

NSW COVID-19 WEEKLY DATA OVERVIEW

Epidemiological week 10, ending 12 March 2022

Summary

- Hospital and intensive care unit (ICU) admissions in people with COVID-19 have plateaued in the last three weeks. Some people with COVID-19 may be admitted to hospital or ICU for reasons other than COVID-19.
- The number of reported COVID-19 cases increased in the last week. The reported case rate remains highest in people aged 10-19 years.
- Reported case rates increased in metropolitan Local Health Districts (LHDs) in the last week. Reported case rates in rural and regional LHDs remained stable.
- 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. Both of the main sub-lineages of the Omicron variant (BA.1 and BA.2) were circulating in NSW, with the proportion of BA.2 increasing in recent weeks to around 75% by 12 March 2022.
- Cases of influenza were well below the seasonal average and other respiratory viral infections were generally below the seasonal average.

Section 1: Hospital admissions, ICU admissions and reported deaths

Figure 1. Number of people with COVID-19 admitted to hospital per day, NSW, in the four weeks to 12 March 2022

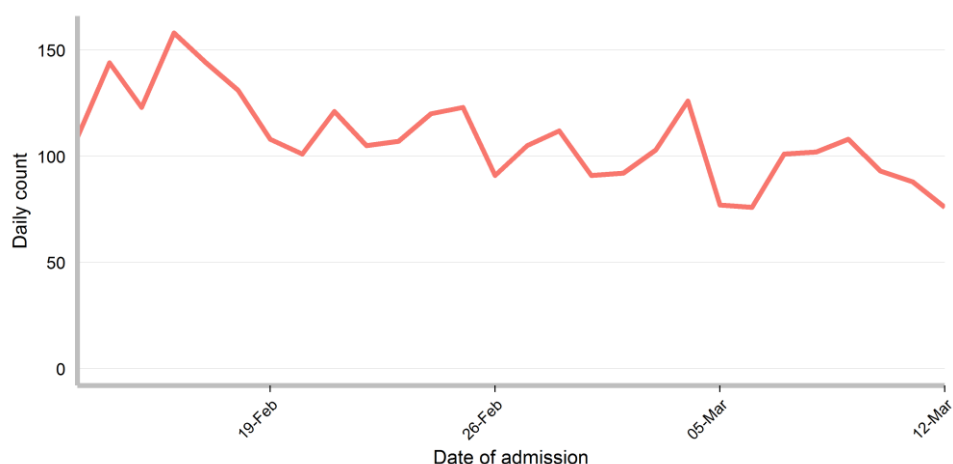
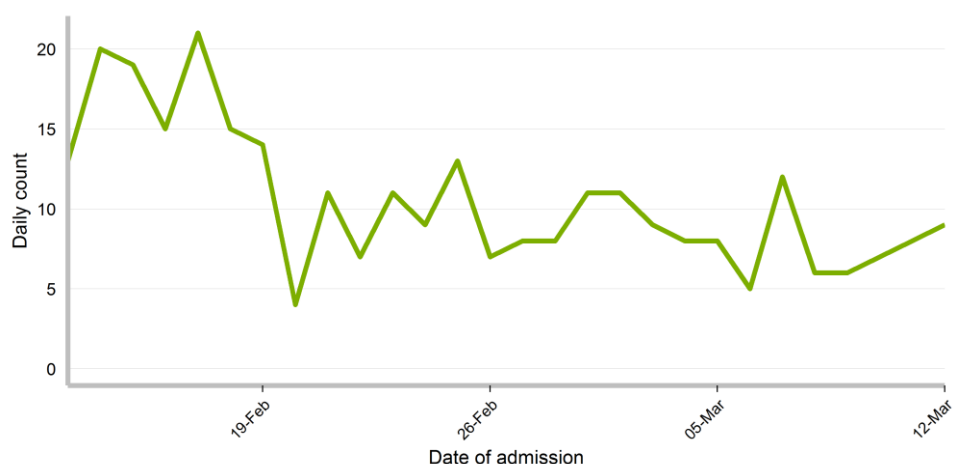


Figure 2. Number of people with COVID-19 admitted to intensive care units per day, NSW, in the four weeks to 12 March 2022



- Daily hospital admissions and ICU admissions in people with COVID-19 have plateaued in the last three weeks.

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- 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 in some people.

Table 1. Vaccination status of people with COVID-19 who were being cared for in hospital, NSW, in the week ending 12 March 2022

Vaccination status	Admitted to hospital (but not to ICU) (%)	Admitted to ICU (%)	Total
Three or more doses	87 (30%)	8 (25%)	95 (30%)
Two doses	89 (31%)	9 (28%)	98 (31%)
One dose	7 (2%)	4 (12%)	11 (3%)
No dose/Unknown	104 (36%)	11 (34%)	115 (36%)
Total	287 (99%)	32 (99%)	319 (100%)

Table 2. Reported deaths of people with COVID-19, by vaccination status, NSW, in the week ending 12 March 2022

Vaccination status	Number of deaths
Three or more doses	11
Two doses	22
One dose	0
No dose/Unknown	8
Total	41

- 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. 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 12 March 2022

Age group (years)	Admitted to hospital (but not to ICU) (%)	Admitted to ICU (%)	Total
0-9	36 (13%)	2 (6%)	38 (12%)
10-19	16 (6%)	2 (6%)	18 (6%)
20-29	22 (8%)	5 (16%)	27 (8%)
30-39	24 (8%)	0 (0%)	24 (8%)
40-49	19 (7%)	3 (9%)	22 (7%)
50-59	25 (9%)	5 (16%)	30 (9%)
60-69	29 (10%)	6 (19%)	35 (11%)
70-79	59 (21%)	8 (25%)	67 (21%)
80-89	39 (14%)	1 (3%)	40 (13%)
90+	18 (6%)	0 (0%)	18 (6%)
Total	287 (100%)	32 (100%)	319 (100%)

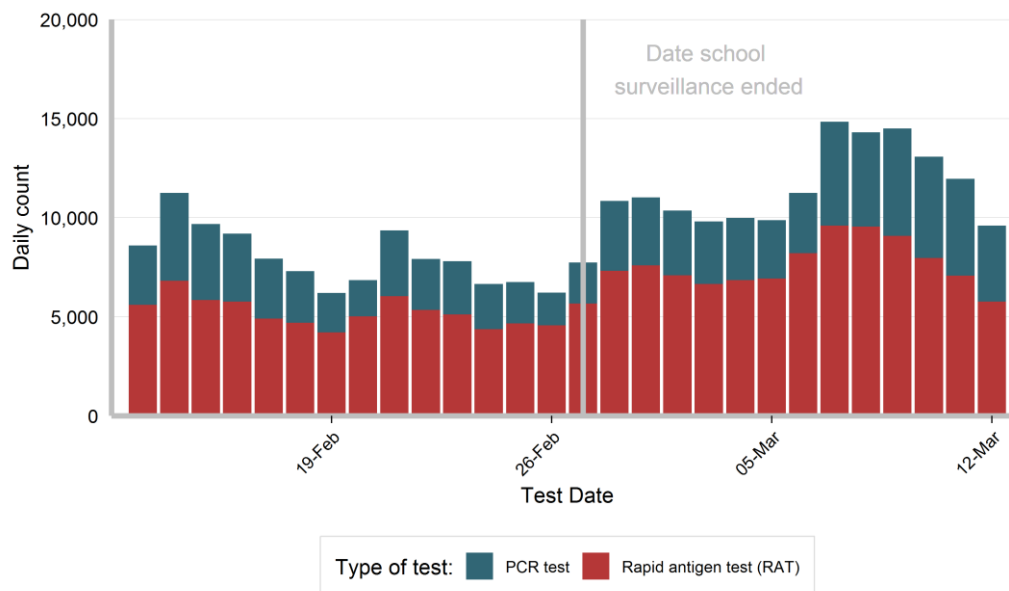
Table 4. Reported deaths of people with COVID-19, by age group, NSW, in the week ending 12 March 2022

Age-group (years)	Number of deaths
0-9	0
10-19	0
20-29	0
30-39	0
40-49	1
50-59	2
60-69	5
70-79	11
80-89	12
90+	10
Total	41

- 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.
- Nine of the people who died with COVID-19 were aged care residents. Five of these people died in hospital and four died at an aged care facility.
- None of the deaths occurred at home.
- Four people aged under 65 years who died with COVID-19. Of these, one was unvaccinated, one had received two doses of a COVID-19 vaccine and two had received three doses of a COVID-19 vaccine.
- 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.

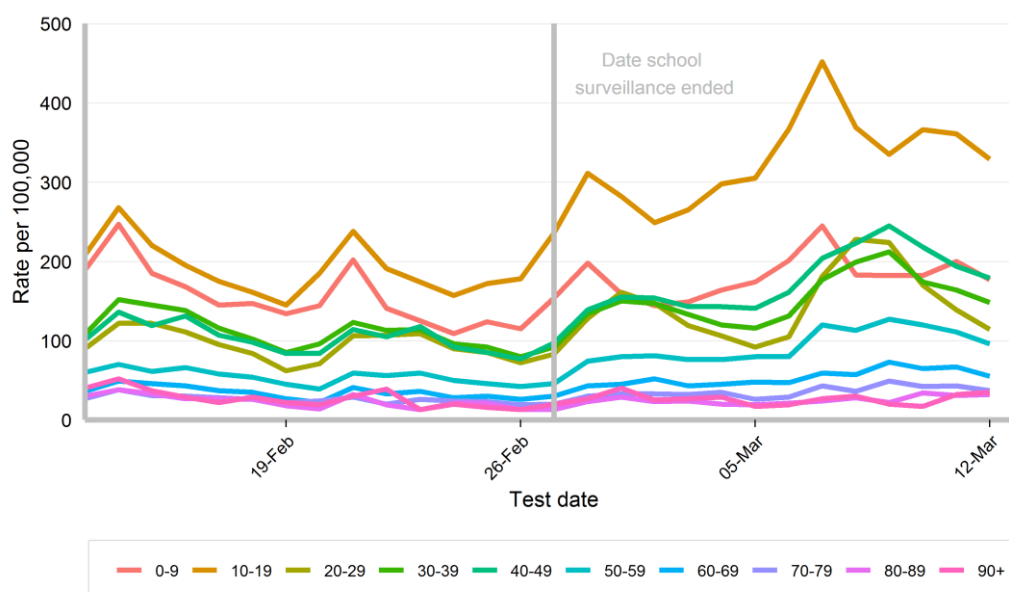
Section 2: Number of people reported to be diagnosed with COVID-19

Figure 3. Number of people diagnosed with COVID-19, by date of test and type of test performed, NSW, in the four weeks to 12 March 2022



- Mandatory registration of positive RAT results commenced on 12 January 2022, with people encouraged to register their results from 1 January onwards.
- Compared with other groups, a relatively higher proportion of COVID-19 infections may have been diagnosed by RAT among school aged children as a result of the School RAT Surveillance Program, which 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. Rate of people reported with COVID-19 per 100,000 population, by age group and test date, NSW, in the four weeks to 12 March 2022



- The rate of people reported with COVID-19 per 100,000 population is highest in people aged 10-19 years.

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 12 March 2022

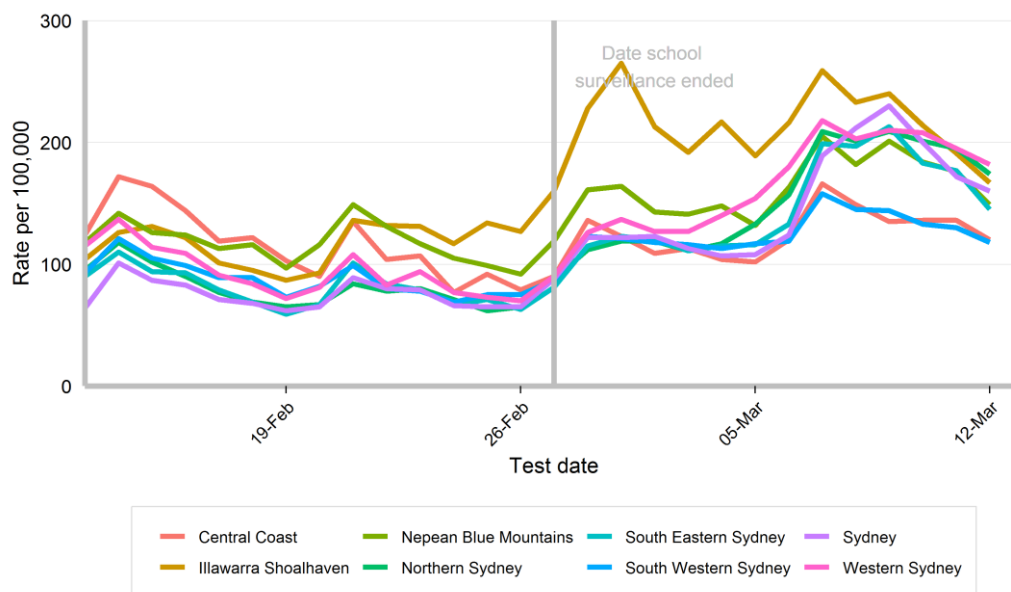
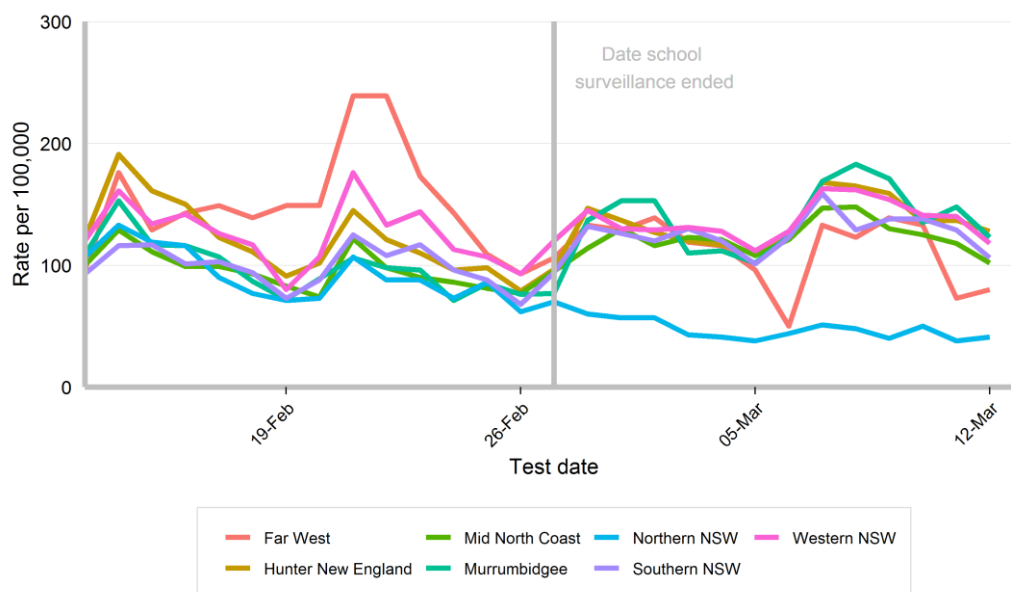


Figure 6. Rate of people reported with COVID-19 per 100,000 population, by rural and regional Local Health District and test date, NSW, in the four weeks to 12 March 2022



- The rate of people reported with COVID-19 per 100,000 population increased in metropolitan LHDs at the start of the last week. In rural and regional LHDs, the rate remained generally stable.
- 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 extreme weather.

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Table 5. Number of people diagnosed with COVID-19, by test type, age group and Local Health District, NSW, reported in the week ending 12 March 2022

	People diagnosed by a PCR test	People diagnosed by RAT	Total
Age group (years)			
0-9	4,293 (31%)	9,475 (69%)	13,768 (100%)
10-19	6,895 (28%)	17,863 (72%)	24,758 (100%)
20-29	4,692 (35%)	8,837 (65%)	13,529 (100%)
30-39	4,962 (35%)	9,076 (65%)	14,038 (100%)
40-49	5,412 (37%)	9,244 (63%)	14,656 (100%)
50-59	3,099 (42%)	4,336 (58%)	7,435 (100%)
60-69	1,666 (47%)	1,875 (53%)	3,541 (100%)
70-79	864 (54%)	749 (46%)	1,613 (100%)
80-89	312 (61%)	202 (39%)	514 (100%)
90+	90 (74%)	32 (26%)	122 (100%)
All ages	32,285 (34%)	61,689 (66%)	93,974 (100%)
Local Health District (LHD)*			
Central Coast	864 (26%)	2,504 (74%)	3,368 (100%)
Illawarra Shoalhaven	2,253 (36%)	4,071 (64%)	6,324 (100%)
Nepean Blue Mountains	1,450 (30%)	3,464 (70%)	4,914 (100%)
Northern Sydney	4,446 (35%)	8,383 (65%)	12,829 (100%)
South Eastern Sydney	4,712 (40%)	7,203 (60%)	11,915 (100%)
South Western Sydney	3,597 (37%)	6,188 (63%)	9,785 (100%)
Sydney	3,596 (40%)	5,310 (60%)	8,906 (100%)
Western Sydney	5,891 (40%)	8,723 (60%)	14,614 (100%)
Total metropolitan LHDs	26,809 (37%)	45,846 (63%)	72,655 (100%)
Far West	62 (28%)	158 (72%)	220 (100%)
Hunter New England	2,799 (29%)	6,875 (71%)	9,674 (100%)
Mid North Coast	165 (8%)	1,841 (92%)	2,006 (100%)
Murrumbidgee	566 (18%)	2,561 (82%)	3,127 (100%)
Northern NSW	166 (17%)	800 (83%)	966 (100%)
Southern NSW	507 (25%)	1,488 (75%)	1,995 (100%)
Western NSW	844 (30%)	2,013 (70%)	2,857 (100%)
Total rural and regional LHDs	5,109 (25%)	15,736 (75%)	20,845 (100%)

*Excludes cases in correctional settings and hotel quarantine.

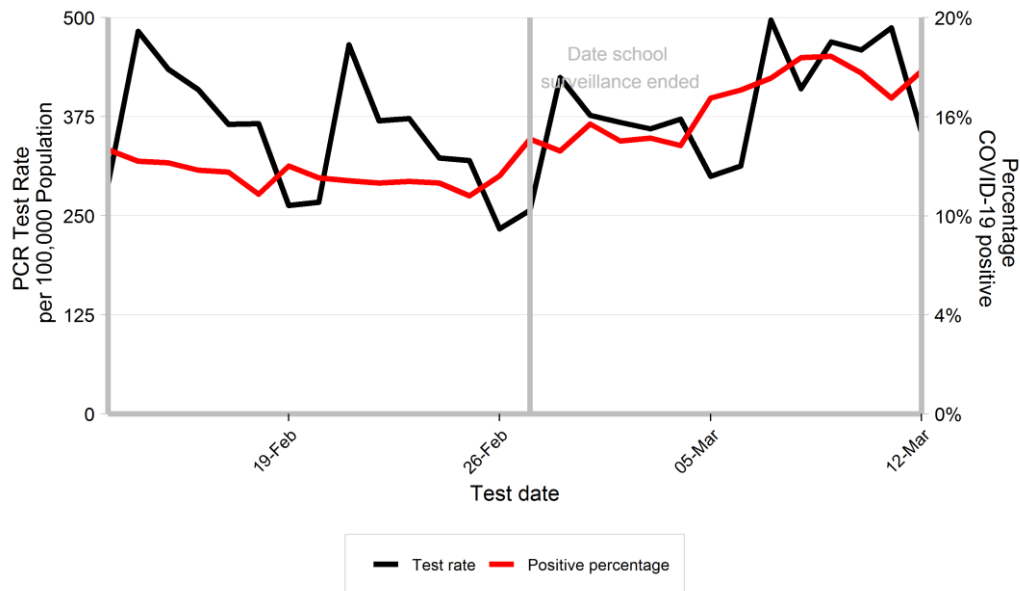
- There was variation in the proportion of people reported with COVID-19 by test type and Local Health District (LHD). In the week ending 12 March 2022, the proportion of cases reported by RAT for regional LHDs (74%) was higher than for metropolitan LHDs (61%).
- The proportion of people reported with 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 6 March 2022, 24 cases of influenza A were identified. In comparison, between 2016-2019 the average number of cases identified in the same week was 240 cases.
- No cases of influenza B were identified, in comparison to the 2016-2019 average of 52 cases for the same week.

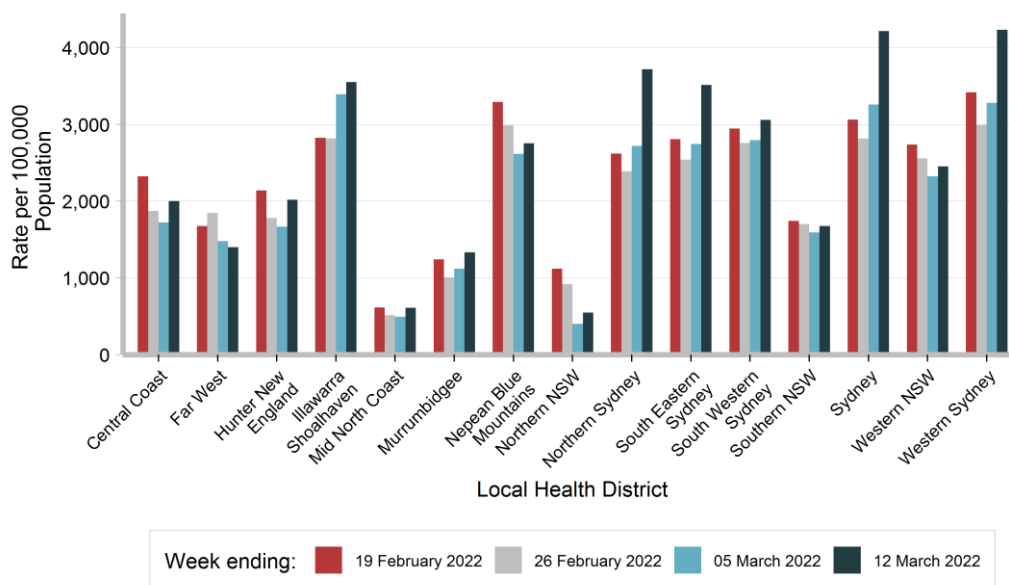
Section 4: Testing

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 12 March 2022



- There were 207,265 PCR tests reported in the week ending 12 March 2022.
- The percentage of PCR tests that were positive for COVID-19 increased over the last four weeks from 13% on 13 February 2022 to 17% on 12 March 2022.
- 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% (33,945/35,620) in the week ending 12 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 12 March 2022



- PCR testing rates increased in all LHDs, except for Far West LHD, in the week ending 12 March 2022. There were large increases in the rate of PCR testing in Northern Sydney, South Eastern Sydney, Sydney and Western Sydney LHDs.

Table 7. 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 12 March 2022

Variant	Week ending			
	19 February	26 February	05 March	12 March
Delta (B.1.617)	0	0	0	0
Omicron (BA.1)	249	212	192	90
Omicron (BA.2)	138	104	150	111
Total	387	316	342	201

- 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, people in correctional settings and people who have recently returned from overseas. 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 the NSW community. Two sub-lineages of the Omicron variant (BA.1 and BA.2) are both circulating in NSW. The proportion of specimens that have been 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 test used by one 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 an S gene has increased and was around 75% by 12 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.

Topic-specific appendices will be included in the NSW COVID-19 Weekly Data Overview every four weeks to provide more detailed data on key topics of interest.

Appendix A: Aboriginal people reported to be diagnosed with COVID-19

Demographics of infections among Aboriginal people by gender, age, vaccination status and severe outcome, NSW, 30 January to 26 February 2022

	Week ending				Year to date*
	5 Feb	12 Feb	19 Feb	26 Feb	
Sex					
Female	2,041	1,722	1,573	1,376	19,724
Male	1,688	1,367	1,218	1,152	16,534
Non-specified or non-binary	9	5	1	7	50
Age (years)					
0-9	528	500	489	387	5,571
10-19	725	659	637	624	7,434
20-29	903	702	620	556	9,210
30-39	705	596	508	476	6,062
40-49	435	340	302	278	3,859
50-59	270	171	139	145	2,498
60+	172	126	97	69	1,671
Vaccine status					
Three or more effective doses	194	184	217	264	1,352
Two effective doses	2,056	1,570	1,329	1,177	21,118
One effective dose	55	54	53	53	560
No effective dose	664	665	661	528	7,722
Unknown	769	621	532	513	5,556
Severe outcome					
Hospitalised	54	37	26	17	476
Admitted to ICU	6	5	4	2	57
Death	2	1	1	1	22
Total	3,738	3,094	2,792	2,535	36,308

*This table excludes 180,433 positive RATS registered up to 19 January 2022 because detailed demographic information was not available for these cases. Totals includes people with an unknown date of birth and therefore the age-specific case number may not sum to the total.

- Aboriginal and Torres Strait Islander communities are recognised as a priority group due to key drivers of increased risk of transmission and severity of COVID-19 which include mobility, remoteness, barriers to healthcare access which may include institutional racism and mistrust of mainstream health services, crowded and inadequate housing, and burden of disease.
- Since 1 January 2022, the proportion of COVID-19 cases who report being Aboriginal is highest for females and people aged 20-29 years.
- Data on Aboriginal cases needs to be interpreted cautiously. NSW Health is no longer interviewing every case and Aboriginal status is now recorded through the short text message survey sent at the time of notification. However, not all cases respond to this message and hence Aboriginality may be under-reported (complete data is available for 75% of cases).

Hospitalisations, ICU admissions and deaths among Aboriginal people diagnosed with COVID-19, NSW, from 1 January to 26 February 2022

Clinical severity	1 Jan – 26 Feb 2022*	
	Aboriginal people (% of total cases)	Non-Aboriginal people/unknown status (% of total cases)
Hospitalised	476 (1.3%)	9,973 (1.1%)
Admitted to ICU	57 (0.2%)	956 (0.1%)
Death	22 (0.1%)	1,126 (0.1%)
Total Cases	36,308	877,222

* Note, table categories are not mutually exclusive. Hospitalised includes cases admitted to ICU; deaths may occur with or without being admitted to hospital or ICU. *Proportions do not include 180,433 positive RATS registered up to 19 January 2022

Hospitalisations, ICU admissions and deaths by age group among Aboriginal people diagnosed with COVID-19, NSW, from 1 January 2022 to 26 February 2022

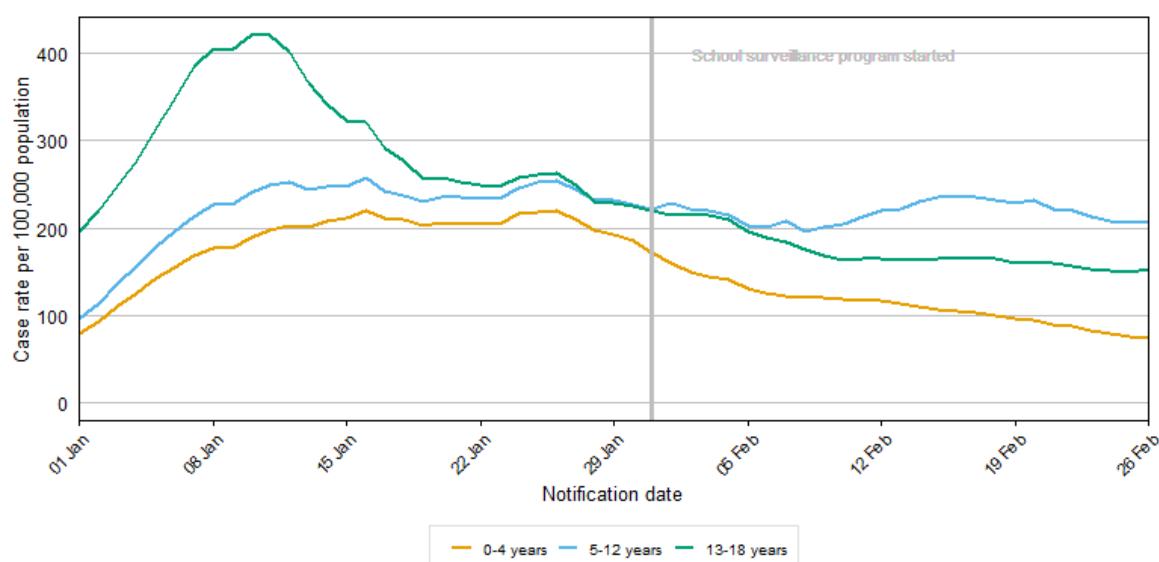
Age group	Outcome		
	Hospitalisation	ICU admission	Death
0-19	96	7	0
20-49	219	22	3
50+	161	28	19
Total	476	57	22

* Note, table categories are not mutually exclusive. Hospitalised includes cases admitted to ICU; deaths may occur with or without being admitted to hospital or ICU.

- People with COVID-19 were included in the hospitalisation data above if their admission date was within 14 days of their COVID-19 diagnosis. The reason for admission may be unrelated to COVID-19 in some people.

Appendix B: Early Childhood Education and Care (ECEC) and school aged children

Seven day backward rolling average of COVID-19 case rate per 100,000 population for children aged 0-18 years, by age group and notification date, from 1 January to 26 February 2022



- Mandatory registration of positive RAT results commenced on 12 January 2022, with people encouraged to register their results collected from 1 January onwards. Demographic information was not available for RATs registered prior to 20 January 2022, therefore RATs registered before this date are not included in this section.
- The school RAT surveillance program commenced at the beginning of the school term. School students were requested to undertake two RATs per week during this reporting period.
- Since the beginning of the school term, COVID-19 notifications in cases aged 5-12 years were stable. Cases in children aged 13-18 years had declined from their peak in early January when there was widespread community COVID-19 transmission across all age groups but were stable for the last two weeks of the period. Cases in children aged 0-4 years declined since the end of January.

Number of cases in children aged 0-18 years by age group and test type, 1 January to 26 February 2022

		Age group (years)			
		0-4	5-12	13-18	Total
1 January – 29 January 2022 (school holidays)	PCR cases	26,505	47,847	44,375	118,727
	RAT cases	3,656	8,186	6,211	18,053
School Term					
Week ending 5 February 2022 (Week 1 school term)	PCR cases	2,576	4,311	2,906	9,793
	RAT cases	2,325	7,555	5,064	14,944
Week ending 12 February 2022 (Week 2 school term)	PCR cases	2,108	4,544	2,286	8,938
	RAT cases	2,288	8,302	4,462	15,052
Week ending 19 February 2022 (Week 3 school term)	PCR cases	1,529	4,259	2,037	7,825
	RAT cases	2,066	9,129	4,476	15,671
Week ending 26 February 2022 (Week 4 school term)	PCR cases	1,173	3,992	1,990	7,155
	RAT cases	1,582	8,171	4,248	14,001
Since 30 January 2022 (school term)	PCR cases	7,386	17,106	9,219	33,711
	RAT cases	8,261	33,157	18,250	59,668

- During the school holidays, cases in children aged 5-18 years were predominantly identified by PCR tests. Since school returned and the commencement of the school RAT surveillance program, most cases were identified by RATs. This trend is also seen in children aged 0-4 years but to a lesser extent as they were not part of the school RAT surveillance program.

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Number of cases in children aged 0-18 years by Local Health District of residence*, 30 January to 26 February 2022

	Week ending 5 Feb 2022	Week ending 12 Feb 2022	Week ending 19 Feb 2022	Week ending 26 Feb 2022	Year to date
Central Coast	1,355	1,480	1,387	1,067	11,643
Far West	86	117	142	154	688
Hunter New England	3,279	3,608	3,666	3,006	28,003
Illawarra Shoalhaven	1,323	1,107	1,175	1,307	12,364
Mid North Coast	930	882	735	609	5,785
Murrumbidgee	1,050	1,027	967	769	7,358
Nepean Blue Mountains	1,434	1,395	1,349	1,434	13,161
Northern NSW	1,064	1,018	915	785	7,459
Northern Sydney	2,833	2,589	2,486	2,132	23,457
South Eastern Sydney	2,276	2,074	2,009	1,904	22,796
South Western Sydney	3,196	2,866	2,685	2,472	35,446
Southern NSW	546	630	678	614	4,554
Sydney	1,298	1,168	1,103	1,165	14,011
Western NSW	1,060	959	1,144	1,128	7,999
Western Sydney	2,858	2,938	2,855	2,534	33,039
Correctional Settings	6	3	1	1	40
Hotel Quarantine	0	4	0	0	6
Total	24,594	23,865	23,297	21,081	227,809

* Excludes people with a usual place of residence outside NSW, and those for whom LHD was not available at the time of data extraction.

- Since 1 January 2022, the three LHDs with the most cases aged 0-18 years are South Western Sydney, Western Sydney and Hunter New England LHDs. However, in each of the last four weeks, Hunter New England LHD has had the most cases in this age group.

Number of positive RAT registrations for ECEC aged children and number of ECEC services* with at least one case registered to them, 30 January to 26 February 2022

	Week ending 5 Feb 2022		Week ending 12 Feb 2022		Week ending 19 Feb 2022		Week ending 26 Feb 2022	
	Cases	ECECs with cases	Cases	ECECs with cases	Cases	ECECs with cases	Cases	ECECs with cases
Total	1,197	841	1,919	1,111	1,653	975	1,274	811

Number of positive RAT registrations for school aged children and number of schools *with at least one case registered to them, 30 January to 26 February 2022

	Week ending 5 Feb 2022		Week ending 12 Feb 2022		Week ending 19 Feb 2022		Week ending 26 Feb 2022	
	Cases	Schools with cases	Cases	Schools with cases	Cases	Schools with cases	Cases	Schools with cases
Primary	2,969	992	5,117	1,064	5,465	1,049	4,768	1,002
Secondary	1,717	365	2,258	371	2,423	366	2,338	358
K-12	93	30	139	38	200	35	160	36
Unspecified	2,727	562	4,808	619	5,053	632	4,181	598
Total	7,506	1,949	12,322	2,092	13,141	2,082	11,447	1,994

* Individual ECECs and schools may appear in multiple week ending periods reported in these tables. Therefore, the number of ECECs and schools with at least one case registered to them cannot be aggregated across weeks.

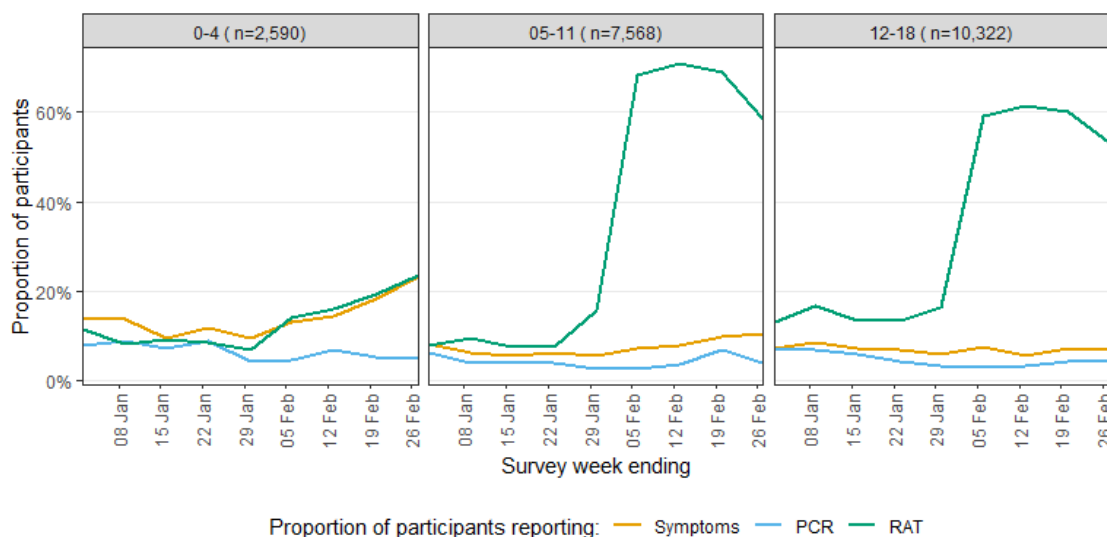
- Service NSW asks for the name of the school or ECEC service the person who has tested positive attends when they register a positive RAT, if the case is aged 0-19 years. This question is not compulsory and not everyone chooses to answer the question. Therefore, data in this section may be an under-count of cases in school and ECEC settings.
- In the week ending 26 February 2022, approximately 60% of schools and 14% of ECECs in NSW had at least one positive RAT registered to them. This is likely an underestimate because the data presented in the tables above excludes schools

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and ECECs that were entered as free text in the Service NSW RAT registration form and therefore cannot be assigned as a school or ECEC.

- Since 30 January 2022, of all RATs registered in the 0-19 age group, the proportion registered against a school or ECEC name increased from 51% in week 1 to 90% in week 4 of term 1, indicating the majority of registrants in this age group were completing the non-mandatory school/ECEC field in the Service NSW registration form.

Proportion of NSW FluTracking participants reporting symptoms, PCR tests, rapid antigen tests (RATs) by age group, weeks ending 8 January to 26 February 2022



- FluTracking is a voluntary online weekly survey conducted across Australia, New Zealand and Hong Kong to monitor flu and COVID-like illness in the community. Participants are self-selected (individuals need to register to receive the weekly survey) and may not be representative of the population as a whole, but provide an indication of illness in the community and trends over time. For more information about FluTracking, go to <https://info.flutracking.net/>
- There was a sharp increase in the proportion of participants self-reporting the use of RATs for children aged 5-18 years in the week ending 26 February 2022. This corresponded with the first week of school and the commencement of the school RAT surveillance program. Children in ECEC were not part of the RAT surveillance program.
- Approximately 70% of children aged 5-11 years and 60% of children aged 12-18 years reported using RATs each week since school commenced. It is important to acknowledge reasons why children may not have used RATs in that time, including that they are not school attenders or may have recently recovered from COVID-19.