NSW Respiratory Surveillance Report - week ending 18 June 2022

COVID-19 Summary

- COVID-19 transmission in the community remains high with a slight increase in the number of notified cases in the last week. Reported rates of COVID-19 are likely to underestimate true incidence in the community due to a decrease in PCR testing and the use of self-reported rapid antigen testing (RATs).
- PCR testing for COVID-19 has increased, with 180,762 PCR tests reported this week, a 0.8% increase compared to the previous week. The proportion of PCR tests that were positive for COVID-19 has increased from 11% to 13%.
- 506 people with COVID-19 were admitted to hospital and 47 were admitted to ICU this week. The seven-day rolling average of daily hospital admissions decreased to an average of 72 daily admissions from 78 last week and ICU admissions increased to an average of seven daily admissions up from six last week. Hospital admissions include people with COVID-19 who are admitted for other reasons.
- There were 77 COVID-19 deaths reported this week. Of these, all were eligible for a third dose of a COVID-19 vaccine but only 56 (73%) had received a third dose. Five of the deaths reported were in people aged under 65 years. Deaths may not have occurred in the week in which they were reported.
- The Omicron variant (B.1.1.529) is currently the dominant COVID-19 variant circulating in the NSW community, with BA.2 the predominant sub-lineage. The proportion of specimens likely to be either the BA.4 or BA.5 sub-lineage has increased substantially in the last week to around 31% compared to 23% at the end of the previous week.
- The BA.4 and BA.5 sub-lineages have a growth advantage over the BA.2 sub-lineage. There is no evidence of a difference in disease severity but this is being closely monitored. The timing of any increase in COVID-19 infections as a result of the BA.4 and BA.5 sub-lineages will depend on a combination of factors, including the growth advantage, immunity levels in the population, and environmental and behavioural factors (e.g. social mixing, isolation when unwell). It is expected that BA.4 and BA.5 will become the dominant strain and will likely be associated with an increase in infections in the coming weeks.

Influenza summary

- Hospital and laboratory surveillance continues to show a high level of influenza activity across NSW.
- Notifications of influenza cases have increased this week; however, case numbers will be impacted by increased levels of influenza testing compared to previous years. Hospitalisations and the percentage of tests that are positive are the most useful indicators for comparison of influenza activity across years.
- Of the 56,527 tests conducted for influenza at sentinel laboratories, the proportion of positive tests decreased to 14% compared to 16% in the previous week.
- Emergency department presentations for 'influenza-like illness' (ILI) requiring an admission have decreased to 211 compared to 221 admissions in the previous week. 15% of all ILI emergency department presentations requiring a hospital admission this week, which is similar to 14% in the previous week. The proportion of presentations that were admitted to hospital was highest for people aged 65 years and over (48%), 35-64 years old (16%) and children aged 0-4 years (14%).
- Influenza A is the dominant circulating strain.

Other respiratory viruses summary

- Detections of respiratory syncytial virus (RSV) have increased this week. Data from sentinel laboratories show 3,775 cases detected this week, compared to 3,200 cases detected last week.
- Detections of RSV are likely impacted by increased levels of testing for respiratory viruses compared to previous years.
- Emergency department presentations for bronchiolitis, which is a clinical diagnosis of infants usually associated with RSV, continued to increase with 625 presentations for bronchiolitis this week in children aged 0-4 years, up from 623 presentations in the previous week. Of these presentations, 40% were admitted to hospital.

Data sources

The NSW Respiratory Surveillance Report consolidates data from a range of sources to provide an understanding of what is happening in the community. This data includes laboratory results, hospital administrative data, emergency department syndromic surveillance, death registrations and community surveys.

COVID-19 hospital admissions, intensive care unit admissions, and deaths

- COVID-19 vaccines are very effective in preventing the severe impacts of infections with the virus. More than 95% of people aged 16 and over in NSW have received two doses of a COVID-19 vaccine, while around 65% 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 intensive care unit (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 some people with COVID-19 who are admitted to hospital or ICU are admitted for conditions unrelated to their COVID-19 infection, and these admissions will not be prevented by vaccination.
- 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.

Figure 1. Daily seven-day rolling average of people with COVID-19 admitted to hospital within 14 days of their diagnosis, NSW, 1 January to 18 June 2022

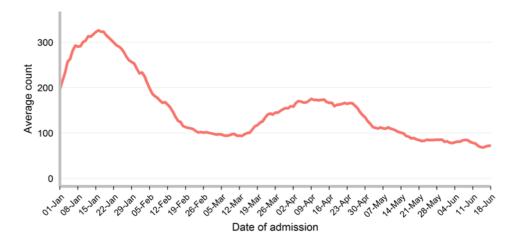
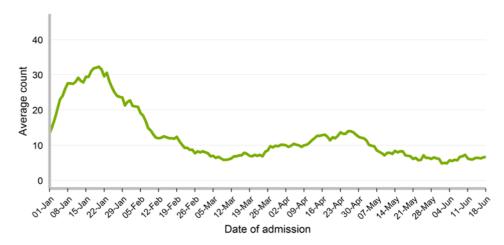


Figure 2. Daily seven-day rolling average of people with COVID-19 admitted to intensive care units, NSW, 1 January to 18 June 2022



- Hospital admissions in people with COVID-19 have decreased in the last week. ICU admissions for people with COVID-19 have increased in the last week
- 506 people diagnosed with COVID-19 were admitted to a NSW public hospital in the last week. The seven-day rolling average of daily hospital admissions decreased to an average of 72 admissions by the end of this week, compared with 78 admissions at the end of the previous week.
- 47 people diagnosed with COVID-19 were admitted to ICU in the last week. The seven-day rolling average of daily ICU admissions increased to an average of 7 admissions by the end of this week, compared with 6 admissions at the end of the previous week.

Table 1. Number of people with a COVID-19 diagnosis in the previous 14 days who were admitted to hospital, admitted to ICU or reported as having died in the week ending 18 June 2022

| | Admitted to hospital (but not to ICU) | Admitted to ICU | Deaths |
|----------------------------------|---------------------------------------|-----------------|--------|
| Gender | | | |
| Female | 251 | 26 | 36 |
| Male | 255 | 21 | 41 |
| Age group (years) | | | |
| 0-9 | 33 | 2 | 0 |
| 10-19 | 14 | 0 | 0 |
| 20-29 | 27 | 4 | 0 |
| 30-39 | 38 | 1 | 0 |
| 40-49 | 34 | 2 | 2 |
| 50-59 | 38 | 7 | 1 |
| 60-69 | 57 | 10 | 5 |
| 70-79 | 91 | 14 | 18 |
| 80-89 | 124 | 6 | 19 |
| 90+ | 50 | 1 | 32 |
| Local Health District of residen | ce [*] | | |
| Central Coast | 22 | 1 | 4 |
| Illawarra Shoalhaven | 31 | 4 | 7 |
| Nepean Blue Mountains | 17 | 2 | 2 |
| Northern Sydney | 50 | 5 | 11 |
| South Eastern Sydney | 65 | 4 | 11 |
| South Western Sydney | 79 | 8 | 7 |
| Sydney | 48 | 3 | 4 |
| Western Sydney | 44 | 4 | 7 |
| Far West | 6 | 0 | 0 |
| Hunter New England | 65 | 7 | 7 |
| Mid North Coast | 17 | 1 | 1 |
| Murrumbidgee | 13 | 2 | 3 |
| Northern NSW | 16 | 4 | 5 |
| Southern NSW | 7 | 0 | 1 |
| Western NSW | 23 | 2 | 7 |
| Vaccination status | | | |
| Four or more doses | 72 | 5 | 8 |
| Three doses | 189 | 24 | 48 |
| Two doses | 105 | 5 | 15 |
| One dose | 8 | 0 | 2 |
| No dose | 4 | 1 | 4 |
| Unknown [^] | 128 | 12 | 0 |
| Total | 506 | 47 | 77 |

^{*}Excludes cases in correctional settings

[^]Vaccination status is determined by matching to Australian Immunisation Register (AIR) data. Name and date of birth need to be an exact match to that recorded in AIR. People with unknown vaccination status were unable to be found in AIR, though may have vaccination details recorded in AIR under a shortened name or different spelling.

Epidemiological week 24, ending 18 June 2022

Of the 77 people who were reported to have died with COVID-19:

- All were eligible for a third dose of a COVID-19 vaccine but only 56 (73% of those eligible) had received a third dose.1
- Thirty-eight were aged care residents. Seven of these people died in hospital and 31 died at an aged care facility.
- Three of the deaths occurred at home. Of these, none were diagnosed after death.
- Five people aged under 65 years died with COVID-19. All had records of significant underlying health conditions that increase the risk of severe disease from COVID-19:
 - Two were unvaccinated
 - Three were fully vaccinated

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 Heath 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).

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. NSW Health does not report deaths under investigation by the Coroner until the Coroner issues their findings on the cause of death.

¹ The Australian Technical Advisory Group on Immunisation (ATAGI) recommends that everyone aged 16 years and over has three doses of a COVID-19 vaccine, with an additional winter dose recommended for other people at increased risk of severe illness.

4

Notifications of COVID-19 and Influenza

Table 2. Number and proportion of notifications of COVID-19 and Influenza, by gender, age group, Local Health District, NSW, reported in the week ending 18 June 2022

| | Week ending 18 June 2022 | | Year total | | |
|------------------------------------------|--------------------------|---------------|-------------------|----------------|--|
| | COVID-19 | Influenza | COVID-19 * | Influenza | |
| Gender | | | | | |
| Female | 25,752 (53.8%) | 9,753 (54.0%) | 1,175,075 (52.2%) | 40,255 (52.1%) | |
| Male | 22,077 (46.1%) | 8,270 (45.8%) | 1,074,138 (47.7%) | 36,840 (47.7%) | |
| Not stated / inadequately described | 74 (0.2%) | 22 (0.1%) | 3,297 (0.1%) | 119 (0.2%) | |
| Transgender | 0 (0.0%) | 0 (0.0%) | 3 (0.0%) | 0 (0.0%) | |
| Age group (years) | | | | | |
| 0-4 | 2,022 (4.2%) | 2,574 (14.3%) | 106,053 (4.7%) | 10,308 (13.4%) | |
| 5-9 | 1,751 (3.7%) | 2,979 (16.5%) | 158,645 (7.0%) | 13,707 (17.8%) | |
| 10-19 | 4,395 (9.2%) | 3,020 (16.7%) | 352,245 (15.6%) | 16,218 (21.0%) | |
| 20-29 | 6,802 (14.2%) | 2,064 (11.4%) | 377,668 (16.8%) | 9,103 (11.8%) | |
| 30-39 | 8,659 (18.1%) | 2,751 (15.2%) | 393,938 (17.5%) | 10,340 (13.4%) | |
| 40-49 | 7,389 (15.4%) | 1,933 (10.7%) | 330,947 (14.7%) | 7,301 (9.5%) | |
| 50-59 | 7,108 (14.8%) | 1,112 (6.2%) | 242,456 (10.8%) | 4,144 (5.4%) | |
| 50-69 | 5,095 (10.6%) | 844 (4.7%) | 161,025 (7.1%) | 2,980 (3.9%) | |
| 70-79 | 2,764 (5.8%) | 444 (2.5%) | 84,703 (3.8%) | 1,844 (2.4%) | |
| 80-89 | 1,392 (2.9%) | 246 (1.4%) | 34,364 (1.5%) | 938 (1.2%) | |
| 90+ | 519 (1.1%) | 78 (0.4%) | 10,341 (0.5%) | 315 (0.4%) | |
| Local Health District of residence# | | | | | |
| Central Coast | 1,946 (4.1%) | 1,275 (7.1%) | 100,322 (4.5%) | 4,678 (6.1%) | |
| Illawarra Shoalhaven | 2,962 (6.2%) | 1,163 (6.4%) | 124,306 (5.6%) | 4,001 (5.2%) | |
| Nepean Blue Mountains | 2,413 (5.1%) | 1,072 (5.9%) | 113,578 (5.1%) | 4,214 (5.5%) | |
| Northern Sydney | 6,603 (13.9%) | 1,850 (10.3%) | 259,887 (11.7%) | 7,810 (10.1%) | |
| South Eastern Sydney | 5,393 (11.4%) | 1,746 (9.7%) | 260,228 (11.7%) | 8,492 (11.0%) | |
| South Western Sydney | 4,591 (9.7%) | 2,474 (13.7%) | 281,697 (12.6%) | 11,145 (14.4%) | |
| Sydney | 4,074 (8.6%) | 989 (5.5%) | 192,827 (8.6%) | 4,745 (6.1%) | |
| Western Sydney | 5,358 (11.3%) | 2,392 (13.3%) | 301,619 (13.5%) | 11,665 (15.1%) | |
| Far West | 199 (0.4%) | 29 (0.2%) | 7,686 (0.3%) | 205 (0.3%) | |
| Hunter New England | 5,775 (12.2%) | 2,630 (14.6%) | 265,363 (11.9%) | 7,625 (9.9%) | |
| Mid North Coast | 1,218 (2.6%) | 297 (1.6%) | 49,630 (2.2%) | 864 (1.1%) | |
| Murrumbidgee | 1,859 (3.9%) | 364 (2.0%) | 76,523 (3.4%) | 2,090 (2.7%) | |
| Northern NSW | 1,240 (2.6%) | 321 (1.8%) | 66,458 (3.0%) | 1,324 (1.7%) | |
| Southern NSW | 1,849 (3.9%) | 253 (1.4%) | 51,878 (2.3%) | 1,016 (1.3%) | |
| Western NSW | 1,949 (4.1%) | 1,136 (6.3%) | 77,611 (3.5%) | 2,415 (3.1%) | |
| Aboriginal status [^] | | | | , | |
| Aboriginal and/or Torres Strait Islander | 1,470 (3.1%) | 584 (3.2%) | 82,671 (3.7%) | 2,190 (2.8%) | |
| Not Aboriginal or Torres Strait Islander | 39,386 (82.2%) | 7,849 (43.5%) | 1,805,845 (80.2%) | 34,654 (44.9%) | |
| Not Stated / Unknown | 7,047 (14.7%) | 9,612 (53.3%) | 363,997 (16.2%) | 40,370 (52.3%) | |
| Total | 47,903 (100%) | 18,045 (100%) | 2,252,513 (100%) | 77,214 (100%) | |

[#]Excludes cases in correctional settings. Aboriginal status is reported by COVID-19 cases when completing their RAT registration or responding to a short text message survey sent to cases detected by PCR. Not all cases respond to the question. For influenza cases, Aboriginal status is only known if it is collected and reported by the laboratory, which is not routine

Figure 3. Number of people diagnosed with COVID-19, by date of test and type of test performed, NSW, 1 January to 18 June 2022

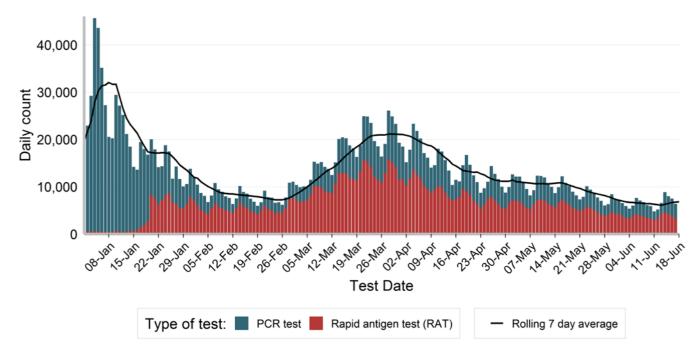
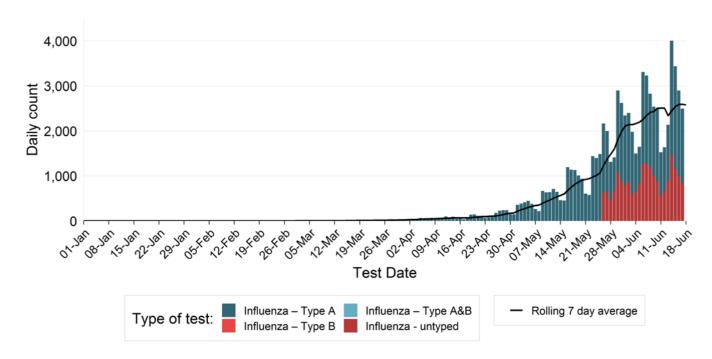


Figure 4. Number of people diagnosed with influenza, by date of test and virus type, NSW, 1 January to 18 June 2022



- There were 47,903 people diagnosed with COVID-19 this week, an increase of 8.2% since the previous week.
- There were 18,045 people diagnosed with influenza this week, an increase of 2.7% since the previous week.

Figure 5. 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 18 June 2022

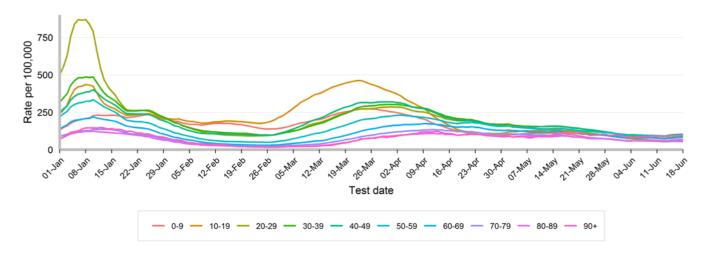


Figure 6. Daily seven-day rolling average rate of people reported with COVID-19 per 100,000 population, by metropolitan Local Health District and test date, NSW, in the four weeks to 18 June 2022

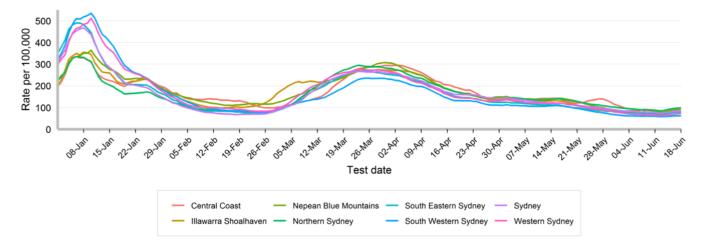
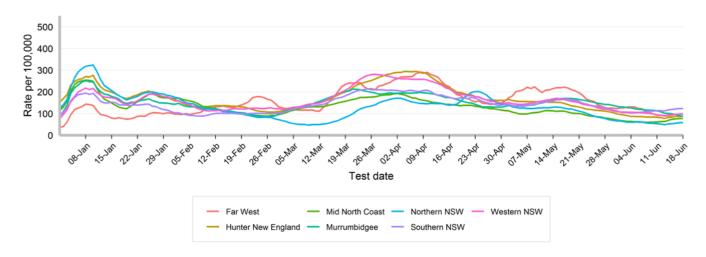


Figure 7. Daily seven-day rolling average rate of people reported with COVID-19 per 100,000 population, by rural and regional Local Health District and test date, NSW, in the four weeks to 18 June 2022



• The rate of people reported with COVID-19 per 100,000 population has remained stable or increased in all age groups and Local Health Districts (LHDs) this week.

Figure 8. Daily seven-day rolling average rate of influenza notifications per 100,000 population, by age group and test date, NSW, 1 January to 18 June 2022

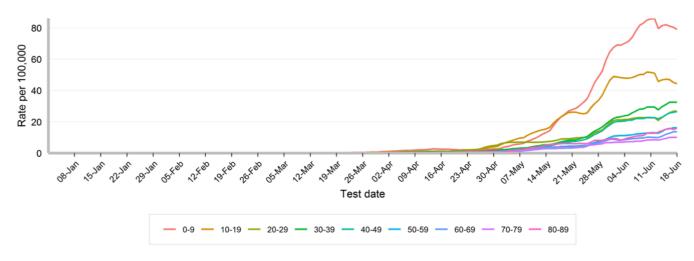


Figure 9. Daily seven-day rolling average rate of influenza notifications per 100,000 population, by metropolitan Local Health District and test date, NSW, 1 January to 18 June 2022

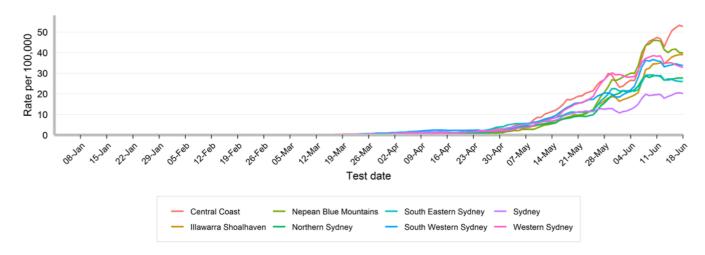
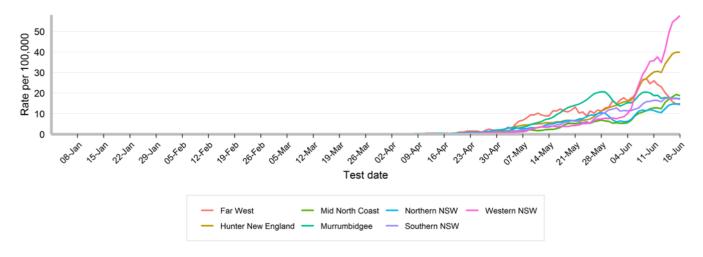


Figure 10. Daily seven-day rolling average rate of influenza notifications per 100,000 population, by rural and regional Local Health District and test date, NSW, 1 January to 18 June 2022



 The rate of influenza notifications remains elevated across all LHDs. In metropolitan LHDs, the rate was highest in Central Coast and Nepean Blue Mountains at the end of this week. In rural and regional LHDs, the rate was highest in Western NSW Hunter New England and Far West.

Emergency department and community surveillance

Public Health Rapid, Emergency, Disease and Syndromic Surveillance (PHREDSS) system

The NSW Public Health Rapid, Emergency, Disease and Syndromic Surveillance (PHREDSS) system provides daily monitoring of most unplanned presentations to NSW public hospital emergency departments (EDs) and all emergency Triple Zero (000) calls to NSW Ambulance. Emergency hospital presentations and ambulance calls are grouped into related acute illness and injury categories.

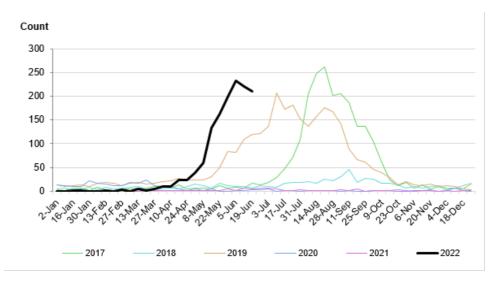
The number of presentations and calls in each category is monitored over time to quickly identify unusual patterns of illness. Unusual patterns could signify an emerging outbreak of disease or issue of public health importance in the population. PHREDSS is also useful for monitoring the impact of seasonal and known disease outbreaks, such as seasonal influenza or gastroenteritis, on the NSW population.

The 88 NSW public hospital EDs used in PHREDSS surveillance account for 95% of all ED activity in NSW public hospitals in 2020-2021, including most major metropolitan public hospitals (99%) and rural public hospitals (89%).

The emergency department 'influenza-like illness' surveillance syndrome includes provisional diagnoses of ILI, influenza, including pneumonia with influenza and avian and other new influenza viruses. Influenza-like illness does not include COVID-19. The number of emergency department presentations for ILI reflects only a fraction of the impact of influenza on emergency departments but it is a useful marker of seasonal timing and trends. The number of presenting patients requiring an admission also provides an indication of severity.

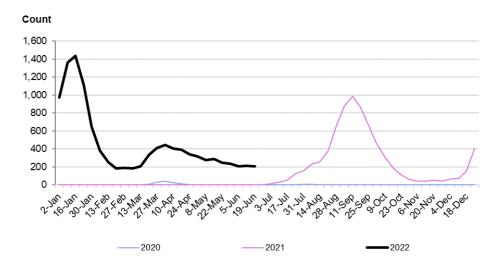
The emergency department 'coronaviruses/SARS' surveillance syndrome includes provisional diagnoses (SNOMEDCT and ICD-10-AM codes) for coronavirus infections SARS, MERS, COVID-19 or other coronaviruses, or clinical condition of Severe Acute Respiratory Syndrome (SARS). It excludes testing and suspected coronavirus codes. There are no IDC-9 codes for COVID-19, so COVID-19 ED presentations at Albury Hospital will be mapped to the fever/unspecified infection surveillance syndrome. A person with COVID-19 may be admitted for reasons other than COVID-19, and of this the number of admissions from ED with a diagnosis of coronaviruses/SARS will be less than the number of confirmed cases of COVID-19 who are in hospital.

Figure 11. Weekly counts of unplanned emergency department (ED) presentations for 'influenza-like illness', that were admitted, for 2022 (black line), compared with the previous five years (coloured lines), persons of all ages, 88 NSW hospitals



• Emergency department presentations for 'influenza-like illness' (ILI) requiring an admission have decreased to 211 compared to 221 admissions in the previous week. This represents 15% of all ILI emergency department presentations this week, which is similar to 14% in the previous week. The proportion of presentations that were admitted to hospital was highest for people aged 65 years and over (48%), 35-64 years old (16%) and children aged 0-4 years (14%).

Figure 12. Weekly counts of unplanned emergency department (ED) presentations for 'coronaviruses/SARS', that were admitted, for 2022 (black line), compared with the previous two years (coloured lines), persons of all ages, 88 NSW hospitals

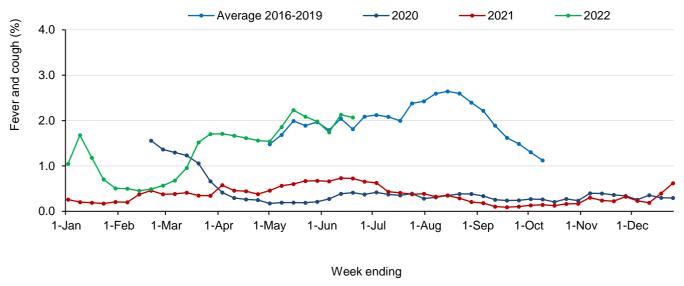


• Emergency department presentations for coronaviruses/SARS requiring an admission have decreased to 210 from 215 admissions in the previous week.

FluTracking

FluTracking is an online health surveillance system used to detect epidemics of influenza across Australia and New Zealand. Participants complete an online survey each week to provide community level influenza-like illness surveillance, consistent surveillance of influenza activity across all jurisdictions over time, and year to year comparisons of the timing, attack rates and seriousness of influenza in the community. More information about FluTracking and ways to be involved are available here: https://info.flutracking.net/about/

Figure 13. Proportion of FluTracking participants reporting influenza-like illness, NSW, 1 January to 19 June 2022

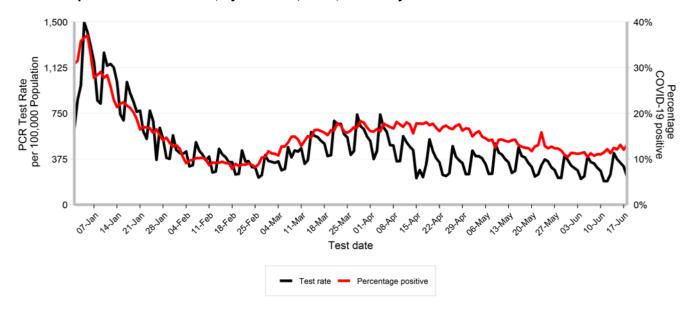


- The proportion of FluTracking participants reporting influenza-like illness decreased slightly this week
- Additional FluTracking reports are available at: https://info.flutracking.net/reports-2/australia-reports/

LABORATORY SURVEILLANCE

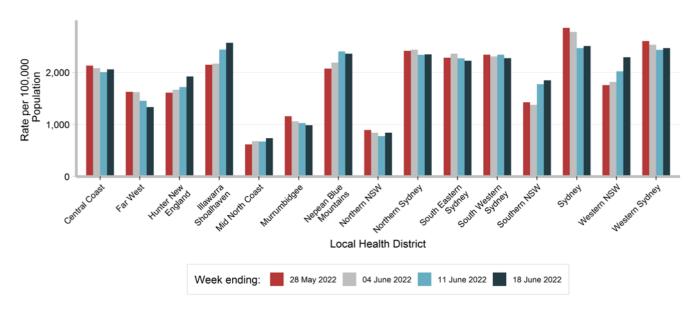
COVID-19 PCR testing

Figure 14. 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, 1 January to 18 June 2022



- There were 180,762 PCR tests reported this week. This is a 0.8% increase compared to 179,372 PCR tests reported in the previous week.
- The percentage of PCR tests that were positive for COVID-19 has increased to 13% compared to 11.4% at the end of the previous week.

Figure 15. Rate of PCR tests for COVID-19 per 100,000 population by Local Health District and test date, NSW, in the four weeks to 18 June 2022



COVID-19 Whole Genome Sequencing

Whole genome sequencing (WGS) is a laboratory procedure that identifies the genetic profile of an organism. WGS can help understand how a virus transmits, responds to vaccination and the severity of disease it may cause. It can also help to monitor the spread of the virus by identifying specimens that have are genomically similar. WGS has been used in NSW since the start of the COVID-19 pandemic to inform epidemiological investigations, and to monitor for and analyse the behaviour of new SARS-CoV-2 variants circulating in the community. WGS is conducted at three NSW reference laboratories. Prior to August 2021, low community transmission meant that most positive specimens were able to be sequenced. However, since that time high case numbers have required prioritisation of specimens for sequencing.

Specimens from people with COVID-19 who are admitted to hospital or an ICU are prioritised to identify and understand lineages with increased disease severity. Specimens from overseas arrivals are also prioritised to monitor for the introduction of new variants into the community. This is not a random sample, therefore the proportion of sequences 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 sequences for recent dates will increase over time.

Variants of Concern

• Like all viruses, the SARS-CoV-2 virus changes over time. The World Health Organization monitors these changes and classifies lineages according to the risk that they pose to global public health. Those that they identify as having changes that increase transmissibility, increase virulence, or decrease the effectiveness of vaccines or treatments are designated as variants of concern (VOCs).

Table 3. 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 18 June 2022

| Variant | Week ending | | | | |
|---------------------|-------------|---------|---------|---------|--|
| | 28 May | 04 June | 11 June | 18 June | |
| Omicron (BA.1) | 2 | 0 | 0 | 0 | |
| Omicron (BA.2) | 445 | 288 | 223 | 4 | |
| Omicron (BA.2.12.1) | 50 | 66 | 32 | 0 | |
| Omicron (BA.3) | 1 | 1 | 0 | 0 | |
| Omicron (BA.4) | 51 | 67 | 48 | 2 | |
| Omicron (BA.5) | 81 | 227 | 116 | 5 | |
| Recombinant (XE)* | 1 | 0 | 0 | 0 | |
| Recombinant (XM) | 1 | 0 | 1 | 0 | |
| Total | 632 | 649 | 420 | 11 | |

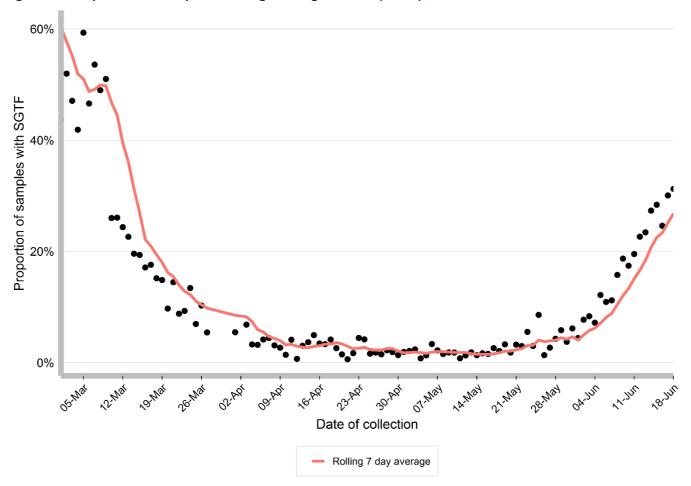
^{*}Recombinant virus sequences occur when two separate virus strains merge, forming a new, single strain that contains genomic regions of both co-infecting strains.

• The Omicron variant (B.1.1.529) is currently the dominant COVID-19 variant circulating in the NSW community. Most recent specimens have been identified as the BA.2 sub-lineage, however the proportion of specimens identified as BA.4 and BA.5 has been increasing in recent weeks, with BA.5 increasing more than BA.4.

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

- The BA.1, BA.4 and BA.5 sub-lineages of the Omicron variant have a mutation that results in a failure of certain PCR test platforms to detect the S gene. This mutation is typically not present in the BA.2 sub-lineage, and therefore the detection of an S gene can be used as a proxy to estimate the prevalence of BA.2 in the community.
- A PCR testing platform 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. Around 69% of SARS-CoV-2 positive specimens currently
 have an S gene detected and 31% do not. This indicates that the BA.2 sub-lineage likely constitutes around
 69% of the SARS-CoV-2 detected in NSW, and the BA.1, BA.4 and BA.5 sub-lineages constitute 31%. The S
 gene failure specimens have been prioritised for WGS, with the majority of these now being identified as BA.4
 and BA.5, rather than BA.1.

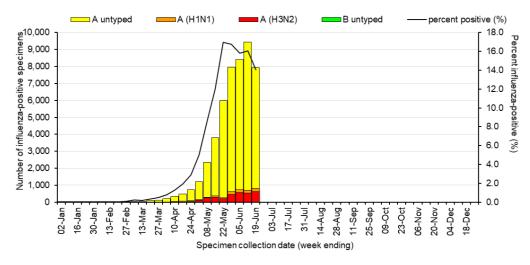
Figure 16. Proportion of samples with S gene target failure (SGTF), 1 March 2022 to 18 June 2022



Influenza and other respiratory viruses

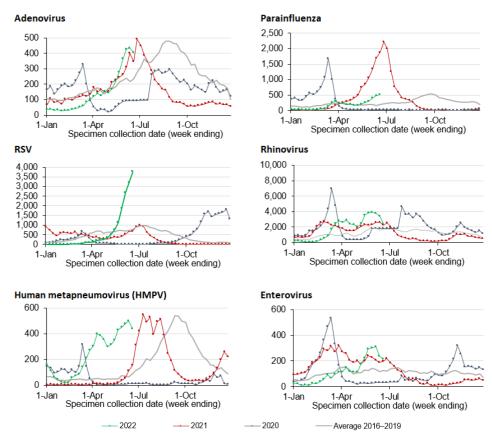
The NSW sentinel laboratory network comprises of 13 public and private laboratories throughout NSW who provide additional data on positive and negative test results. This helps us to understand which respiratory viruses are circulating as well as how much

Figure 16. Number and proportion of tests positive for influenza at sentinel NSW laboratories, 1 January to 19 June 2022



 Of the 56,527 tests conducted for influenza, the proportion positive has decreased to 14% from 16% in the previous week.

Figure 17. Number of positive PCR test results for other respiratory viruses at sentinel NSW laboratories, 1 January to 19 June 2022.



 Recent data is subject to change. For the week ending 19 June 2022, 11 out of 13 sentinel laboratories have provided testing data at the time of reporting.

Table 4. Total number of respiratory disease notifications from sentinel laboratories, NSW in the four weeks to 19 June 2022

| | Week ending | | | Year to date | |
|-----------------------------------|-------------|---------|---------|----------------------|--------------|
| | 29 May | 05 June | 12 June | 19 June [*] | rear to date |
| Adenovirus | 363 | 427 | 435 | 406 | 3,552 |
| Respiratory syncytial virus (RSV) | 1,862 | 2,687 | 3,200 | 3,775 | 15,448 |
| Rhinovirus | 3,887 | 3,733 | 3,380 | 2,399 | 45,063 |
| Human metapneumovirus (HMPV) | 451 | 479 | 498 | 437 | 5,844 |
| Enterovirus | 304 | 309 | 235 | 215 | 2,956 |
| Number of PCR tests conducted | 47,543 | 53,271 | 58,869 | 56,527 | 620,655 |

^{*}Recent data is subject to change. For the week ending 19 June 2022, 11 out of 13 sentinel laboratories have provided testing data at the time of reporting.