

## NSW COVID-19 WEEKLY DATA OVERVIEW

### Epidemiological week 16, ending 23 April 2022

#### Summary

- The seven-day rolling average of daily admissions decreased for hospital admissions this week (142 daily admissions compared to 154 last week) and remained stable for ICU admissions (13 daily admissions).
- There were 83,924 people diagnosed with COVID-19 this week, a decrease of 16% since the previous week.
- PCR testing has also decreased, with 177,580 PCR tests reported this week, a decrease of 13% since the previous week. The proportion of PCR tests that were positive remained stable at around 18%.
- The rate of people diagnosed with COVID-19 per 100,000 population decreased or remained stable in all age groups, with the most noticeable decrease in people aged under 20 years.
- The rate of people diagnosed with COVID-19 per 100,000 population decreased or remained stable in all Local Health Districts (LHDs), with the exception of Northern NSW LHD where the rate increased. The increase in the rate of cases in Northern NSW LHD was accompanied with an increase of the PCR testing rate.
- There were 80 deaths reported this week in people who died with COVID-19. Six of the deaths reported were in people aged under 65 years. Deaths may not have occurred in the week in which they were reported.
- Of 23,015 tests conducted for influenza, the proportion positive has increased to 2.1% from 1.4% in the previous week.

#### 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 23 April 2022

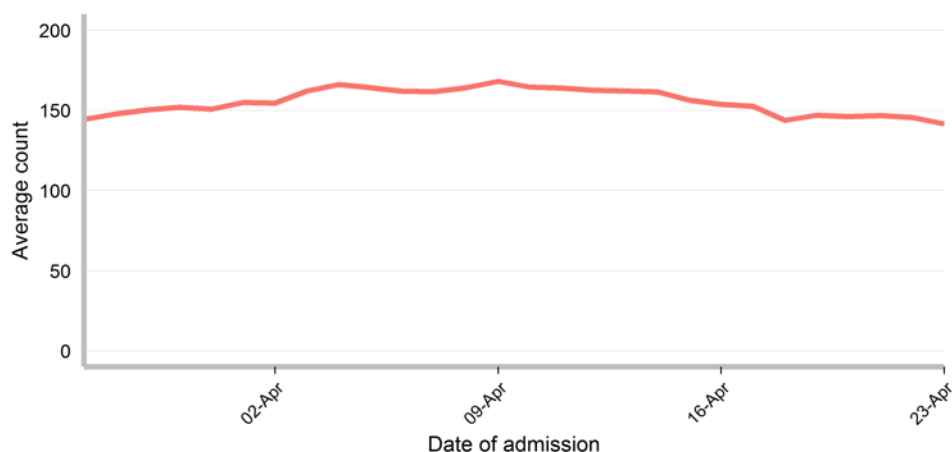
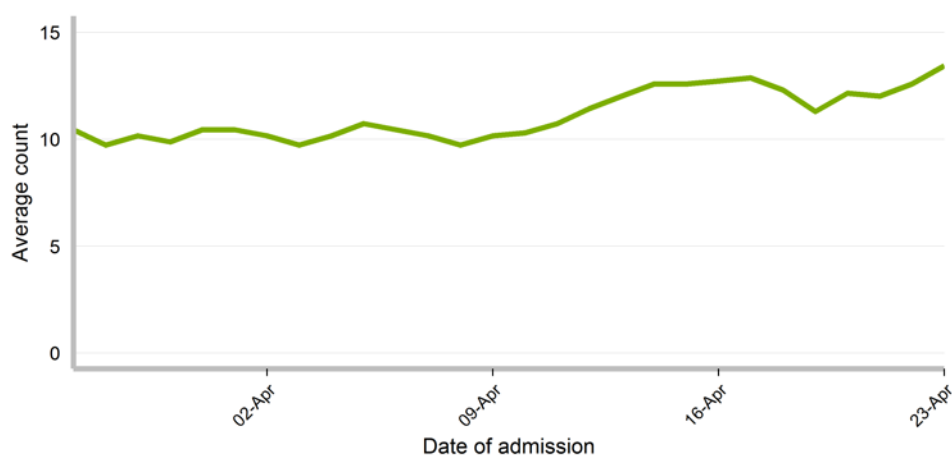


Figure 2. Daily seven-day rolling average\* of people with COVID-19 admitted to intensive care units, NSW, in the four weeks to 23 April 2022



\*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.

## Epidemiological week 16, ending 23 April 2022

- Hospital admissions in people with COVID-19 have decreased in the last week and ICU admissions have remained stable.
- In the last week, 951 people diagnosed with COVID-19 in the previous 14 days were admitted to a NSW public hospital. The seven-day rolling average of daily hospital admissions decreased to an average of 142 admissions by the end of this week, compared with 154 admissions at the end of the previous week (data updated since last week's report).
- In the last week, 97 people diagnosed with COVID-19 were admitted to ICU. The seven-day rolling average of daily intensive care unit (ICU) admissions was an average of 13 admissions by the end of this week, the same as at the end of the previous week.
- The median length of stay for people discharged from a hospital admission in the week ending 23 April was two days, the same as in the previous week.
- The median length of stay for people discharged from an ICU admission in the week ending 23 April was three days, which same as in the previous week.

**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 23 April 2022, NSW**

Vaccination status	Admitted to hospital (but not to ICU) (%)	Admitted to ICU (%)	Total
Three or more doses	433 (46%)	43 (44%)	476 (45%)
Two doses	259 (27%)	30 (31%)	289 (28%)
One dose	11 (1%)	2 (2%)	13 (1%)
No dose/Unknown	248 (26%)	22 (23%)	270 (26%)
Total	951 (100%)	97 (100%)	1,048 (100%)

**Table 2. Age group of people with a COVID-19 diagnosis in the previous 14 days who were admitted to hospital in the week ending 23 April 2022, NSW**

Age group (years)	Admitted to hospital (but not to ICU) (%)	Admitted to ICU (%)	Total
0-9	74 (8%)	3 (3%)	77 (7%)
10-19	47 (5%)	4 (4%)	51 (5%)
20-29	86 (9%)	5 (5%)	91 (9%)
30-39	140 (15%)	6 (6%)	146 (14%)
40-49	75 (8%)	9 (9%)	84 (8%)
50-59	78 (8%)	11 (11%)	89 (8%)
60-69	94 (10%)	15 (15%)	109 (10%)
70-79	150 (16%)	32 (33%)	182 (17%)
80-89	146 (15%)	12 (12%)	158 (15%)
90+	61 (6%)	0 (0%)	61 (6%)
Total	951 (100%)	97 (98%)	1,048 (99%)

- 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 65 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. Reported deaths of people with COVID-19, by gender, age group, Local Health District and vaccination status, NSW, in the week ending 23 April 2022

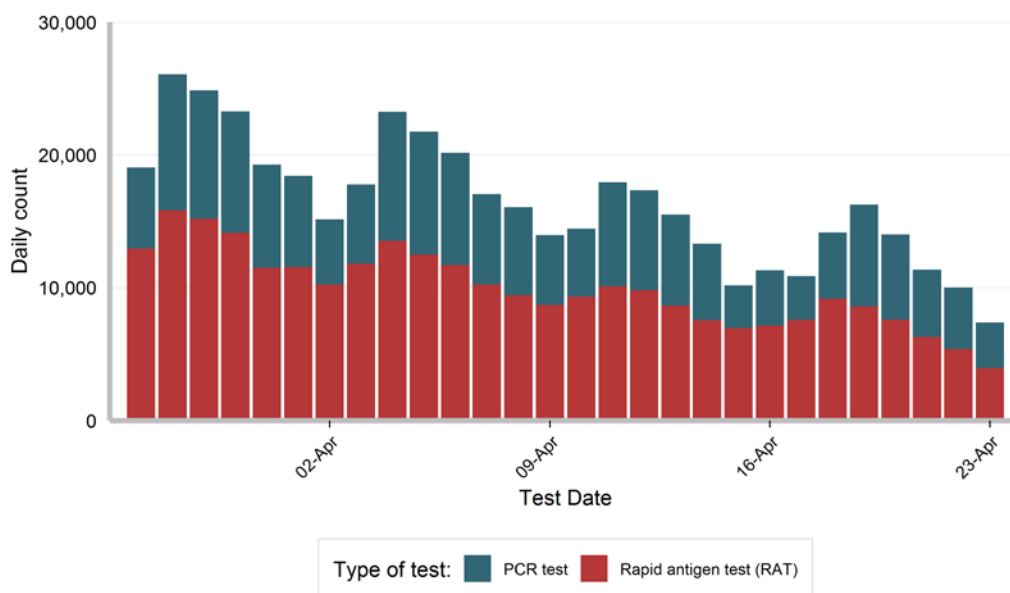
	Number of deaths
Gender	
Female	37 (46%)
Male	43 (54%)
Age group	
0-9	0 (0%)
10-19	0 (0%)
20-29	1 (1%)
30-39	0 (0%)
40-49	1 (1%)
50-59	2 (2%)
60-69	5 (6%)
70-79	23 (29%)
80-89	29 (36%)
90+	19 (24%)
Local Health District (LHD)	
Central Coast	3 (4%)
Far West	0 (0%)
Hunter New England	13 (16%)
Illawarra Shoalhaven	4 (5%)
Mid North Coast	0 (0%)
Murrumbidgee	1 (1%)
Nepean Blue Mountains	1 (1%)
Northern NSW	2 (3%)
Northern Sydney	14 (18%)
South Eastern Sydney	7 (9%)
South Western Sydney	17 (21%)
Southern NSW	1 (1%)
Sydney	6 (8%)
Western NSW	4 (5%)
Western Sydney	7 (9%)
Vaccination status	
Three or more doses	41 (51%)
Two doses	13 (16%)
One dose	6 (8%)
No dose/Unknown	20 (25%)
<b>Total</b>	<b>80 (100%)</b>

- 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 80 people who were reported to have died with COVID-19, 34 were aged care residents. Nine of these people died in hospital and 25 died at an aged care facility.
- Three of the deaths occurred at home. Of these, one was diagnosed after death.

- Six people aged under 65 years died with COVID-19. Of these, one was unvaccinated, one had received one dose of a COVID-19 vaccine, three had received two doses and one had received three 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.
- 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.

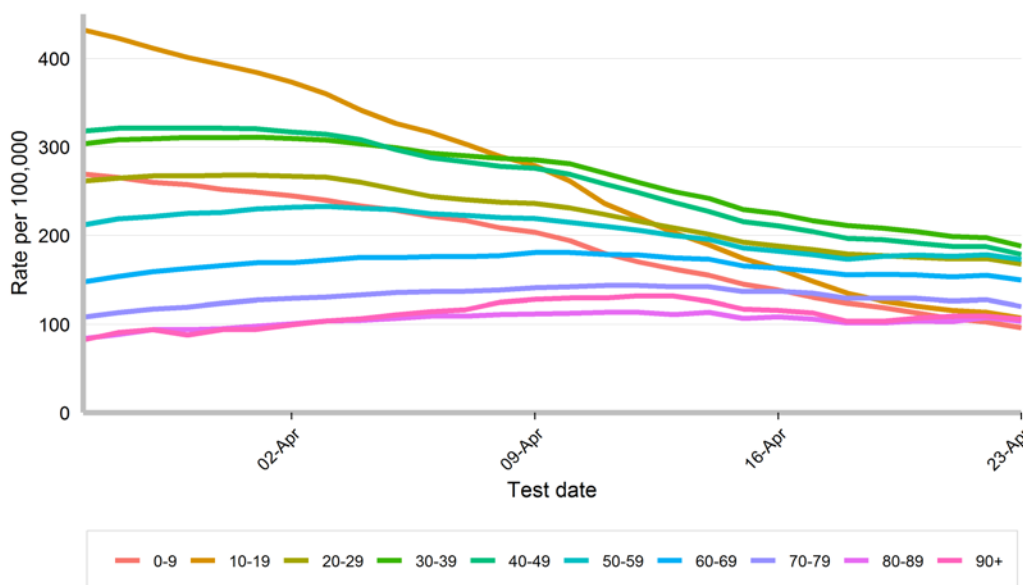
## Section 2: Number of people diagnosed with COVID-19

Figure 3. Number of people diagnosed with COVID-19, by date of test and type of test performed, NSW, in the four weeks to 23 April 2022



- There were 83,924 people diagnosed with COVID-19 this week, a decrease of 16% since the previous week.

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 23 April 2022



- In the last week the rate of people diagnosed with COVID-19 per 100,000 population remained stable or decreased in all age groups. The rate continues to decrease most noticeably in people aged under 20 years of age, similar to previous weeks.

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 23 April 2022

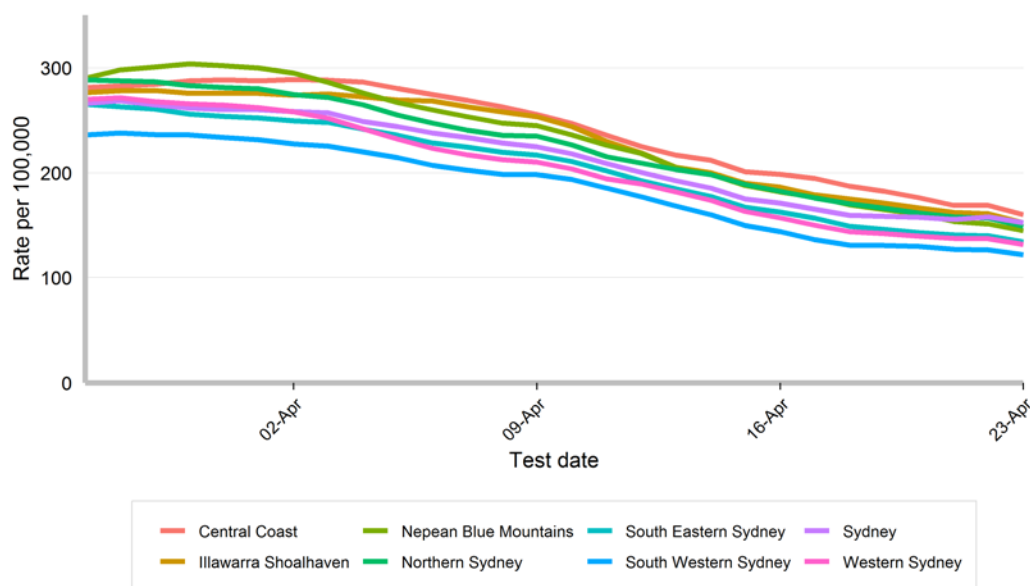
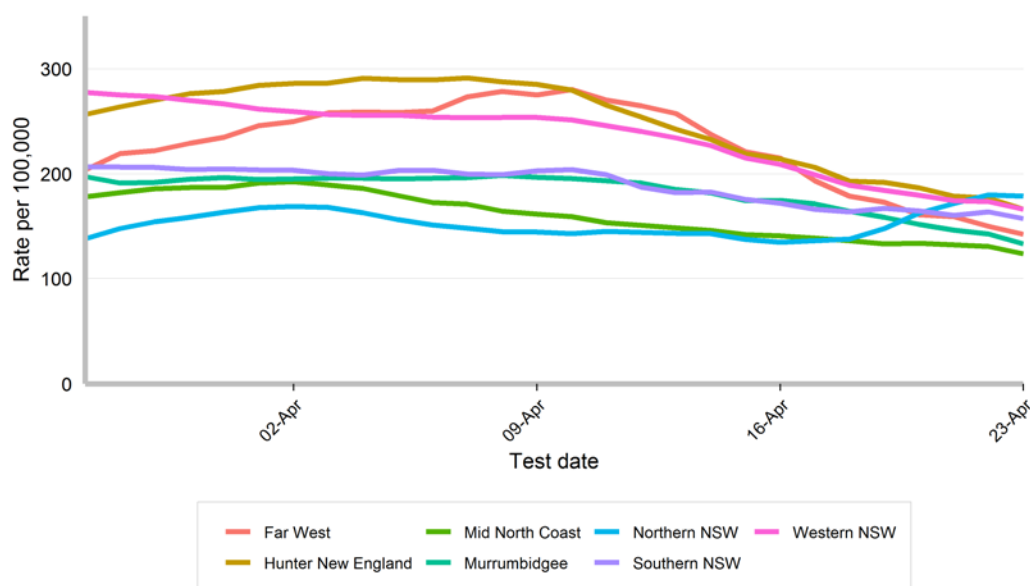


Figure 6. Daily seven-day rolling average rate of people reported with COVID-19 per 100,000 population, by rural and regional Local Health District and test date, NSW, in the four weeks to 23 April 2022



- In the last week the rate of people diagnosed with COVID-19 per 100,000 population decreased or remained stable in most local health districts (LHDs), with the exception of Northern NSW LHD. Testing rates have also decreased in all LHDs except Mid North Coast and Northern NSW LHDs.

Table 5. Number of people diagnosed with COVID-19, by test type, age group and Local Health District, NSW, reported in the week ending 23 April 2022

	People diagnosed by a PCR test	People diagnosed by rapid antigen test	Total
Age group (years)			
0-9	2,683 (40%)	4,096 (60%)	6,779 (100%)
10-19	2,121 (29%)	5,087 (71%)	7,208 (100%)
20-29	5,352 (39%)	8,390 (61%)	13,742 (100%)
30-39	6,257 (41%)	9,134 (59%)	15,391 (100%)
40-49	5,073 (39%)	7,833 (61%)	12,906 (100%)
50-59	5,274 (45%)	6,472 (55%)	11,746 (100%)
60-69	4,350 (50%)	4,430 (50%)	8,780 (100%)
70-79	2,699 (55%)	2,180 (45%)	4,879 (100%)
80-89	1,221 (62%)	756 (38%)	1,977 (100%)
90+	379 (74%)	134 (26%)	513 (100%)
<b>All ages</b>	<b>35,409 (42%)</b>	<b>48,512 (58%)</b>	<b>83,921 (100%)</b>
Local Health District (LHD)*			
Central Coast	1,378 (35%)	2,567 (65%)	3,945 (100%)
Illawarra Shoalhaven	2,046 (46%)	2,423 (54%)	4,469 (100%)
Nepean Blue Mountains	1,530 (39%)	2,421 (61%)	3,951 (100%)
Northern Sydney	4,582 (46%)	5,372 (54%)	9,954 (100%)
South Eastern Sydney	4,462 (50%)	4,526 (50%)	8,988 (100%)
South Western Sydney	4,367 (49%)	4,468 (51%)	8,835 (100%)
Sydney	3,945 (53%)	3,474 (47%)	7,419 (100%)
Western Sydney	5,222 (54%)	4,472 (46%)	9,694 (100%)
<b>Total metropolitan LHDs</b>	<b>27,532 (48%)</b>	<b>29,723 (52%)</b>	<b>57,255 (100%)</b>
Far West	69 (23%)	231 (77%)	300 (100%)
Hunter New England	3,585 (32%)	7,480 (68%)	11,065 (100%)
Mid North Coast	284 (15%)	1,670 (85%)	1,954 (100%)
Murrumbidgee	463 (17%)	2,321 (83%)	2,784 (100%)
Northern NSW	866 (22%)	3,016 (78%)	3,882 (100%)
Southern NSW	769 (32%)	1,619 (68%)	2,388 (100%)
Western NSW	1,061 (32%)	2,250 (68%)	3,311 (100%)
<b>Total rural and regional LHDs</b>	<b>7,097 (28%)</b>	<b>18,587 (72%)</b>	<b>25,684 (100%)</b>

\*Excludes cases in correctional settings and hotel quarantine.

- In the week ending 23 April 2022, the proportion of cases reported by RAT for regional LHDs (72%) was higher than for metropolitan LHDs (52%).
- The proportion of people reported with COVID-19 who were diagnosed by PCR test generally increased with age.

Table 6. Rate per 100,000 population of people diagnosed with COVID-19, by Aboriginal status, age group and Local Health District, NSW, reported in the week ending 23 April 2022

	Case rate in Aboriginal people	Case rate in non-Aboriginal people	Total case rate#
Age group (years)			
0-9	353	701	678
10-19	607	796	784
20-29	1,670	1,224	1,242
30-39	2,048	1,400	1,417
40-49	1,286	1,268	1,268
50-59	1,368	1,206	1,210
60-69	1,259	1,083	1,086
70-79	1,094	954	956
80+	876	777	778
<b>All ages</b>	<b>1,065</b>	<b>1,085</b>	<b>1,084</b>
Local Health District (LHD)*			
Central Coast	1,054	1,182	1,177
Illawarra Shoalhaven	1,100	1,102	1,102
Nepean Blue Mountains	941	1,080	1,074
Northern Sydney	1,481	1,087	1,089
South Eastern Sydney	923	984	983
South Western Sydney	965	915	916
Sydney	1,344	1,128	1,130
Western Sydney	971	1,023	1,022
<b>Total metropolitan LHDs</b>	<b>1,038</b>	<b>1,040</b>	<b>1,040</b>
Far West	931	1,017	1,006
Hunter New England	1,110	1,221	1,213
Mid North Coast	842	907	903
Murrumbidgee	979	948	1,155
Northern NSW	907	1,332	1,309
Southern NSW	1,293	1,158	1,163
Western NSW	1,163	1,188	1,185
<b>Total rural and regional LHDs</b>	<b>1,069</b>	<b>1,156</b>	<b>1,178</b>

#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 similar for people who identify as Aboriginal and/or Torres Strait Islander. The rate was highest for both groups in the 30-39 year age group. The rate for people who identify as Aboriginal and/or Torres Strait Islander was highest in Northern Sydney LHD and for people who are non-Aboriginal in Northern NSW LHD.
- 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 87% of cases).



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

- Testing for influenza and other respiratory viruses is much higher than prior to the COVID-19 pandemic. In the week ending 17 April 2022, 23,015 PCR tests were conducted, compared to the 2016-2019 average for the same week of 5,518 tests. The proportion of PCR tests that were positive for influenza A has increased since the previous week. Of the 23,015 PCR tests conducted, 2.1% were positive for influenza however this remains below the 2016-2019 average positivity rate (4.7%).
- In the week ending 17 April 2022, 478 cases of influenza A were identified. In comparison, between 2016-2019 the average number of cases identified in the same week was 244 cases. No cases of influenza B were identified, in comparison to the 2016-2019 average of 67 cases for the same week.
- The number of cases of other respiratory viruses decreased since the previous week, with the exception of RSV which increased. Both human metapneumovirus virus and rhinovirus remain above the average number of cases for 2016-2019.

Figure 7. Number of positive PCR test results for influenza and other respiratory viruses at sentinel NSW laboratories, January 2020 to 17 April 2022

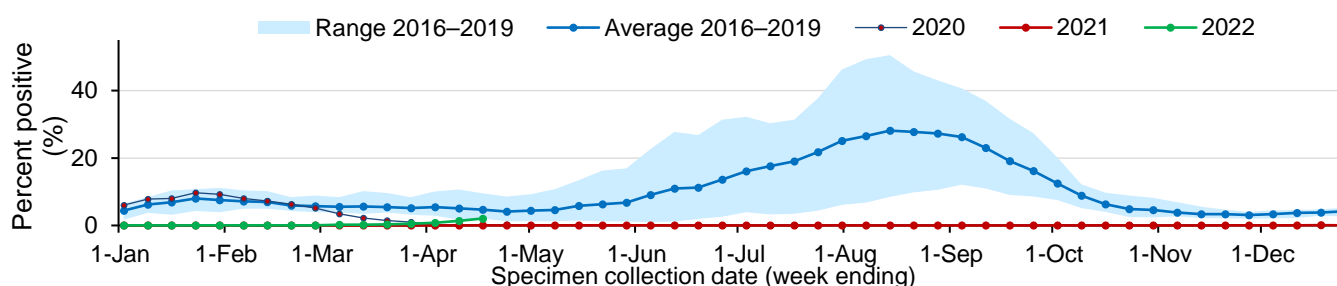
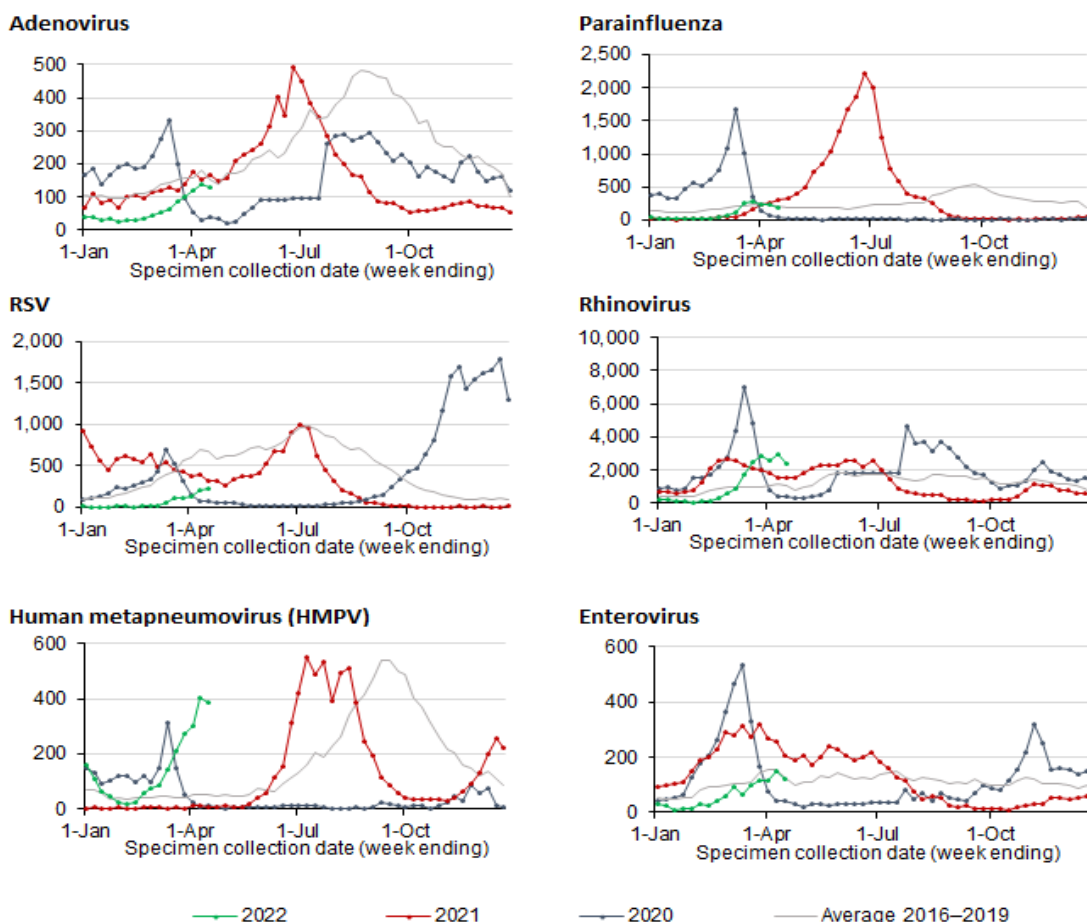
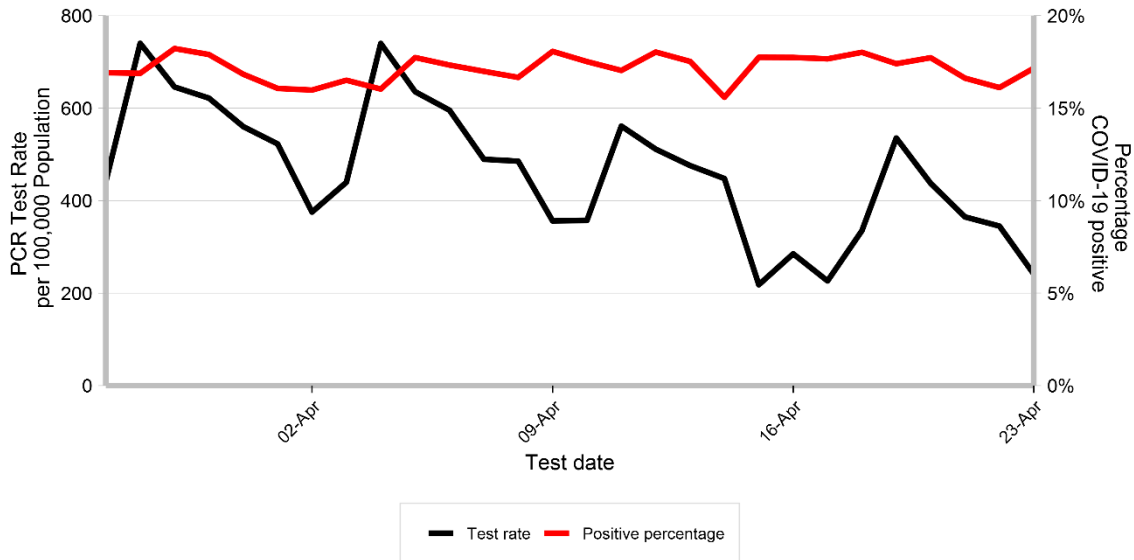


Figure 8. Number of positive PCR test results for other respiratory viruses at sentinel NSW laboratories, January 2020 to 17 April 2022



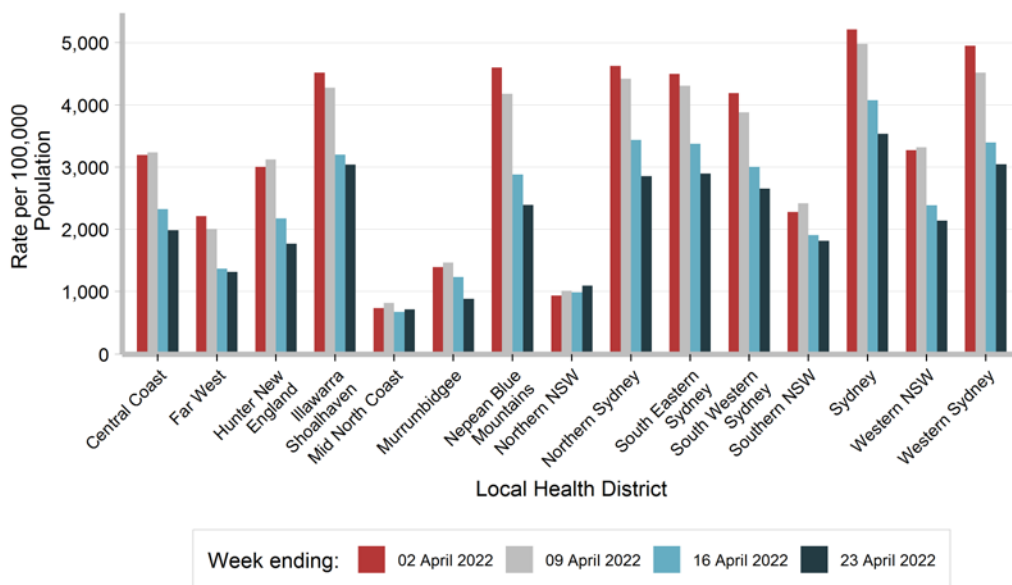
### Section 4: Testing

Figure 9. 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 23 April 2022



- There were 177,580 PCR tests reported in the week ending 23 April 2022. This is a 13% decrease compared to 203,551 PCR tests reported in the previous week.
- The percentage of PCR tests that were positive for COVID-19 has remained mostly stable at 17%, compared to 18% 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 98% (37,596/38,400) in the week ending 23 April 2022.

Figure 10. Rate of PCR tests for COVID-19 per 100,000 population by Local Health District and test date, NSW, in the four weeks to 23 April 2022



- The PCR testing rate decreased in most Local Health Districts (LHDs) this week, with the exception of Mid North Coast and Northern NSW 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 23 April 2022**

Variant	Week ending			
	02 April	09 April	16 April	23 April
Omicron (BA.1)	26	24	10	0
Omicron (BA.2)	592	487	311	20
Omicron (BA.4)	1	0	0	0
Mixed BA.1/BA.2*	1	1	0	0
Recombinant BA.1/BA.2 (XE) <sup>^</sup>	0	4	1	0
<b>Total</b>	<b>620</b>	<b>516</b>	<b>322</b>	<b>20</b>

- 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 with BA.2 the dominant sub-lineage.
- No additional recombinant XE specimens have been identified this week. The five specimens previously identified as recombinant XE were from a returned traveller and their household. Enhanced surveillance around this household has not detected any further spread of the XE variant.
- As part of routine genomic surveillance, Omicron sub-lineage BA.4 was identified in a returned traveller from South Africa from a specimen collected in the week ending 2 April.

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

- 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 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. More than 90% of SARS-CoV-2 positive specimens have had an S gene detected since the end of March 2022. This indicates that the BA.2 sub-lineage likely makes up more than 90% of the SARS-CoV-2 detected in NSW.