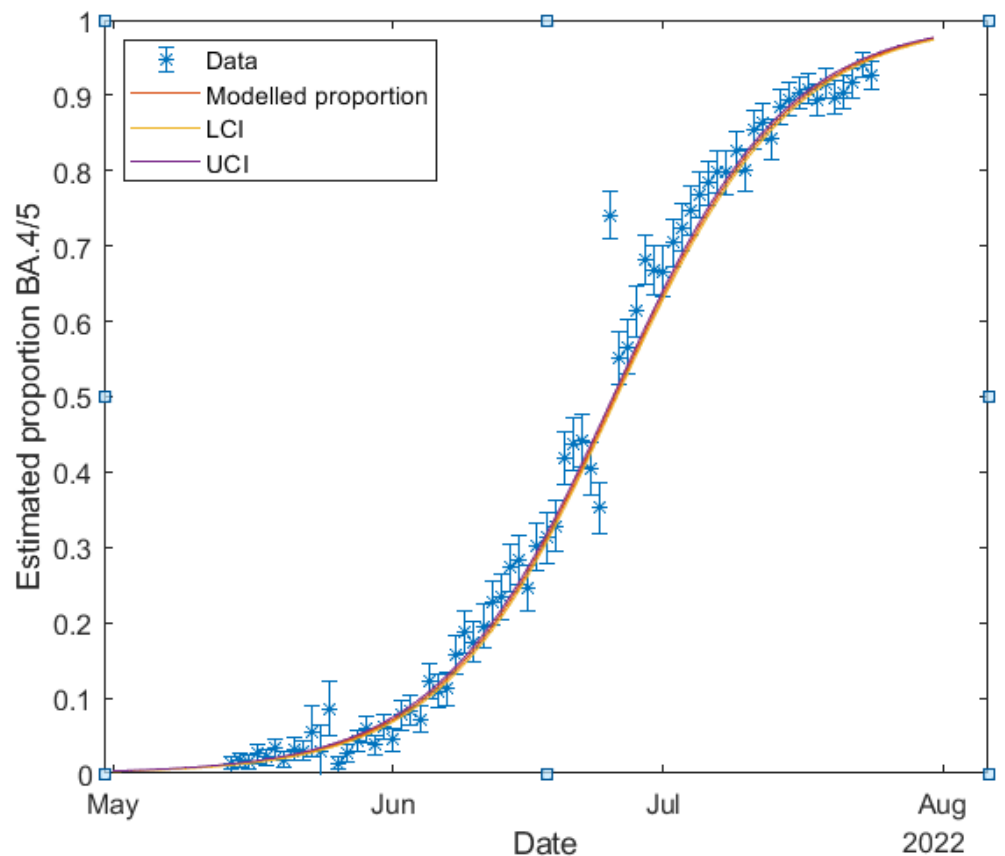
## SARS-CoV-2 variants – BA.4/BA.5 now predominates globally

COVID-19 variants, June 2021 - July 2022



## Most positive PCR tests are BA.4/5, NSW, May to July 2022

This graph illustrates the proportion of COVID-19 PCR tests that have 'S gene target failure'— this is a marker for BA.4/5. The proportion was 0 in May 2022 and latest data suggest around 95% of positive samples are currently BA.4/5.



(LCI: lower confidence interval; UCI: upper confidence interval)

## Age profiles

The number of COVID-19 cases peaked early in 2022 with the Omicron variant, followed by a second Omicron peak in late March.

People aged 65+ years accounted for 23% of COVID-19-positive hospital admissions in July 2021, and the proportion increased to 51% in January 2022. The corresponding proportions for those aged 75+ years was 9% and 26%.

In July 2022, people aged 65+ years accounted for 54% of all COVID-19-positive hospital admissions (those aged 75+ years accounted for 40%).

## Conversion rates (cases to hospital)

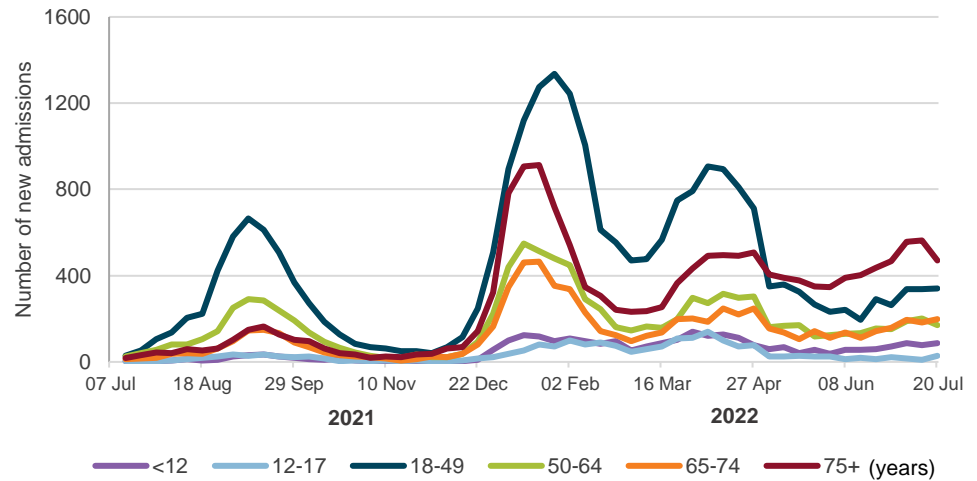
The conversion rate refers to the number of new hospitalisations or intensive care unit admissions over a seven-day period, divided by the number of reported cases in the previous seven-day period.

For NSW, the current conversion rate is 1.90 for hospital admission and 0.12 for ICU admission.

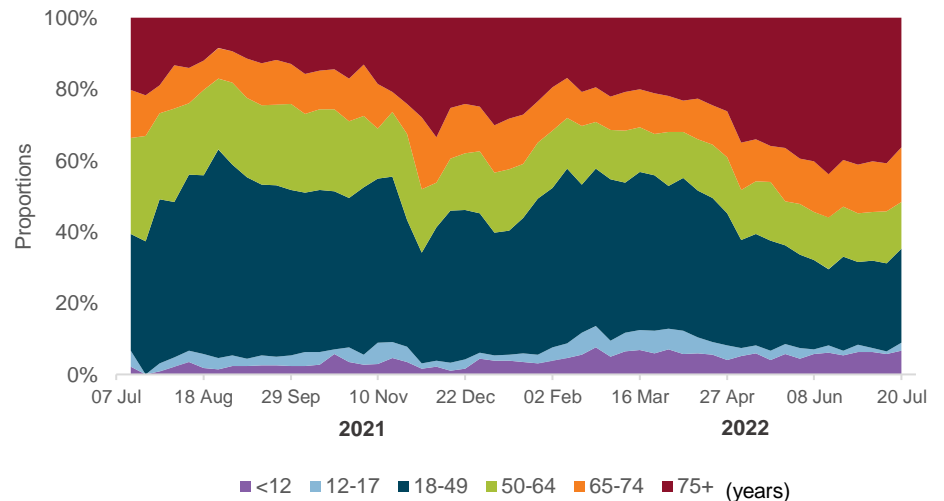
Conversion rates generally increase with age.

During the Omicron wave, the conversion rate peaked in early March and subsequently declined. More recently, it has increased to above 10% for those aged 75+ years.

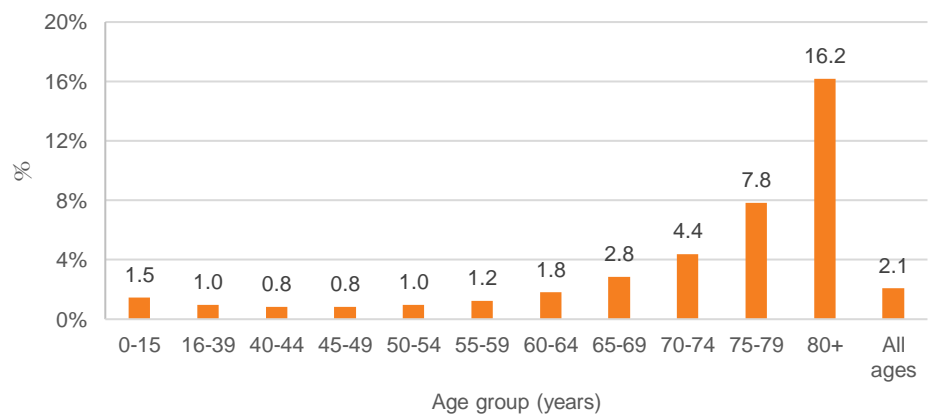
Number of weekly new admission to hospital ward, by age group, NSW, July 2021 to July 2022



Proportion of weekly new admissions to hospital ward, by age group, NSW, July 2021 to July 2022



Conversion rate (case to hospital ward), by age group, NSW, 28 days to 26 July 2022



## The Omicron waves

There have been three distinct Omicron waves in NSW: BA.1 peaked in early January; BA.2 peaked in late March (at a lower level than BA.1); and we are currently in the BA.4/BA.5 wave.

Reported cases peaked at 45,000 on 7 January. Overall, the rate of increase of this latest wave is much slower than the BA.1 and BA.2 waves.

New admissions peaked on 24 January during the BA.1 wave, with 587 new patients hospitalised. This was around a week after cases peaked.

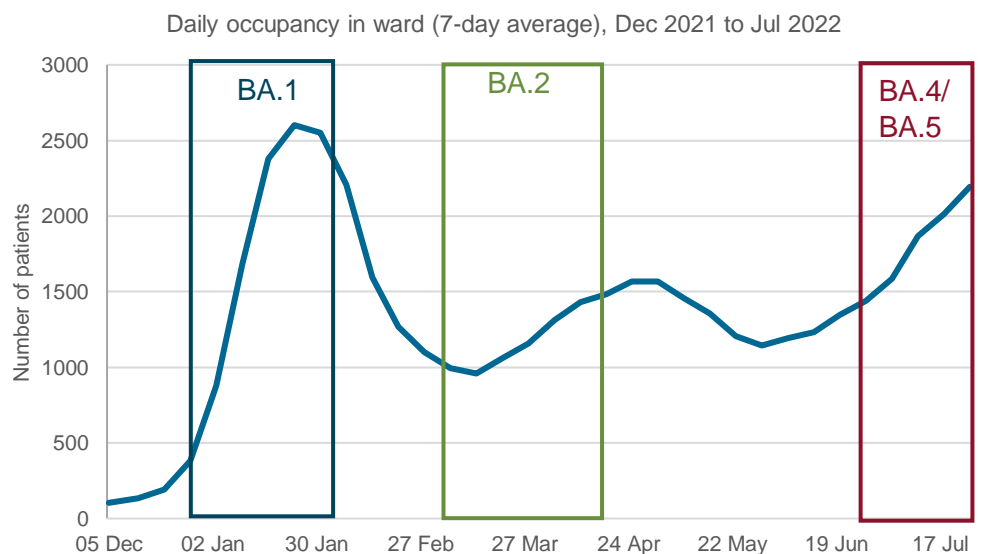
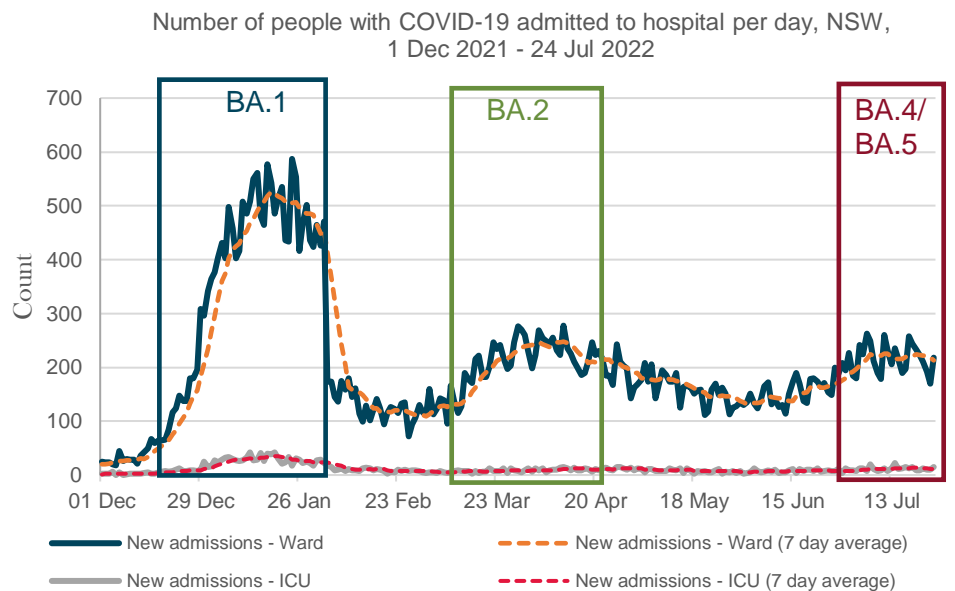
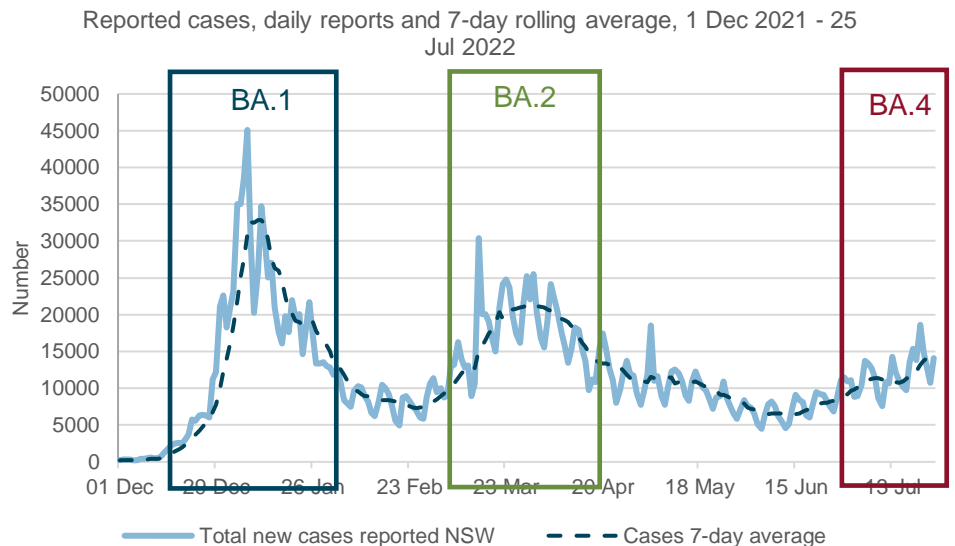
For BA.2, new admissions peaked around the same time as cases peaked.

Current daily admissions to hospital are much lower than the daily admissions during BA.1, and slightly lower than BA.2.

Hospital occupancy peaked in late January with a weekly average on the ward of 2,601 patients.

Occupancy levels are still increasing during the current wave. This is at a slower pace than BA.1 and a similar pace to BA.2, albeit from a high base of admitted cases.

## Cases, admissions and occupancy, Omicron waves



Note: From 27 Apr 2022, the definition of a COVID-19 positive hospitalisation changed so that admissions prior to 3 Feb 2022 are considered a COVID-19 positive hospitalisation, if the COVID-19 onset date is no more than 28 days before, or any time after, the admission date. For patients admitted on or after 3 Feb. a 14-day rule, rather than 28-day, is applied.

## References

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2. UK Health Security Agency (UKHSA). Risk assessment for SARS-CoV-2 variants VOC-22APR-03 and VOC-22APR-04 [Internet]. London: UKHSA; 2022 Jun 22 [cited 2022 Jul 26]. Available from: [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/1085552/22-june-2022-risk-assessment-for-VOC-22APR-03-and-VOC-22APR-04.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1085552/22-june-2022-risk-assessment-for-VOC-22APR-03-and-VOC-22APR-04.pdf).
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