

NSW COVID-19 WEEKLY DATA OVERVIEW

Epidemiological week 11, ending 19 March 2022

Summary

- Hospital admissions in people diagnosed with COVID-19 this week increased to 409 admissions, 43% higher than people diagnosed with COVID-19 the previous week. Admissions to intensive care units (ICU) in people diagnosed with COVID-19 this week were generally stable. Some people with COVID-19 may be admitted to hospital or ICU for reasons other than COVID-19.
- There were 39 deaths reported this week in people who died with COVID-19, compared with 41 deaths in the previous week. Five of the deaths reported this week were in people aged under 65 years.
- There were 122,870 COVID-19 cases reported this week, an increase of 30% since the previous week.
- The reported case rate remained highest in people aged 10-19 years.
- Reported case rates increased in most Local Health Districts (LHDs) in the last week.
- Most cases continued to be identified by rapid antigen test (RAT), particularly in regional areas and in younger people.
- PCR testing rates increased further this week. The percentage of PCR tests that were positive increased to 19% on 19 March 2022, up from 17% the previous week.
- The BA.2 sub-lineage of the Omicron variant (B.1.1.529) is currently dominant, making up around 80% of SARS-CoV-2 detected. The BA.1 sub-lineage was also circulating in NSW but at lower levels.
- Cases of influenza were well below the seasonal average 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 admitted to hospital per day within 14 days of their diagnosis, NSW, 14 February to 19 March 2022

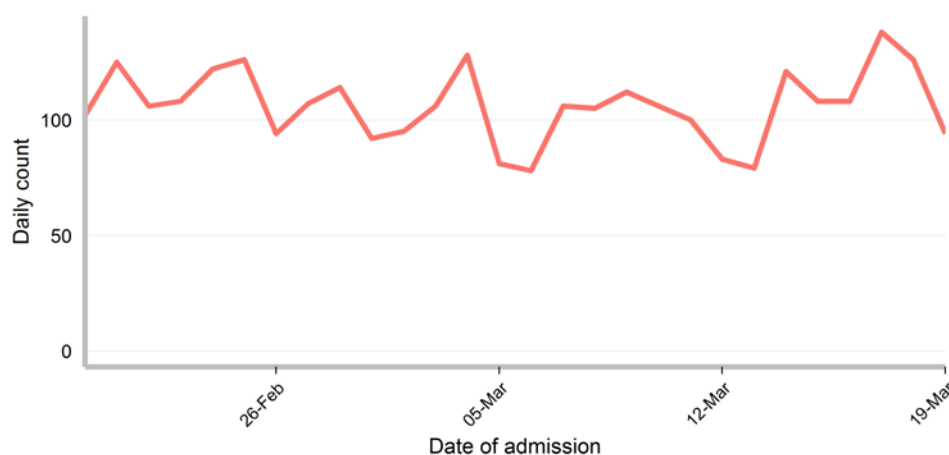
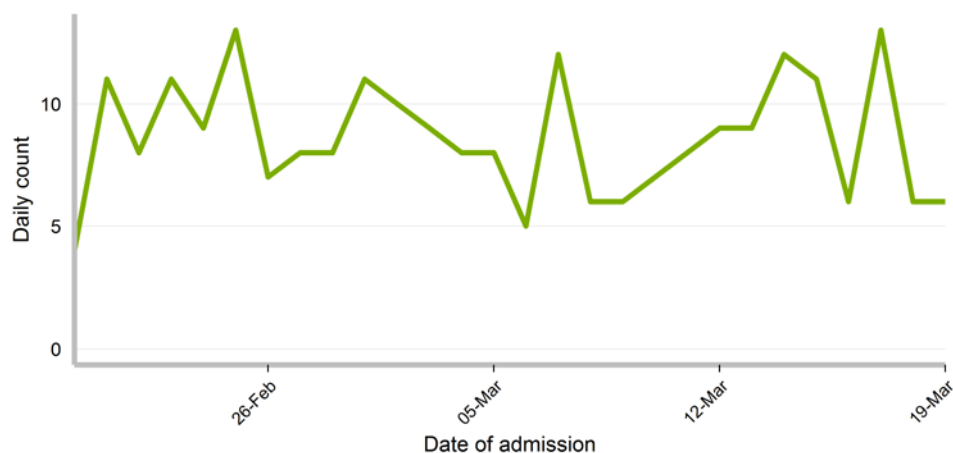


Figure 2. Number of people with COVID-19 admitted to intensive care units per day, NSW, 14 February to 19 March 2022



- People were considered hospitalised with COVID-19 if their admission date was within 14 days of their COVID-19 diagnosis, regardless of the reason for admission. In the last week 811 people diagnosed with COVID-19 in the previous 14 days were admitted to a NSW hospital compared with 699 in the week before. The reason for admission may be unrelated to COVID-19.

Table 1. Vaccination status of people diagnosed with COVID-19 in the week ending 19 March 2022 who were hospitalised, NSW

Vaccination status	Admitted to hospital (but not to ICU) (%)	Admitted to ICU (%)	Total
Three or more doses	141 (34%)	7 (21%)	148 (33%)
Two doses	126 (31%)	11 (32%)	137 (31%)
One dose	9 (2%)	0 (0%)	9 (2%)
No dose/Unknown	133 (33%)	16 (47%)	149 (34%)
Total	409 (100%)	34 (100%)	443 (100%)

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

Vaccination status	Number of deaths
Three or more doses	8 (21%)
Two doses	16 (41%)
One dose	1 (3%)
No dose/Unknown	14 (36%)
Total	39 (100%)

- To better understand trends, we compare hospitalised cases diagnosed with COVID-19 this week to those diagnosed with COVID-19 in the previous week. Hospital admissions in people diagnosed with COVID-19 this week increased by 43%, from 287 admissions the previous week to 409 admissions this week. ICU admissions were generally stable with 34 admissions this week compared to 32 admissions last week.
- COVID-19 vaccines are very effective in preventing the severe impacts of infections with the virus. Almost 95 per cent of people aged 16 and over in NSW have received two doses of a COVID-19 vaccine, while more than 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. The minority of the overall population who have not been vaccinated are significantly overrepresented among patients admitted to hospitals or ICUs, and among those who have died with COVID-19.

Table 3. Age group of people diagnosed with COVID-19 in the week ending 19 March 2022 who were hospitalised, NSW

Age group (years)	Admitted to hospital (but not to ICU) (%)	Admitted to ICU (%)	Total
0-9	49 (12%)	3 (9%)	52 (12%)
10-19	14 (3%)	3 (9%)	17 (4%)
20-29	41 (10%)	1 (3%)	42 (9%)
30-39	41 (10%)	8 (24%)	49 (11%)
40-49	34 (8%)	2 (6%)	36 (8%)
50-59	24 (6%)	3 (9%)	27 (6%)
60-69	49 (12%)	8 (24%)	57 (13%)
70-79	58 (14%)	3 (9%)	61 (14%)
80-89	74 (18%)	3 (9%)	77 (17%)
90+	25 (6%)	0 (0%)	25 (6%)
Total	409 (99%)	34 (100%)	443 (100%)

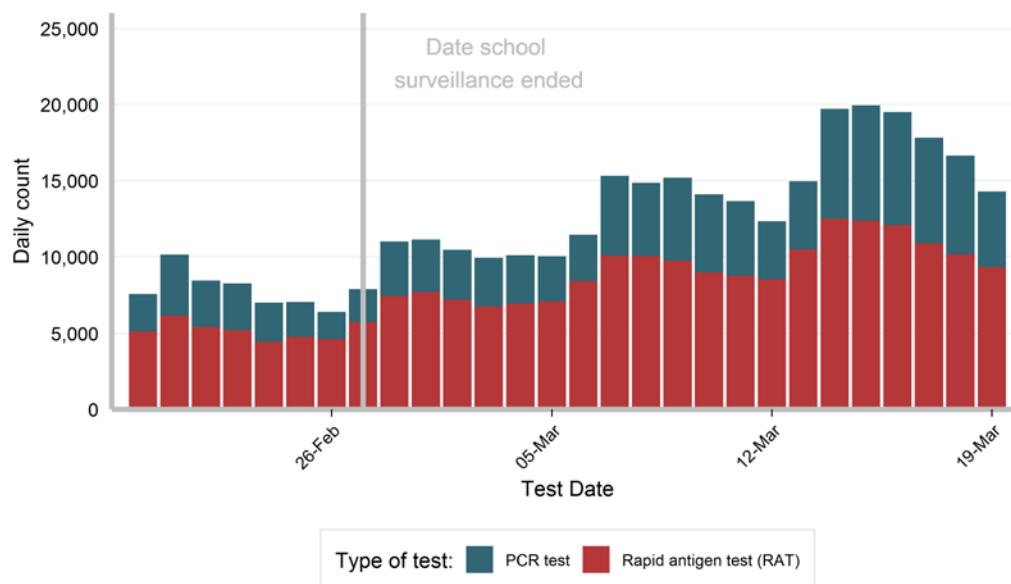
Table 4. Reported deaths of people with COVID-19, by age group, NSW, in the week ending 19 March 2022

Age-group (years)	Number of deaths
0-9	0 (0%)
10-19	0 (0%)
20-29	0 (0%)
30-39	1 (3%)
40-49	1 (3%)
50-59	2 (5%)
60-69	3 (8%)
70-79	10 (26%)
80-89	9 (23%)
90+	13 (33%)
Total	39 (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.
- Of the 39 people who were reported to have died with COVID-19, 13 were aged care residents. Four of these people died in hospital and nine died at an aged care facility.
- One of the deaths occurred at home. This person was diagnosed with COVID-19 after death.
- Five people aged under 65 years died with COVID-19. Of these, three were unvaccinated, and two had received two vaccine doses. All had significant underlying health conditions that increase the risk of severe disease from COVID-19.
- 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.

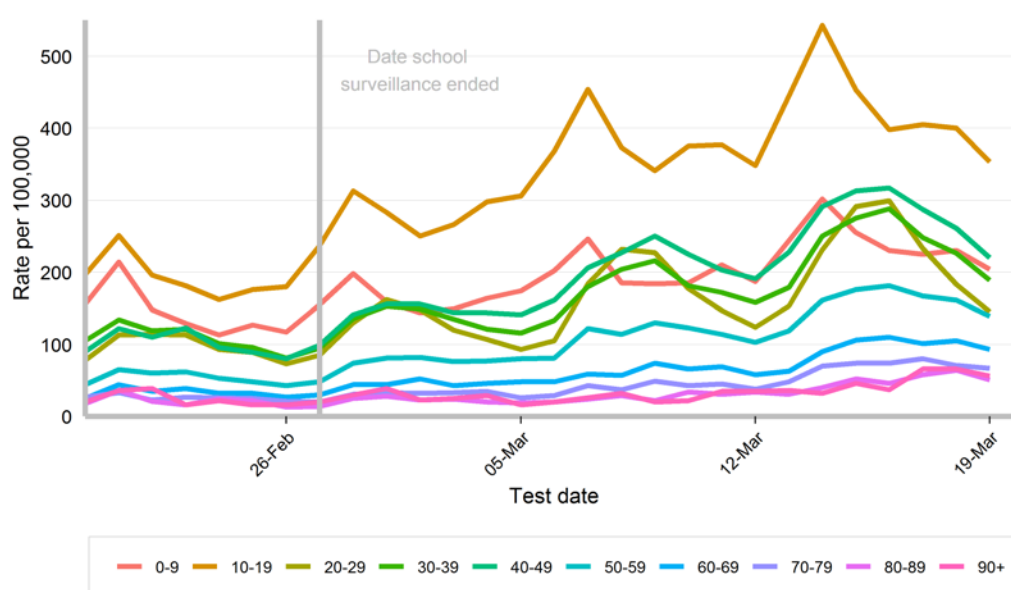
Section 2: Number of people diagnosed with COVID-19

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



- There were 122,870 COVID-19 cases reported this week, an increase of 30% since the previous week.
- Mandatory registration of positive RAT results commenced on 12 January 2022, with people encouraged to register their results from 1 January 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.

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



- The rate of people reported with COVID-19 per 100,000 population was highest in people aged 10-19 years and increased in all age groups compared with the previous week.

Figure 5. Daily 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 19 March 2022

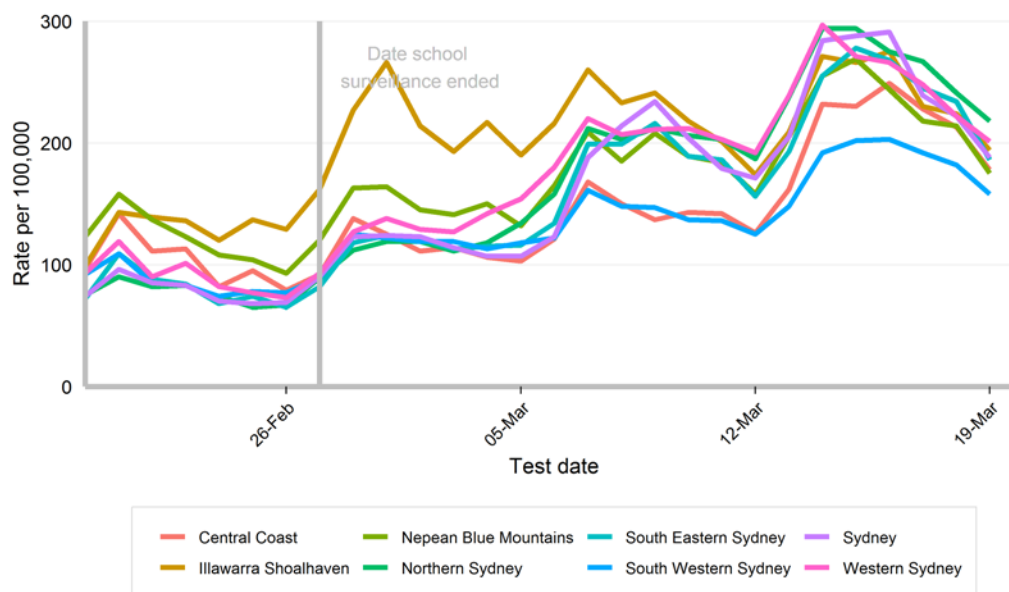
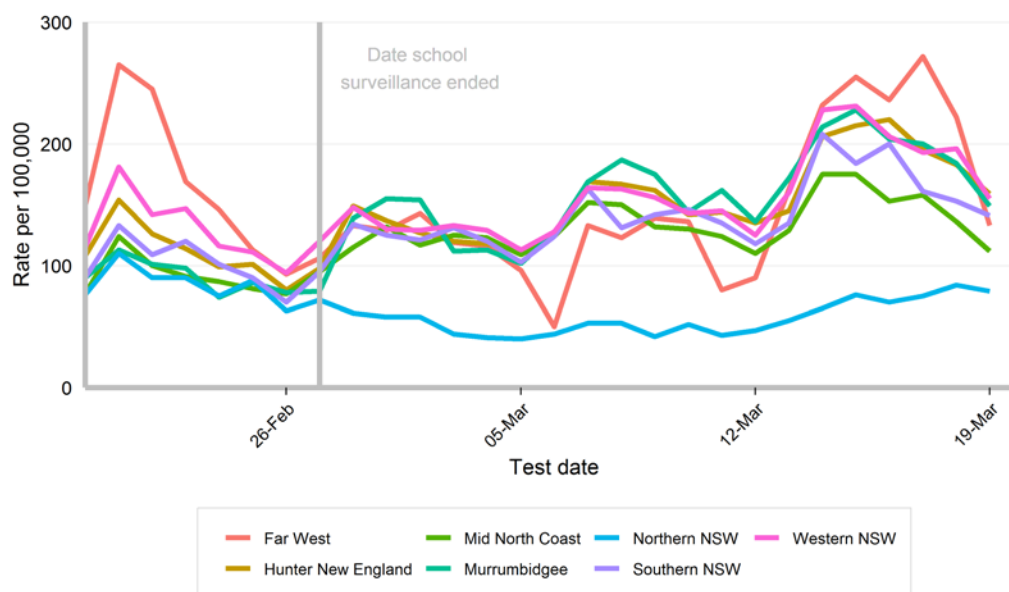


Figure 6. Daily rate of people reported with COVID-19 per 100,000 population, by rural and regional Local Health District and test date, NSW, in the four weeks to 19 March 2022



- The rate of people reported with COVID-19 per 100,000 population increased in most LHDs in the last week.
- The rate in Northern NSW LHD continues to be lower than other LHDs, associated with recent extreme weather in the region, but this rate has also increased in the last week.

Epidemiological week 11, ending 19 March 2022

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

	People diagnosed by a PCR test	People diagnosed by rapid antigen test	Total
Age group (years)			
0-9	5,496 (32%)	11,507 (68%)	17,003 (100%)
10-19	8,338 (29%)	20,414 (71%)	28,752 (100%)
20-29	6,787 (38%)	11,119 (62%)	17,906 (100%)
30-39	7,206 (37%)	12,064 (63%)	19,270 (100%)
40-49	7,538 (38%)	12,170 (62%)	19,708 (100%)
50-59	4,707 (44%)	5,969 (56%)	10,676 (100%)
60-69	2,715 (49%)	2,865 (51%)	5,580 (100%)
70-79	1,514 (54%)	1,290 (46%)	2,804 (100%)
80-89	571 (61%)	366 (39%)	937 (100%)
90+	168 (73%)	63 (27%)	231 (100%)
All ages	45,040 (37%)	77,827 (63%)	122,867 (100%)
Local Health District (LHD)*			
Central Coast	1,587 (30%)	3,658 (70%)	5,245 (100%)
Illawarra Shoalhaven	2,651 (38%)	4,308 (62%)	6,959 (100%)
Nepean Blue Mountains	2,129 (35%)	4,028 (65%)	6,157 (100%)
Northern Sydney	6,407 (37%)	10,978 (63%)	17,385 (100%)
South Eastern Sydney	6,601 (42%)	9,197 (58%)	15,798 (100%)
South Western Sydney	5,228 (40%)	7,962 (60%)	13,190 (100%)
Sydney	5,217 (44%)	6,661 (56%)	11,878 (100%)
Western Sydney	7,794 (43%)	10,461 (57%)	18,255 (100%)
Total metropolitan LHDs	37,614 (40%)	57,253 (60%)	94,867 (100%)
Far West	96 (21%)	360 (79%)	456 (100%)
Hunter New England	3,779 (30%)	8,783 (70%)	12,562 (100%)
Mid North Coast	235 (10%)	2,107 (90%)	2,342 (100%)
Murrumbidgee	661 (16%)	3,348 (84%)	4,009 (100%)
Northern NSW	270 (17%)	1,297 (83%)	1,567 (100%)
Southern NSW	709 (28%)	1,853 (72%)	2,562 (100%)
Western NSW	1,213 (31%)	2,680 (69%)	3,893 (100%)
Total rural and regional LHDs	6,963 (25%)	20,428 (75%)	27,391 (100%)

*Excludes cases in correctional settings and hotel quarantine.

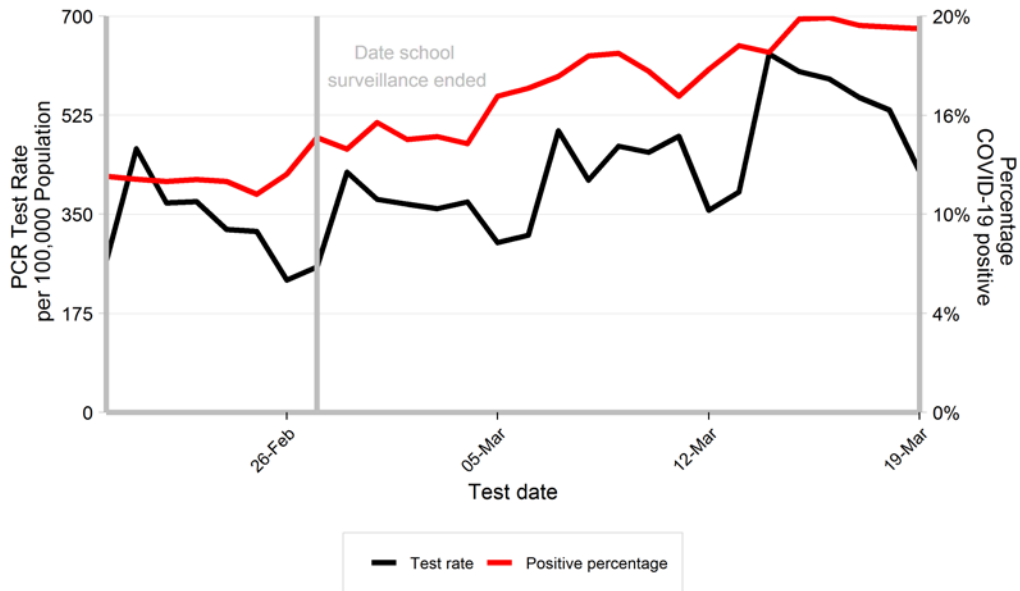
- The proportion of cases reported by RAT for regional LHDs (75%) was higher than for metropolitan LHDs (60%).
- The proportion of people reported with COVID-19 who were diagnosed by PCR test increased with age. The high proportion of reported children with COVID-19 who were diagnosed by RAT may in part be due to families of school children being given a supply of RATs.

Section 3: Number of people reported to be diagnosed with influenza and other respiratory viral infections

- Cases of influenza and other respiratory viral infections were generally below the seasonal average.
- In the week ending 13 March 2022, 29 cases of influenza A were identified. In comparison, between 2016-2019 the average number of cases identified in the same week was 266 cases.
- Two cases of influenza B were identified, compared with the 2016-2019 average of 55 cases for the same week.
- The proportion of positive PCR tests for influenza A or B remained very low. Of 17,657 PCR tests conducted for influenza, 0.16% were positive for influenza A and 0.01% were positive for influenza B.

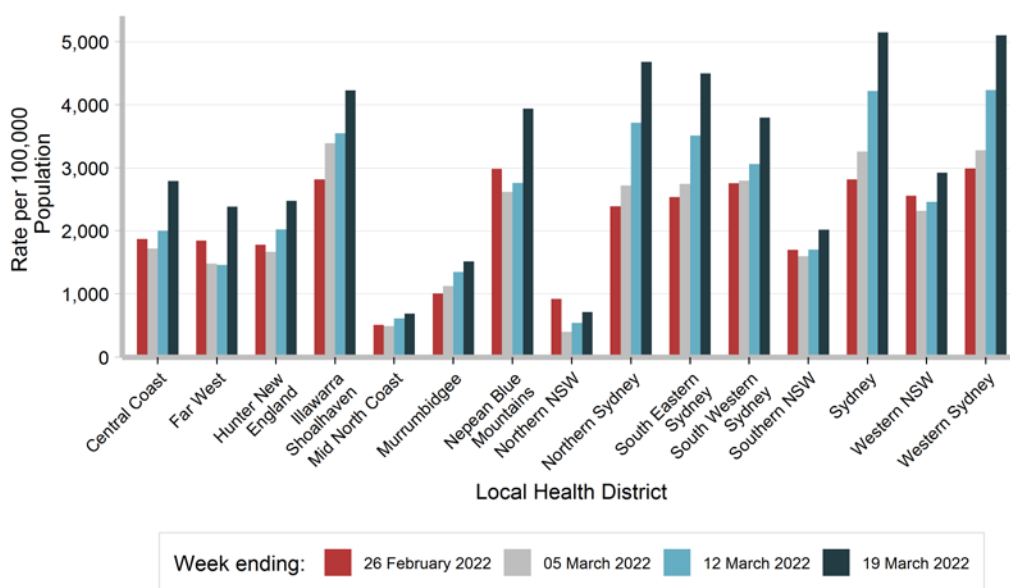
Section 4: Testing

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



- There were 250,070 PCR tests for COVID-19 reported in the week ending 19 March 2022.
- The percentage of PCR tests that were positive for COVID-19 increased to 19% by 19 March 2022, compared to 17% at the end of the previous 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 95% (47,198/49,916) in the week ending 19 March 2022.

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 19 March 2022



- PCR testing rates per 100,000 population increased in all LHDs in the week ending 19 March 2022.

Table 6. 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 19 March 2022

Variant	Week ending			
	26 February	05 March	12 March	19 March
Delta (B.1.617)	1	0	0	2
Omicron (BA.1)	215	202	129	11
Omicron (BA.2)	107	160	207	22
Total	323	362	336	35

- 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. Specimens are prioritised for WGS for people admitted to hospital and ICU. This is not a random sample, therefore the proportion of VoCs identified is not necessarily reflective of their distribution in the community.
- 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 NSW. Two sub-lineages of the Omicron variant (BA.1 and BA.2) are both circulating. The proportion of specimens identified as BA.2 has increased in recent weeks.
- The BA.1 sub-lineage of the Omicron variant has a mutation that results in a failure of certain PCR test platforms to detect the S gene. This mutation is not present in the BA.2 lineage, and therefore in a region where there is little Delta variant circulating the detection of an S gene can be used as a proxy to distinguish between the two Omicron sub-lineages.
- The PCR test used by a large private pathology provider in NSW can routinely report on detection of the S gene in a specimen positive for SARS-CoV-2. The proportion of SARS-CoV-2 positive specimens with the S gene detected increased to around 80% by 15 March 2022. This indicates that the BA.2 sub-lineage made up around 80% of the SARS-CoV-2 detected in NSW by 15 March 2022.
- The Delta (B.1.617.2) variant also results in detection of an S gene in SARS-CoV-2 positive specimens. However, recent whole genome sequencing (WGS) of NSW specimens has identified very few Delta sequences, and so it is very likely that the specimens with S gene detected are the BA.2 Omicron sub-lineage.