

## NSW COVID-19 WEEKLY DATA OVERVIEW

### Epidemiological week 9 ending 5 March 2022

#### Summary

- Hospital and intensive care unit (ICU) admissions in people with COVID-19 stabilised in the last two weeks. People with COVID-19 may be admitted to hospital or ICU for reasons other than COVID-19.
- The number of reported cases increased in the last week.
- Reported case rates continue to be highest in people aged 10-19 years. Rates in this age group increased in the last week.
- Reported case rates increased in the Illawarra Shoalhaven Local Health District (LHD) in the last week. Reported case rates declined in the last week in Northern NSW LHD with the PCR testing rate decreasing over the same period, likely due to recent flooding and evacuations in this region.
- Most cases continue to be identified by rapid antigen test (RAT), particularly in regional areas.
- The Omicron variant (B.1.1.529) is currently the dominant COVID-19 variant of concern circulating in the NSW community, with both of the main sub-lineages of the Omicron variant (BA.1 and BA.2) circulating in NSW.
- Cases of influenza and other respiratory viral infections were generally below the seasonal average.

#### Section 1: Hospital admissions, intensive care unit (ICU) admissions and reported deaths

Figure 1. Number of people with COVID-19 admitted to hospital per day, NSW, in the four weeks to 5 March 2022

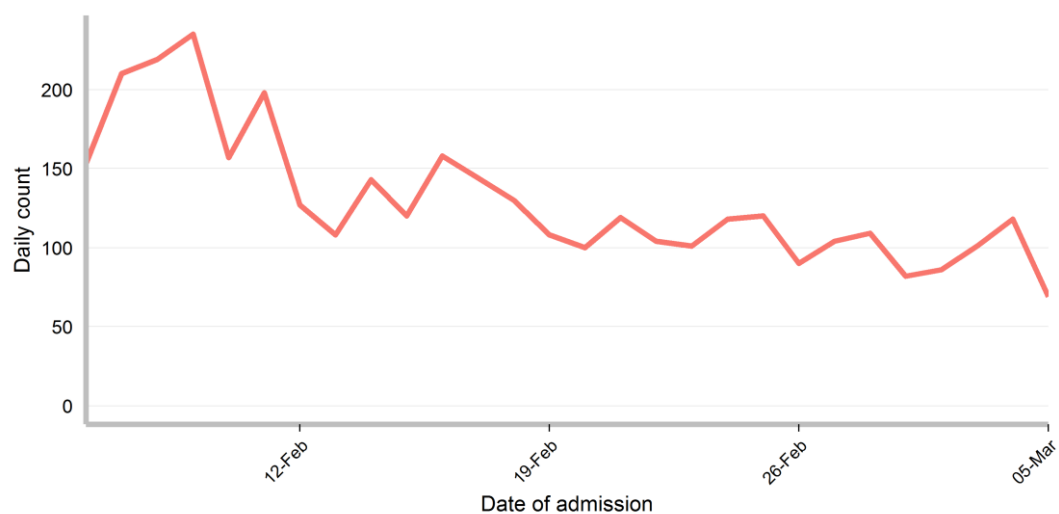
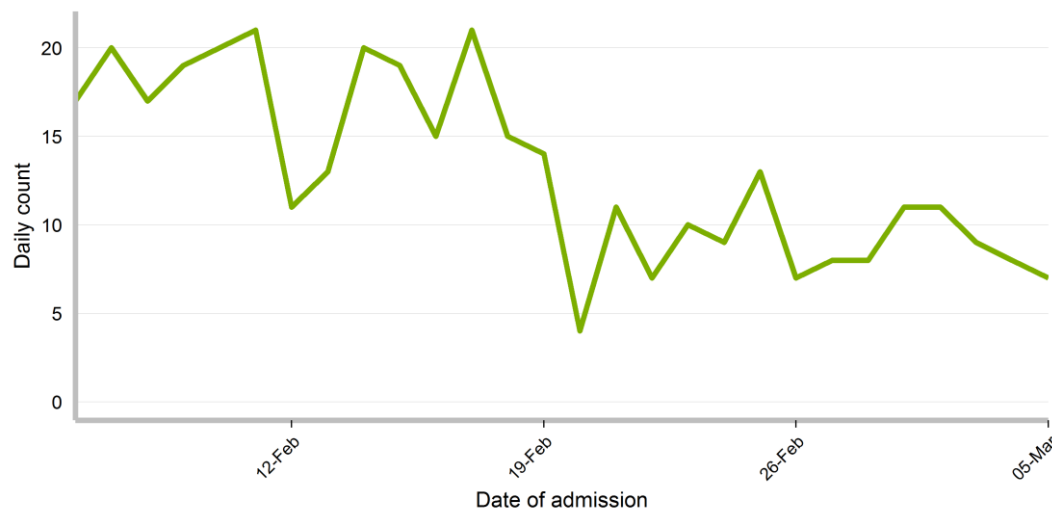


Figure 2. Number of people with COVID-19 admitted to intensive care units per day, NSW, in the four weeks to 5 March 2022



- Daily hospital admissions and ICU admissions in people with COVID-19 have plateaued in the last two weeks.
- The median time between test date and hospitalisation was four days.
- People with COVID-19 were included in the hospitalisation data if their admission date was within 14 days of their COVID-19 diagnosis. The reason for admission may be unrelated to COVID-19.

Table 1. Vaccination status of people with COVID-19 who were being cared for in hospital, NSW, in the week ending 5 March 2022

Vaccination status	Admitted to hospital (but not to ICU) (%)	Admitted to ICU (%)	Total
Three or more doses	99 (35%)	5 (17%)	104 (33%)
Two doses	89 (32%)	13 (43%)	102 (33%)
One dose	15 (5%)	2 (7%)	17 (5%)
No dose/Unknown	78 (28%)	10 (33%)	88 (28%)
Total	281 (100%)	30 (100%)	311 (99%)

Table 2. Reported deaths of people with COVID-19, by vaccination status, NSW, in the week ending 5 March 2022

Vaccination status	Number of deaths
Three or more doses	20 (43%)
Two doses	16 (35%)
One dose	2 (4%)
No dose/Unknown	8 (17%)
Total	46 (100%)

- COVID-19 vaccines are very effective in preventing the severe impacts of infection with the virus. More than 93 per cent of people aged 12 and over in NSW have received two doses of a COVID-19 vaccine, while almost 60 per cent of people eligible for their third dose have received it. With such high vaccination coverage in the community, a greater proportion of people admitted to hospital or ICU with COVID-19 are now vaccinated with two or three doses. However, when the size of the vaccinated and unvaccinated populations in NSW are considered, people who are not vaccinated remain far more likely to suffer severe COVID-19. NSW Health will continue to present this analysis in its monthly epidemiological reports. Analysis to date shows the minority of the overall population who have not been vaccinated are significantly overrepresented among patients in hospitals and ICUs with COVID-19.

Table 3. Age group of people with COVID-19 who were being cared for in hospital, NSW, in the week ending 5 March 2022

Age group (years)	Admitted to hospital (but not to ICU)(%)	Admitted to ICU (%)	Total
0-9	31 (11%)	2 (7%)	33 (11%)
10-19	11 (4%)	1 (3%)	12 (4%)
20-29	24 (9%)	0 (0%)	24 (8%)
30-39	22 (8%)	2 (7%)	24 (8%)
40-49	21 (7%)	2 (7%)	23 (7%)
50-59	22 (8%)	4 (13%)	26 (8%)
60-69	39 (14%)	6 (20%)	45 (14%)
70-79	40 (14%)	8 (27%)	48 (15%)
80-89	42 (15%)	4 (13%)	46 (15%)
90+	29 (10%)	1 (3%)	30 (10%)
Total	281 (100%)	30 (100%)	311 (100%)

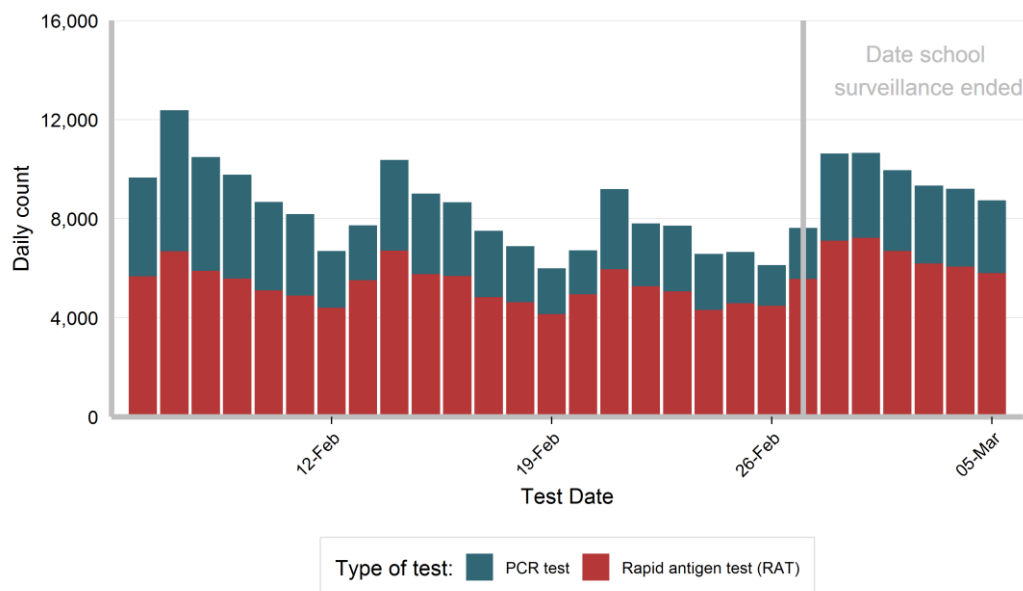
Table 4. Reported deaths of people with COVID-19, by age group, NSW, in the week ending 5 March 2022

Age-group (years)	Number of deaths
0-9	0 (0%)
10-19	0 (0%)
20-29	0 (0%)
30-39	1 (2%)
40-49	1 (2%)
50-59	3 (7%)
60-69	4 (9%)
70-79	10 (22%)
80-89	14 (30%)
90+	13 (28%)
Total	46 (100%)

- Despite the substantial protection from COVID-19 provided by vaccination, older age remains a significant risk factor for serious illness and death with COVID-19, particularly when combined with significant underlying health conditions.
- Eleven of the people who died with COVID-19 were aged care residents. Six of these people died in hospital and five died at an aged care facility.
- Four deaths occurred at home in the community. All four of these people were diagnosed with COVID-19 after death.
- Six of the people who died with COVID-19 were aged under 65 years. Two of these people were unvaccinated, one had received one vaccine dose, one had received two vaccine doses and two had received three vaccine doses. All had significant underlying health conditions.
- Reported deaths were classified as COVID-19 deaths if they met the surveillance definition in the Communicable Diseases Network of Australia's COVID-19 National Guidelines for Public Health Units. Under this definition, deaths are considered COVID-19 deaths for surveillance purposes if the person died with COVID-19, not necessarily because COVID-19 was the cause of death. Deaths may be excluded if there was a clear alternative cause of death that was unrelated to COVID-19 (e.g. major trauma).
- NSW Health does not report deaths under investigation by the Coroner until the Coroner issues their findings on the cause of death.

## Section 2: Number of people diagnosed with COVID-19

Figure 3. The number of people diagnosed with COVID-19, by date of test and type of test performed, NSW, in the four weeks to 5 March 2022



- Mandatory registration of positive RAT results commenced on 12 January 2022, with people encouraged to register their results from 1 January 2022 onwards.
- The School RAT Surveillance Program commenced at the beginning of school term 1 2022 (31 January 2022). Under this program, all school students and staff were requested to undertake two RATs per week. From Monday 28 February, all students and staff were provided with an allocation of RATs to use at their discretion, such as if they were experiencing COVID-19 symptoms.

Table 6. Number of people diagnosed with COVID-19, by test type, age group and Local Health District, NSW, reported in the week ending 5 March 2022

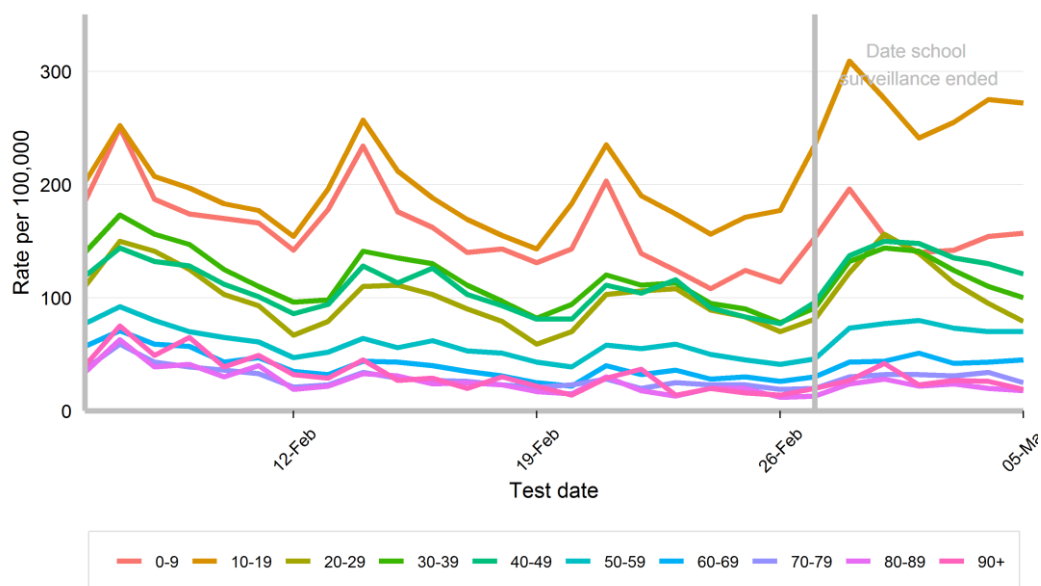
	People diagnosed by a PCR test	People diagnosed by rapid antigen test	Total
Age group (years)			
0-9	3,242 (29%)	7,764 (71%)	11,006 (100%)
10-19	4,546 (25%)	13,365 (75%)	17,911 (100%)
20-29	2,957 (32%)	6,164 (68%)	9,121 (100%)
30-39	3,299 (34%)	6,480 (66%)	9,779 (100%)
40-49	3,393 (36%)	6,042 (64%)	9,435 (100%)
50-59	1,925 (41%)	2,803 (59%)	4,728 (100%)
60-69	1,124 (45%)	1,348 (55%)	2,472 (100%)
70-79	628 (53%)	546 (47%)	1,174 (100%)
80-89	271 (68%)	130 (32%)	401 (100%)
90+	103 (81%)	24 (19%)	127 (100%)
<b>All ages</b>	<b>21,488 (32%)</b>	<b>44,666 (68%)</b>	<b>66,154 (100%)</b>
Local Health District (LHD)*			
Central Coast	691 (27%)	1,891 (73%)	2,582 (100%)
Illawarra Shoalhaven	1,991 (34%)	3,912 (66%)	5,903 (100%)
Nepean Blue Mountains	1,014 (27%)	2,721 (73%)	3,735 (100%)

	People diagnosed by a PCR test	People diagnosed by rapid antigen test	Total
Northern Sydney	2,511 (35%)	4,734 (65%)	7,245 (100%)
South Eastern Sydney	2,710 (38%)	4,351 (62%)	7,061 (100%)
South Western Sydney	2,631 (34%)	5,123 (66%)	7,754 (100%)
Sydney	2,114 (41%)	3,102 (59%)	5,216 (100%)
Western Sydney	3,503 (39%)	5,470 (61%)	8,973 (100%)
<b>Total metropolitan LHDs</b>	<b>17,165 (35%)</b>	<b>31,304 (65%)</b>	<b>48,469 (100%)</b>
Far West	50 (21%)	185 (79%)	235 (100%)
Hunter New England	2,191 (28%)	5,570 (72%)	7,761 (100%)
Mid North Coast	127 (8%)	1,558 (92%)	1,685 (100%)
Murrumbidgee	404 (17%)	1,977 (83%)	2,381 (100%)
Northern NSW	88 (9%)	924 (91%)	1,012 (100%)
Southern NSW	401 (24%)	1,278 (76%)	1,679 (100%)
Western NSW	683 (28%)	1,763 (72%)	2,446 (100%)
<b>Total rural and regional LHDs</b>	<b>3,944 (23%)</b>	<b>13,255 (77%)</b>	<b>17,199 (100%)</b>

\*Excludes cases in correctional settings and hotel quarantine.

- In the week ending 5 March 2022, the proportion of cases reported by RAT for regional LHDs (77%) was higher than for metropolitan LHDs (65%).
- The proportion of people reported with COVID-19 who were diagnosed by PCR test increased with age. The high proportion of reported children with COVID-19 who were diagnosed by RAT may in part be due to families of school children being given a supply of RATs.

Figure 4. Rate of people reported with COVID-19 per 100,000 population, by age group and test date, NSW, in the four weeks to 5 March 2022



- The rate of people reported with COVID-19 aged 10-19 years increased in the week ending 5 March 2022. The rate for all other age groups was generally stable.

Figure 5. Rate of people reported with COVID-19 per 100,000 population, by metropolitan Local Health District and test date, NSW, in the four weeks to 5 March 2022

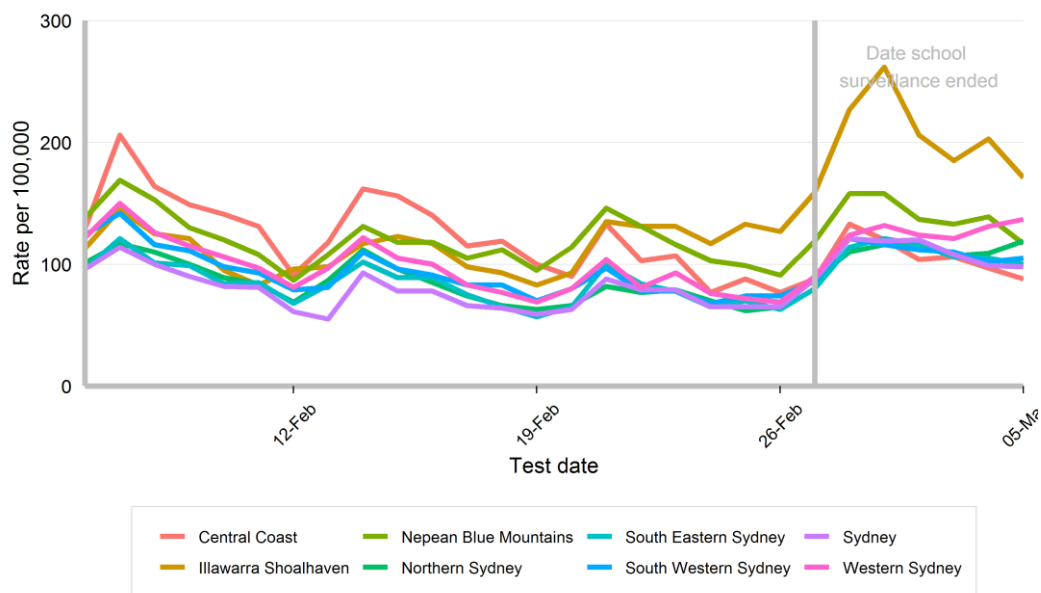
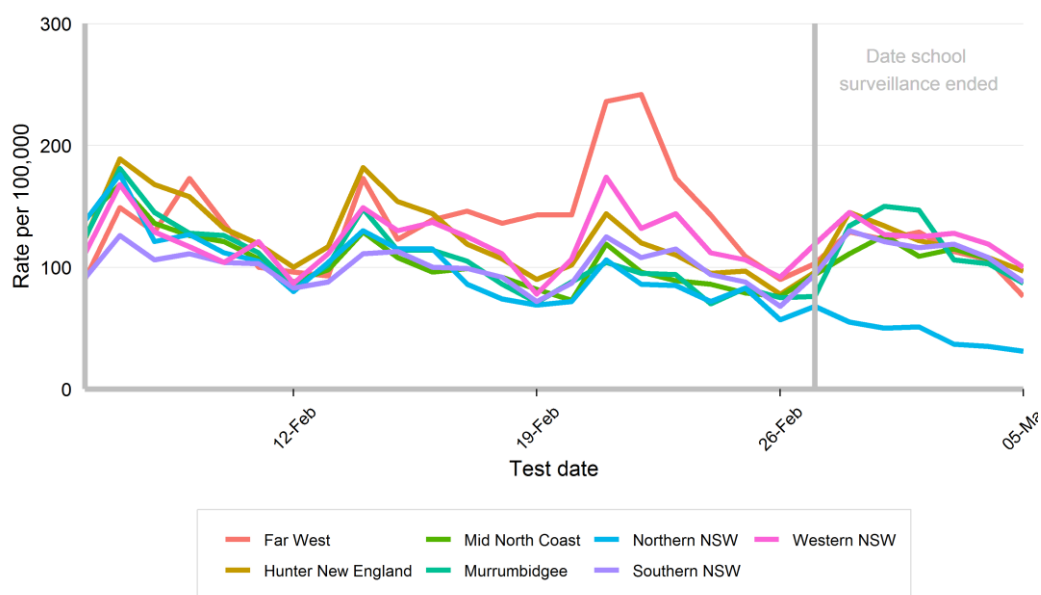


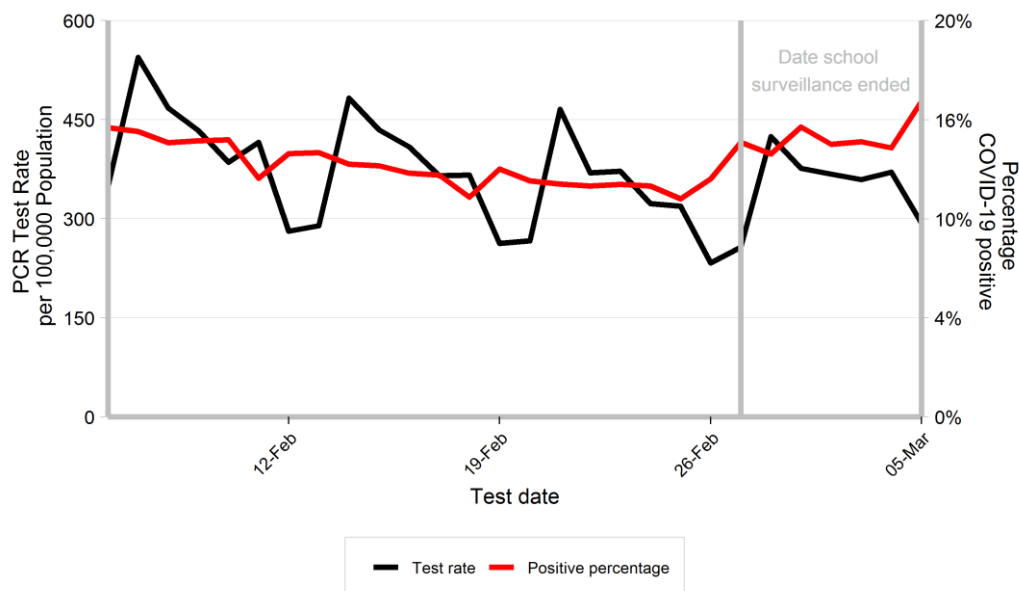
Figure 6. Rate of people reported with COVID-19 per 100,000 population, by rural and regional Local Health District and test date, NSW, in the four weeks to 5 March 2022



- The rate of people reported with COVID-19 in most LHDs has been generally stable over the last four weeks. The rate in the Illawarra Shoalhaven LHD increased in the last week, and the rate in Western Sydney and Northern Sydney LHDs started trending up towards the end of the week.
- The rate in Northern NSW LHD is noticeably lower than other LHDs in the last week. This is likely due to reduced testing because of the recent flooding and evacuations in the region.
- Cases of influenza and other respiratory viral infections were generally below the seasonal average. In the week ending 6 March 2022, 13 cases of Influenza A were identified. In comparison, between 2016-2019 the average number of cases identified in the same week was 240 cases. More detail in relation to other respiratory viruses will be available in the monthly epidemiological report.

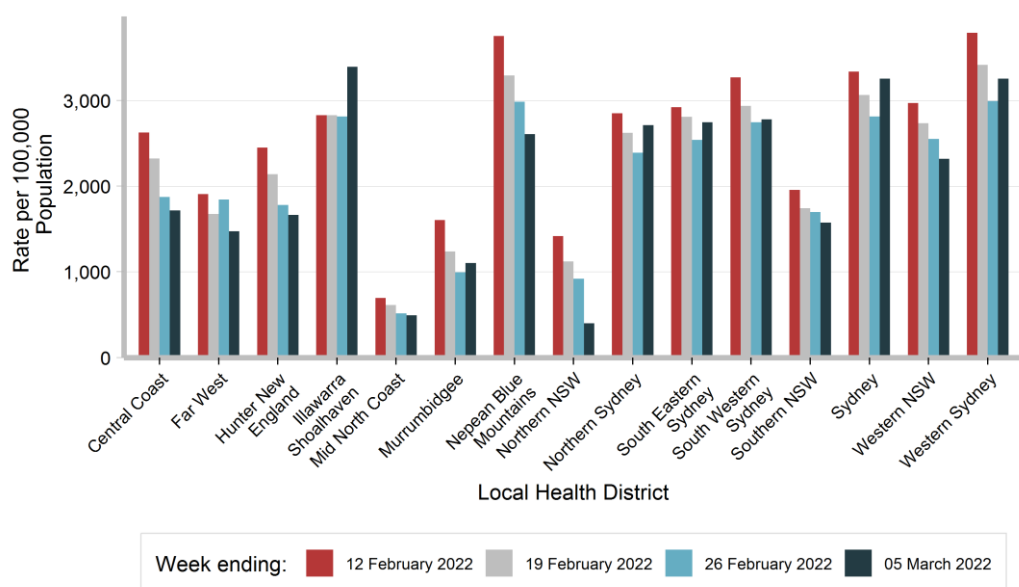
### Section 3: Testing

Figure 7. Rate of PCR tests for COVID-19 per 100,000 population per day, and percentage positive for COVID-19, by test date, NSW, in the four weeks to 5 March 2022



- There were 178,683 PCR tests reported in the week ending 5 March 2022.
- The rate of PCR tests per 100,000 population continued to gradually decline last week, but the percentage of PCR tests that were positive for COVID-19 increased above 16% at the end of last week.
- The proportion of people with PCR confirmed COVID-19 who were notified to NSW Health by the laboratory within 24 hours of specimen collection was 96% (23,061/24,019).

Figure 8. Rate of PCR tests for COVID-19 per 100,000 population by Local Health District and test date, NSW, in the four weeks to 5 March 2022



- PCR testing rates declined noticeably in Northern NSW LHD, likely due to the recent flooding and evacuations.

Figure 9. Variants of concern (VOCs) identified by whole genome sequencing (WGS) of virus from people who tested positive for SARS CoV-2 by PCR, by test date, NSW, in the four weeks to 5 March 2022

Variant	Week ending			
	12 February	19 February	26 February	5 March
Delta (B.1.617)	3	1	1	0
Omicron (BA.1)	326	269	231	66
Omicron (BA.2)	59	130	101	26
Total	388	400	333	92

- Variants that pose an increased risk to global public health are designated as variants of concern (VOCs) by the World Health Organization.
- VOCs are identified by WGS, which can only be conducted on PCR positive tests.
- There is a lag between the date a PCR test is taken and the date that the results of WGS are reported, therefore the count of VOCs for recent dates will increase over time.
- The Omicron variant (B.1.1.529) is currently the dominant COVID-19 variant circulating in the NSW community. Two sub-lineages of the Omicron variant (BA.1 and BA.2) are circulating in NSW.
- WGS is conducted on a sample of PCR positive tests. This is not a random sample, therefore the proportion of VOCs identified by WGS may not reflect the true proportion of each variant circulating in the community.
- Specimens are prioritised for WGS for people admitted to hospital and ICU, people in correctional settings and people who have recently returned from overseas.
- The BA.1 sub-lineage has a mutation that results in a failure of certain tests to detect the S gene. This mutation is not present in the BA.2 sub-lineage or the Delta variant, therefore specimens with the S gene detected are prioritised for WGS to determine whether they are the BA.2 sub-lineage or the Delta variant.