

NSW COVID-19 WEEKLY DATA OVERVIEW

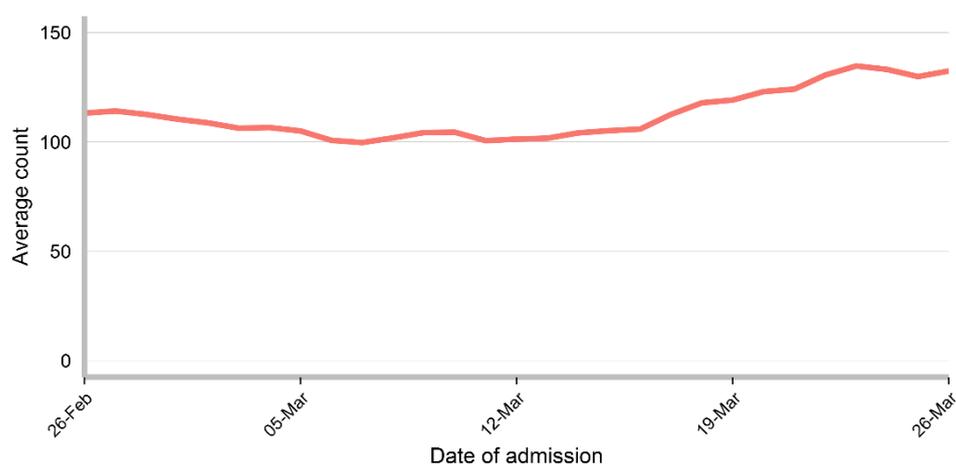
Epidemiological week 12, ending 26 March 2022

Summary

- Hospital admissions in people diagnosed with COVID-19 increased to 919 admissions this week, 12% higher than the previous week.¹ Admissions to intensive care units (ICU) in people diagnosed with COVID-19 increased to 45 admissions this week, 45% higher than the previous week. Some people with COVID-19 may be admitted to hospital or ICU for reasons other than COVID-19.
- There were 140,044 COVID-19 diagnoses reported this week, an increase of 9% since the previous week.
- The rate of reported COVID-19 diagnosis remained highest in people aged 10-19 years and lowest in people aged 70 years and over.
- Most people with COVID-19 continued to be identified by rapid antigen test (RAT), particularly in regional areas and younger people.
- PCR testing rates increased by 12% this week. The percentage of PCR tests that were positive increased to 21% on 26 March 2022, up from 19% the previous week.
- The BA.2 sub-lineage of the Omicron variant (B.1.1.529) is currently dominant, making up around 90% of SARS-CoV-2 detected in NSW. The BA.1 sub-lineage was also circulating in NSW but at lower levels.
- There were 33 deaths reported this week in people who died with COVID-19, compared with 39 deaths in the previous week. Four of the deaths reported this week were in people aged under 65 years. Some deaths may not have occurred in the week in which they were reported.
- Cases of influenza were below the seasonal average. Other respiratory viral infections were also generally below the seasonal average, but cases of rhinovirus and enterovirus have increased above the seasonal average in recent weeks.

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

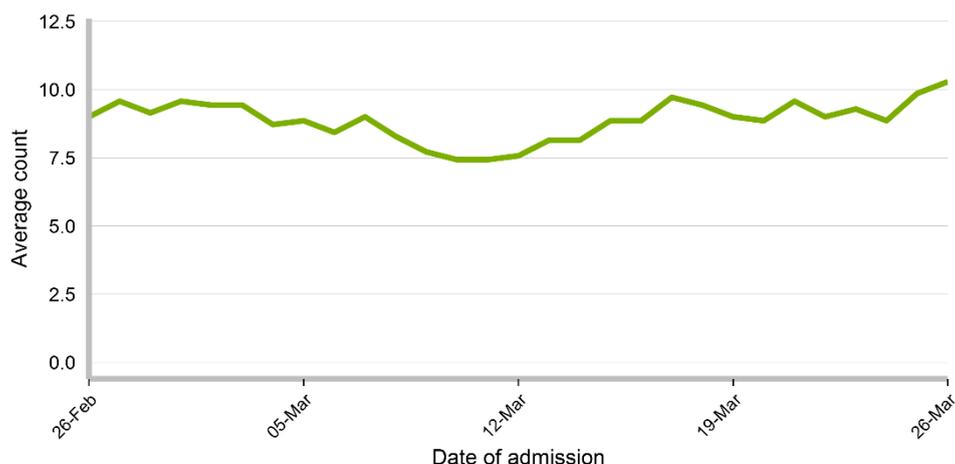
Figure 1. Daily seven-day rolling average* of people with COVID-19 admitted to hospital within 14 days of their diagnosis, NSW, in the four weeks to 26 March 2022



* a seven-day rolling average uses the average of the previous seven days of data to smooth daily variations in data and make it easier to observe trends over time.

¹ This is a different measure than was included in the summary section of last weeks' report. This includes all people with COVID-19 who were admitted to hospital this week. Previously only people who tested positive for COVID-19 this week and were admitted this week were included

Figure 2. Daily seven-day rolling average of people with COVID-19 admitted to intensive care units, NSW, in the four weeks to 26 March 2022



- Hospital admissions and ICU admissions in people with COVID-19 have increased in the last week.
- In the last week, 919 people diagnosed with COVID-19 in the previous 14 days were admitted to a NSW public hospital compared with 821 people in the week before. In the last week 45 people diagnosed with COVID-19 were admitted to ICU compared with 31 people in the week before. The reason for admission may be unrelated to COVID-19.²

Table 1. Vaccination status of people with a COVID-19 diagnosis in the previous 14 days who were admitted to hospital in the week ending 26 March 2022, NSW*

Vaccination status	Admitted to hospital (but not to ICU) (%)	Admitted to ICU (%)	Total
Three or more doses	333 (32%)	10 (27%)	343 (36%)
Two doses	278 (30%)	20 (39%)	298 (31%)
One dose	23 (2%)	0 (0%)	23 (2%)
No dose/Unknown	285 (36%)	15 (34%)	300 (31%)
Total	919 (100%)	45 (100%)	964 (100%)

* This table has been amended since the last report to include all people with COVID-19 diagnosed in the previous 14 days who were admitted to hospital this week. Previously only people who tested positive for COVID-19 this week and were admitted during the same week were included.

Table 2. Reported deaths of people with COVID-19, by vaccination status, NSW, in the week ending 26 March 2022

Vaccination status	Number of deaths
Three or more doses	15 (45%)
Two doses	10 (30%)
One dose	0 (0%)
No dose/Unknown	8 (24%)
Total	33 (100%)

- 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

² 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.

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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, 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 in hospitals and ICUs with COVID-19. Note that because some people with COVID-19 who are admitted to hospital or ICU are admitted for conditions unrelated to their COVID-19 infection, these admissions will not be prevented by vaccination.

Table 3. Age group of people with a COVID-19 diagnosis in the previous 14 days who were admitted to hospital in the week ending 26 March 2022, NSW*

Age group (years)	Admitted to hospital (but not to ICU) (%)	Admitted to ICU (%)	Total
0-9	90 (10%)	0 (0%)	90 (9%)
10-19	60 (7%)	1 (2%)	61 (6%)
20-29	96 (10%)	6 (13%)	102 (11%)
30-39	112 (12%)	7 (16%)	119 (12%)
40-49	80 (9%)	2 (4%)	82 (9%)
50-59	77 (8%)	5 (11%)	82 (9%)
60-69	102 (11%)	10 (22%)	112 (12%)
70-79	121 (13%)	4 (9%)	125 (13%)
80-89	133 (14%)	9 (20%)	142 (15%)
90+	48 (5%)	1 (2%)	49 (5%)
Total	919 (99%)	45 (99%)	964 (100%)

* This table has been amended since the last report to include all people with COVID-19 diagnosed in the previous 14 days who were admitted to hospital this week. Previously only people who tested positive for COVID-19 this week and were admitted during the same week were included.

Table 4. Reported deaths of people with COVID-19, by age group, NSW, in the week ending 26 March 2022

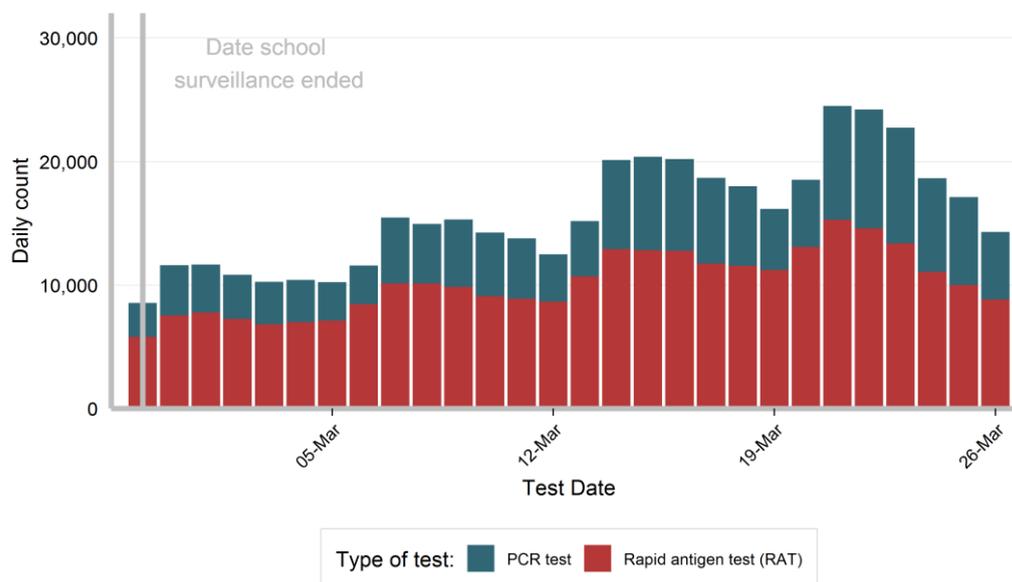
Age-group (years)	Number of deaths (%)
0-9	2 (6%)
10-19	0 (0%)
20-29	0 (0%)
30-39	0 (0%)
40-49	1 (3%)
50-59	1 (3%)
60-69	1 (3%)
70-79	9 (27%)
80-89	7 (21%)
90+	12 (36%)
Total	33 (100%)

- 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 33 people who were reported to have died with COVID-19, 10 were aged care residents. Three of these people died in hospital and seven died at an aged care facility.
- None of the deaths occurred at home.
- Four people aged under 65 years died with COVID-19. Of these, three were unvaccinated and one had received three vaccine doses. One 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.
- COVID-19 related deaths are notified to NSW Health from a range of sources, including public and private hospitals, aged care facilities, and the Coroner. Not all deaths reported by NSW Health occurred in the week in which they are reported as there is sometimes a delay between a death occurring and it being reported to NSW Health.

Section 2: Number of people diagnosed with COVID-19

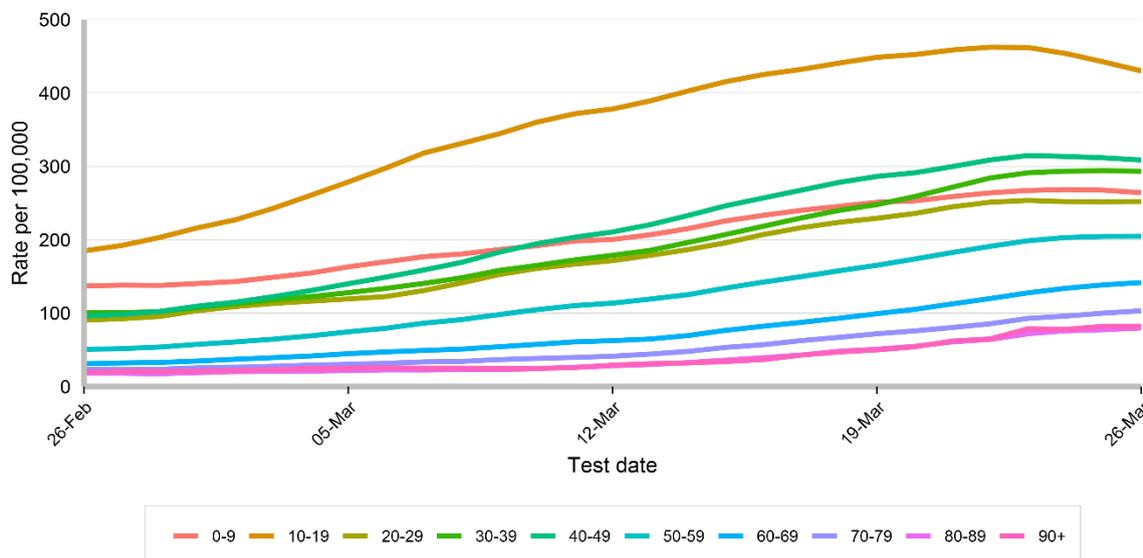
Figure 3. Number of people diagnosed with COVID-19, by date of test and type of test performed, NSW, in the four weeks to 26 March 2022*



*Note that COVID-19 diagnoses tend to follow a weekly pattern with a peak at the start of the week and a decline towards the end of the week. The decline in recent days does not necessarily reflect a longer-term trend, and some positive tests from the most recent week may not yet have been reported.

- There were 140,044 COVID-19 cases reported this week, an increase of 9% 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 seven-day rolling average rate of people reported with COVID-19 per 100,000 population, by age group and test date, NSW, in the four weeks to 26 March 2022



- The rate of people reported with COVID-19 per 100,000 population was highest in people aged 10-19 years.
- The rate was lowest in people aged 70 years and over but increased more than other age groups this week.

Figure 5. Daily seven-day rolling average 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 26 March 2022

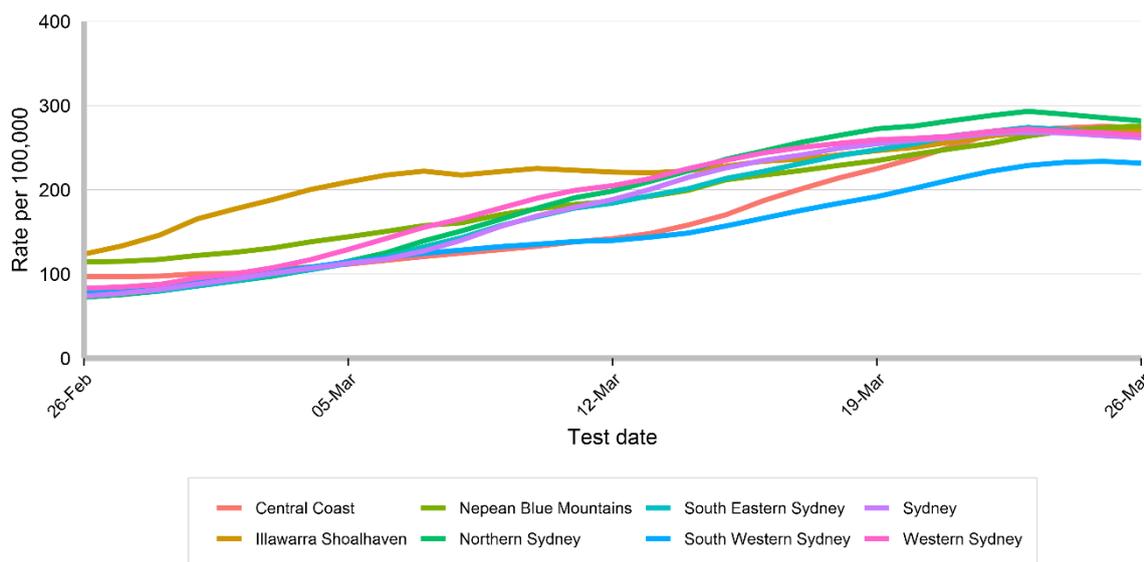
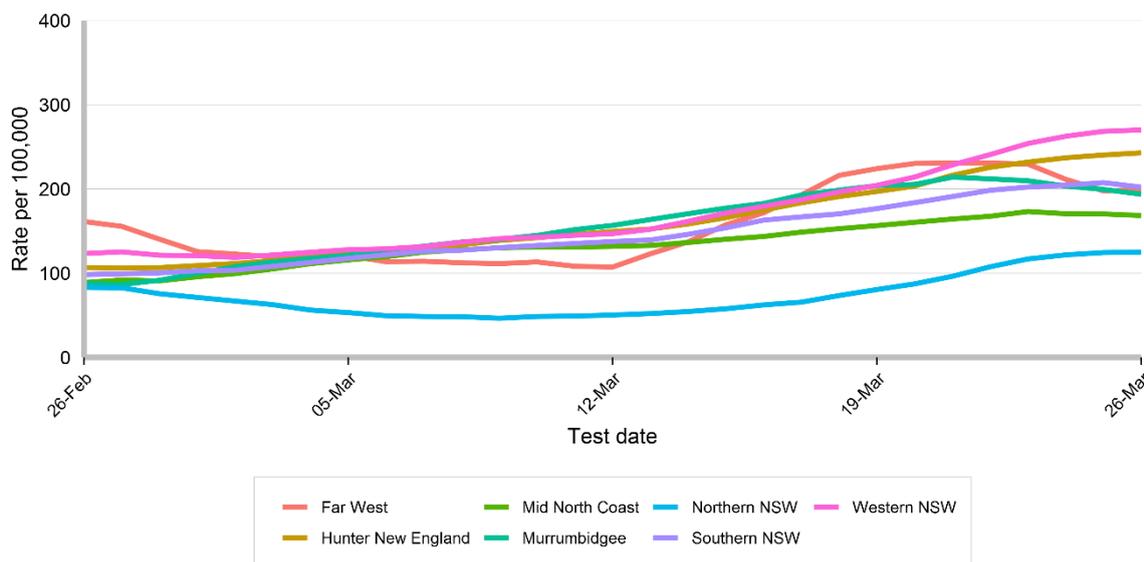


Figure 6. Daily seven-day rolling average rate of people reported with COVID-19 per 100,000 population, by rural and regional Local Health District and test date, NSW, in the four weeks to 26 March 2022



- In metropolitan Sydney, South Western Sydney Local Health District (LHD) had the lowest reported case rate per 100,000 population. However, the PCR test rate was also lowest in Southern Western Sydney LHD compared to other metropolitan LHDs (Figure 8).
- In regional areas, Western NSW and Hunter New England LHDs had the highest case rates this week. Reported rates increased in all LHDs, except for Murrumbidgee and Far West LHDs. Northern NSW LHD continued to have the lowest reported case rate after recent extreme weather in the region, along with a low PCR test rate.

Table 5. Number of people diagnosed with COVID-19, by test type, age group and Local Health District, NSW, in the week ending 26 March 2022

	People diagnosed by a PCR test	People diagnosed by rapid antigen test	Total
Age group (years)			
0-9	6,125 (34%)	12,128 (66%)	18,253 (100%)
10-19	8,244 (29%)	20,144 (71%)	28,388 (100%)
20-29	7,927 (39%)	12,351 (61%)	20,278 (100%)
30-39	9,119 (39%)	14,376 (61%)	23,495 (100%)
40-49	8,599 (39%)	13,249 (61%)	21,848 (100%)
50-59	6,201 (46%)	7,384 (54%)	13,585 (100%)
60-69	4,188 (51%)	3,990 (49%)	8,178 (100%)
70-79	2,267 (55%)	1,843 (45%)	4,110 (100%)
80-89	921 (61%)	588 (39%)	1,509 (100%)
90+	282 (72%)	110 (28%)	392 (100%)
All ages	53,873 (38%)	86,163 (62%)	140,036 (100%)
Local Health District (LHD)*			
Central Coast	2,067 (31%)	4,543 (69%)	6,610 (100%)
Illawarra Shoalhaven	3,142 (40%)	4,669 (60%)	7,811 (100%)
Nepean Blue Mountains	2,718 (37%)	4,715 (63%)	7,433 (100%)
Northern Sydney	7,093 (39%)	11,327 (61%)	18,420 (100%)
South Eastern Sydney	7,686 (44%)	9,590 (56%)	17,276 (100%)
South Western Sydney	6,950 (42%)	9,508 (58%)	16,458 (100%)
Sydney	5,842 (47%)	6,655 (53%)	12,497 (100%)
Western Sydney	8,856 (46%)	10,272 (54%)	19,128 (100%)
Total metropolitan LHDs	44,354 (42%)	61,279 (58%)	105,633 (100%)
Far West	91 (22%)	315 (78%)	406 (100%)
Hunter New England	4,884 (31%)	11,022 (69%)	15,906 (100%)
Mid North Coast	298 (11%)	2,294 (89%)	2,592 (100%)
Murrumbidgee	716 (18%)	3,214 (82%)	3,930 (100%)
Northern NSW	516 (20%)	2,102 (80%)	2,618 (100%)
Southern NSW	831 (28%)	2,112 (72%)	2,943 (100%)
Western NSW	1,611 (30%)	3,677 (70%)	5,288 (100%)
Total rural and regional LHDs	8,947 (27%)	24,736 (73%)	33,683 (100%)

*Excludes cases in correctional settings and hotel quarantine.

- In the week ending 26 March 2022, the proportion of cases reported by RAT for regional LHDs (73%) was higher than for metropolitan LHDs (58%).
- The proportion of people reported with COVID-19 who were diagnosed by PCR test generally 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.

Table 6. Rate per 100,000 population of people diagnosed with COVID-19, by Aboriginal status, age group and Local Health District, NSW, in the week ending 19 March 2022

	Case rate in Aboriginal people	Case rate in non-Aboriginal people	Total case rate#
Age group (years)			
0-9	918	908	1,954
10-19	1,769	1,447	3,312
20-29	2,646	1,070	2,004
30-39	3,228	1,232	2,344
40-49	2,227	1,230	2,324
50-59	1,558	844	1,521
60-69	1,206	632	1,099
70-79	962	461	878
80+	759	236	519
All ages	1,851	985	1,952
Local Health District (LHD)*			
Central Coast	2,121	738	2,093
Illawarra Shoalhaven	2,088	1,244	2,054
Nepean Blue Mountains	2,285	1,327	2,171
Northern Sydney	2,913	945	2,184
South Eastern Sydney	2,230	1,286	2,062
South Western Sydney	2,373	930	1,862
Sydney	2,084	1,225	2,090
Western Sydney	2,270	1,231	2,255
Total metropolitan LHDs	2,249	1,117	2,093
Far West	1,216	1,040	1,432
Hunter New England	1,705	632	1,832
Mid North Coast	1,105	200	1,252
Murrumbidgee	1,560	551	1,412
Northern NSW	671	225	924
Southern NSW	1,835	859	1,546
Western NSW	1,903	1,318	1,997
Total rural and regional LHDs	1,570	631	1,589

Total includes cases where Aboriginal status is unknown.

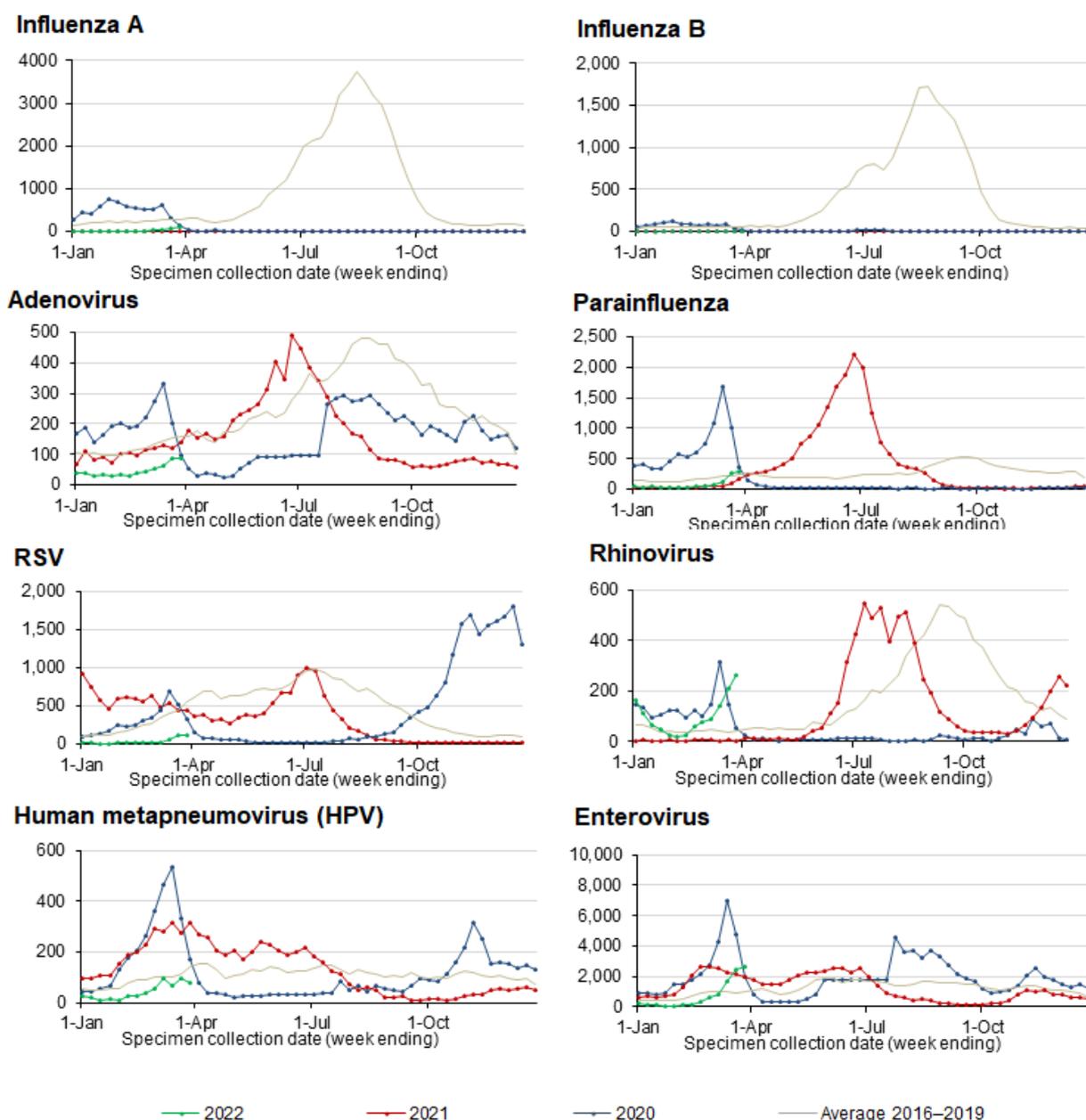
*Excludes cases in correctional settings and hotel quarantine.

- 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.
- Overall, the case rate per 100,000 population was higher for people who are Aboriginal and/or Torres Strait Islander. The rate was highest in the 30-39 year age group for people who are Aboriginal and/or Torres Strait Islander, whereas the rate was highest in the 10-19 year age group for people who are not Aboriginal or Torres Strait Islander. The rate was highest for both groups in metropolitan compared to rural and regional LHDs.
- Data on Aboriginal and Torres Strait Islander cases needs to be interpreted cautiously. Aboriginal status is reported by cases when responding to a 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 52% of cases).

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

- Cases of influenza were below the seasonal average. In the week ending 20 March 2022, 69 cases of influenza A were identified. In comparison, between 2016-2019 the average number of cases identified in the same week was 260 cases. No cases of influenza B were identified, in comparison to the 2016-2019 average of 58 cases for the same week.
- The proportion of positive PCR tests for influenza A or B remained very low. Of 21,223 PCR tests conducted for influenza, 0.33% were positive for influenza A and 0.00% were positive for influenza B.
- Other respiratory viral infections were also below the seasonal average, except for rhinovirus and enterovirus which have increased above the 2016-2019 seasonal average in recent weeks.

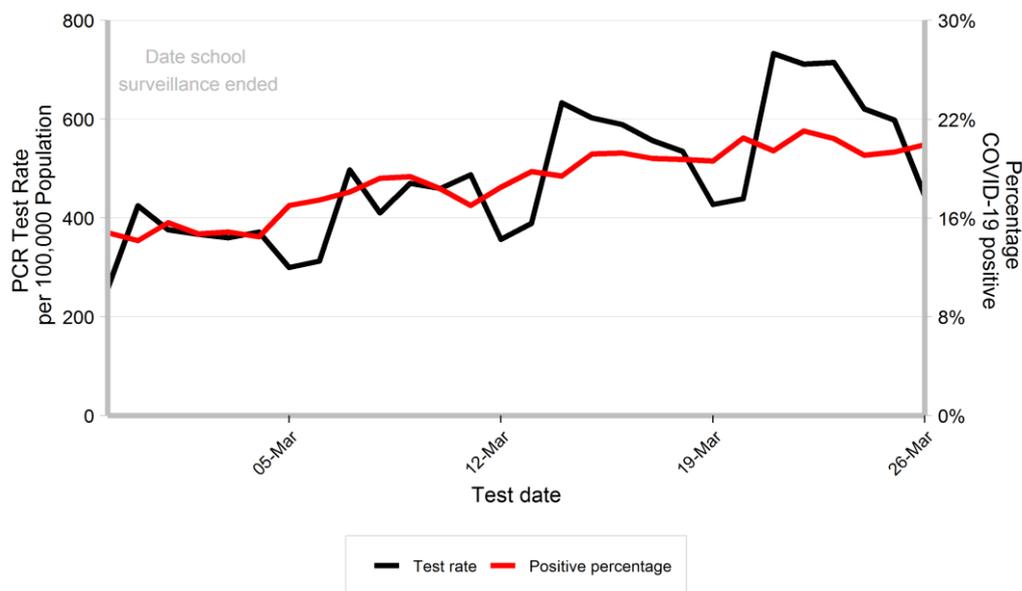
Table 7. Number of positive PCR test results for influenza and other respiratory viruses at sentinel NSW laboratories, January 2020 to 26 March 2022



N.B. Not all samples are tested for all respiratory viruses. Therefore, data presented may tend to under-represent current respiratory virus activity in NSW.

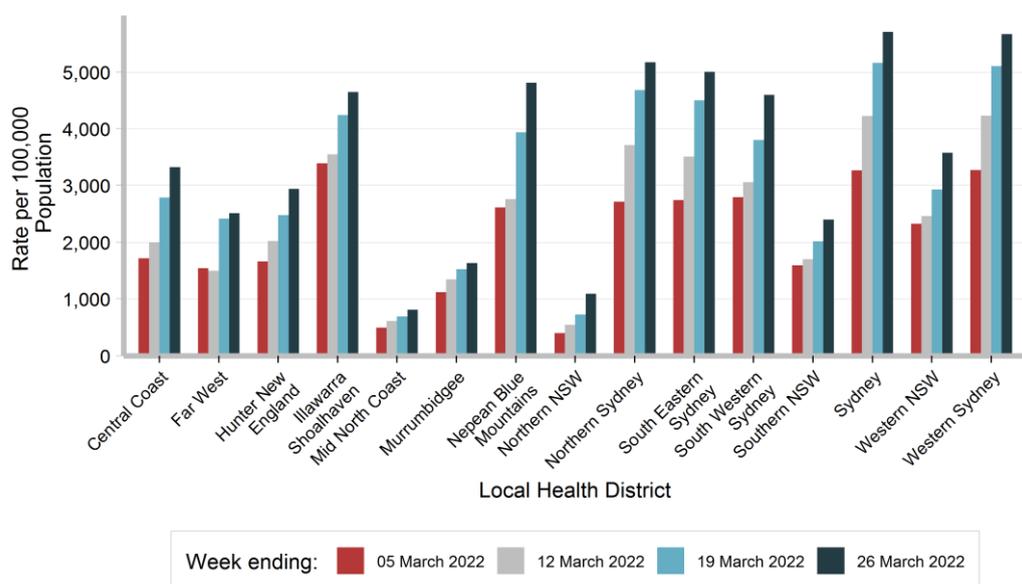
Section 4: Testing

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 26 March 2022



- There were 279,167 PCR tests reported in the week ending 26 March 2022. This is a 12% increase compared to 250,070 PCR tests reported in the previous week.
- The percentage of PCR tests that were positive for COVID-19 increased to 21% by 26 March 2022, compared to 19% 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 97% (57,805/59,841) in the week ending 26 March 2022.
- NSW Health has recently reinforced messages that PCR tests are preferred for people at higher risk of severe illness.

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 26 March 2022



- PCR testing rates per 100,000 population increased in all LHDs in the week ending 26 March 2022.

Table 8. 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 26 March 2022

Variant	Week ending			
	05 March	12 March	19 March	26 March
Omicron (BA.1)	209	146	97	18
Omicron (BA.2)	164	263	305	121
Delta (B.1.617)	0	0	2	0
Total	373	409	404	139

- 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 conducted at three NSW reference laboratories. WGS 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 the NSW community. Two sub-lineages of the Omicron variant (BA.1 and BA.2) are both circulating. The proportion of specimens that have been identified as BA.2 has increased in recent weeks.

S Gene detection as a proxy for the BA.2 Omicron sub-lineage

- The BA.1 sublineage 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 sub-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 has increased to around 90% by 26 March 2022. This indicates that the BA.2 sub-lineage made up around 90% of the SARS-CoV-2 detected in NSW by 26 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.