

COVID-19 WEEKLY SURVEILLANCE IN NSW

EPIDEMIOLOGICAL WEEK 04 ENDING 29 JANUARY 2022

Published 14 February 2022

Summary for the week 23 January 2022 to 29 January 2022 (inclusive)

Table 1. Total number of cases and tests, and number of cases who were hospitalised, admitted to an Intensive Care Unit (ICU) or died, to the week ending 29 January 2022

	1 Jan 2020 – 15 Jun 2021 (pre-Delta)	16 Jun 2021 – 25 Nov 2021 (Delta variant)	26 Nov 2021 – 29 Jan 2022 (Omicron emergence)	Total
Total cases	5,431 (100%)	75,317 (100%)	983,537 (100%)	1,064,285 (100%)
PCR cases	5,431 (100%)	75,317 (100%)	737,169 (75%)	817,917 (77%)
RAT cases*	NA	NA	246,368 (25%)	246,368 (23%)
Hospitalised#	381 (7%)	7,828 (10%)	9,664 (1%)	17,873 (2%)
Admitted to ICU#	147 (3%)	1,478 (2%)	973 (<1%)	2,598 (<1%)
Deaths#	56 (1%)	588 (1%)	751 (<1%)	1,395 (<1%)
PCR Tests	6,858,471	15,811,943	6,130,658	28,801,072

* This includes 180,433 RAT cases registered between 12 and 19 January 2022. Demographic data was not available for RAT registrations until 20 January 2022, and as such these cases are not included in any demographic data presented in the report. However, they are included in clinical outcome data.

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

In the week ending 29 January 2022:

- There were 111,876 total cases reported, including 66,707 (60%) detected by PCR and 45,169 (40%) registrations of a positive Rapid Antigen Test (RAT). In comparison, 131,775 cases were reported in the week ending 22 January 2022.
- The ten LGAs with the highest number of cases were:
 - Blacktown, 6,178 (6%) cases
 - Sutherland Shire, 3,515 (3%) cases
 - Canterbury-Bankstown, 5,460 (5%) cases
 - Liverpool, 3,488 (3%) cases
 - Central Coast, 5,002 (4%) cases
 - Wollongong, 3,097 (3%) cases
 - Northern Beaches, 4,952 (4%) cases
 - Campbelltown, 2,901 (3%) cases
 - Cumberland, 4,060 (4%) cases
 - 68,098 (61%) cases were residents across 118 other LGAs
 - Penrith, 3,560 (3%) cases
- There were 220 deaths in people diagnosed with COVID-19, compared with 239 in the week ending 22 January 2022.
- From 26 November 2021, cases who had received two effective doses of a COVID-19 vaccine accounted for 63.9% of all cases, 61.7% of those hospitalised, and 57.8% of those admitted to ICU.
- From 26 November 2021, cases who had received three or more effective doses of a COVID-19 vaccine accounted for 4.3% of all cases, 4.8% of those hospitalised, and 4.6% of those admitted to ICU.
- At 29 January 2022, among those aged 12 years and over, 92.9% of the population had received at least two effective doses. Among those aged 18 years and over, 26.1% of the population had received three or more effective vaccine doses.
- PCR testing rates decreased compared to the previous week (down 30%).

Table of Contents

Section 1: Case overview	3
Section 2: Variants of concern in NSW	6
Section 3: Cases in hospital each day with COVID-19	7
Section 4: Clinical severity by vaccination status.....	9
Section 5: Deaths following recent infection with COVID-19	11
Section 6: Vaccination coverage in NSW	12
Section 7: COVID-19 testing in NSW by age group.....	13
Section 8: PCR testing and positivity rates, NSW.....	14
Section 9: Case rates in Local Health Districts	15
Section 10: Aboriginal people	18
Section 11: Correctional settings	20
Section 12: Other respiratory infections in NSW.....	21
Appendix A: COVID-19 PCR tests in NSW by Local Government Area	22
Appendix B: Deaths reported by the Chief Health Officer in the media for 21 January to 27 January 2022	26
Appendix C: Number of positive PCR test results for influenza and other respiratory viruses at sentinel NSW laboratories, January 2020 to 23 January 2022	27
Appendix D: Additional tables and figures	29

Note: Information on measures of public health action has been moved to the PCR testing section (Section 8).

Section 1: Case overview

Figure 1. COVID-19 case count by notification date, with 7 day backward rolling average, NSW, from 16 June 2021 to 29 January 2022

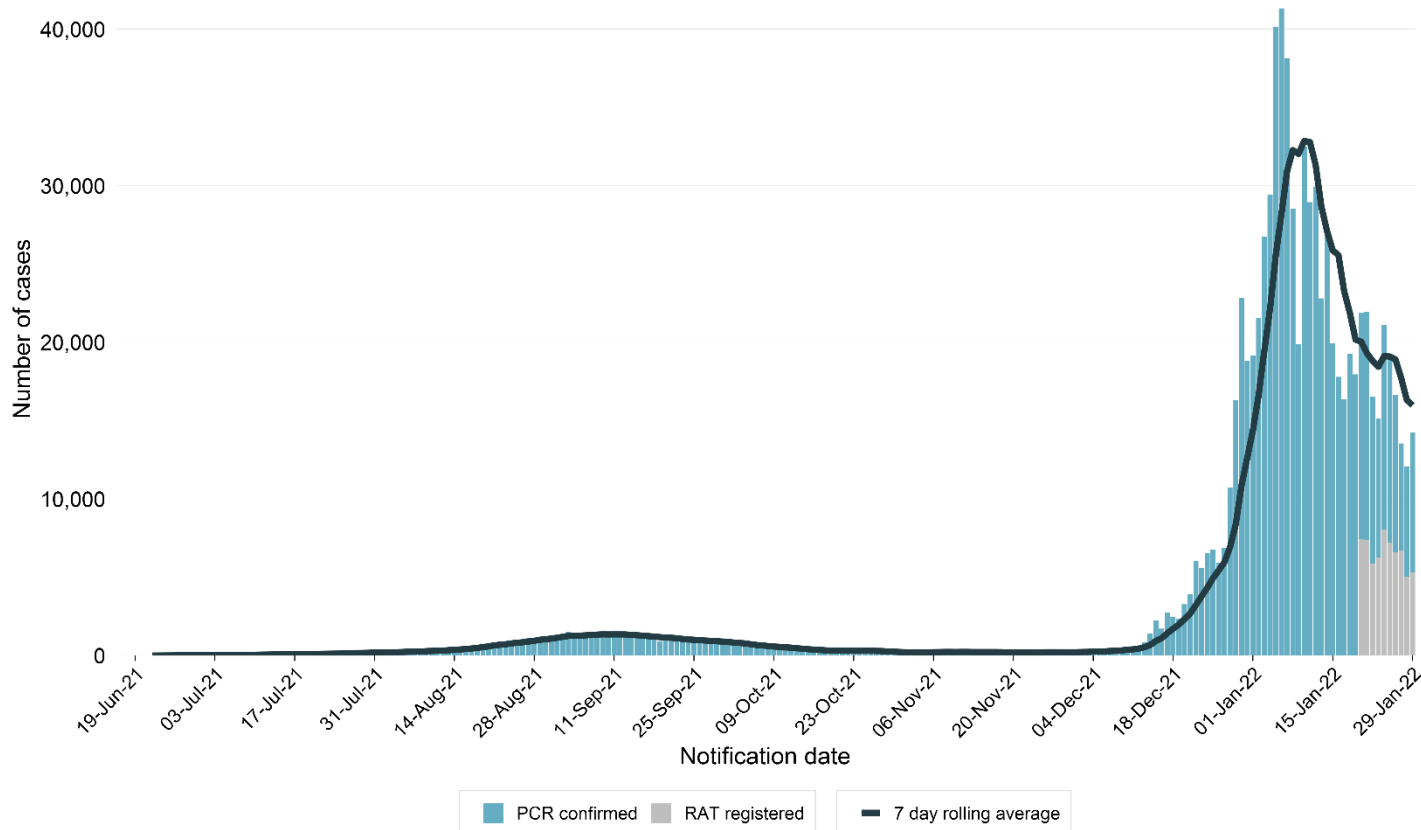


Table 2. Demographics of infections among total confirmed cases by gender and age, NSW, 1 January 2020 to 29 January 2022

	Week ending		26 Nov 2021 – 29 Jan 2022	16 Jun 2021 – 25 Nov 2021	1 Jan 2020 – 15 Jun 2021
	29 Jan 2022	22 Jan 2022			
Gender					
Female	57,231 (51%)	66,749 (51%)	406,447 (51%)	35,774 (47%)	2,670 (49%)
Male	54,448 (49%)	64,799 (49%)	395,238 (49%)	39,510 (52%)	2,760 (51%)
Non-specified or non-binary	197 (<1%)	227 (<1%)	1,419 (<1%)	33 (<1%)	1 (<1%)
Age group					
0-9	15,866 (14%)	16,211 (12%)	72,950 (9%)	12,409 (16%)	251 (5%)
10-19	15,964 (14%)	17,355 (13%)	105,046 (13%)	12,319 (16%)	325 (6%)
20-29	19,024 (17%)	23,090 (18%)	197,848 (25%)	14,741 (20%)	1,115 (21%)
30-39	20,905 (19%)	23,749 (18%)	149,310 (19%)	12,882 (17%)	1,098 (20%)
40-49	16,022 (14%)	18,901 (14%)	106,866 (13%)	9,273 (12%)	718 (13%)
50-59	11,131 (10%)	14,423 (11%)	83,114 (10%)	6,745 (9%)	710 (13%)
60-69	7,367 (7%)	10,224 (8%)	51,336 (6%)	3,871 (5%)	656 (12%)
70-79	3,686 (3%)	5,071 (3%)	23,986 (3%)	1,902 (3%)	394 (7%)
80-89	1,433 (1%)	2,105 (2%)	9,674 (1%)	937 (1%)	122 (2%)
90+	462 (<1%)	611 (<1%)	2,852 (<1%)	238 (<1%)	42 (1%)
Total*	111,876 (100%)	131,775 (100%)	803,104 (100%)	75,317 (100%)	5,431 (100%)

* Total includes cases for whom age was not available at the time of data extraction, and excludes 180,433 positive RATs registered up to 19 January 2022.

Table 3. Demographics of infections among PCR and RAT cases by gender, age and Local Health District of residence, NSW, 20 January 2021 to 29 January 2022

	Week ending 29 Jan 2022		20 Jan 2022 – 29 Jan 2022	
	PCR cases	RAT cases	PCR cases	RAT cases
Gender				
Female	33,919 (59%)	23,312 (41%)	54,034 (61%)	33,918 (39%)
Male	32,656 (60%)	21,792 (40%)	52,126 (62%)	31,884 (38%)
Non-specified or non-binary	132 (67%)	65 (33%)	188 (61%)	118 (39%)
Age group				
0-9	9,456 (60%)	6,410 (40%)	14,489 (62%)	8,905 (38%)
10-19	8,562 (54%)	7,402 (46%)	13,590 (56%)	10,503 (44%)
20-29	10,642 (56%)	8,382 (44%)	17,295 (58%)	12,558 (42%)
30-39	11,915 (57%)	8,990 (43%)	19,022 (59%)	13,115 (41%)
40-49	9,496 (59%)	6,526 (41%)	15,059 (61%)	9,570 (39%)
50-59	7,217 (65%)	3,914 (35%)	11,586 (66%)	5,927 (34%)
60-69	5,144 (70%)	2,223 (30%)	8,373 (71%)	3,383 (29%)
70-79	2,760 (75%)	926 (25%)	4,457 (76%)	1,374 (24%)
80-89	1,130 (79%)	303 (21%)	1,869 (81%)	443 (19%)
90+	372 (81%)	90 (19%)	593 (81%)	139 (19%)
Local Health District				
Central Coast	2,691 (54%)	2,311 (46%)	4,236 (56%)	3,390 (44%)
Illawarra Shoalhaven	3,552 (61%)	2,281 (39%)	5,834 (64%)	3,348 (36%)
Nepean Blue Mountains	3,399 (62%)	2,121 (38%)	5,499 (64%)	3,072 (36%)
Northern Sydney	7,131 (60%)	4,829 (40%)	10,380 (59%)	7,136 (41%)
South Eastern Sydney	6,720 (55%)	5,423 (45%)	10,803 (57%)	8,141 (43%)
South Western Sydney	9,079 (61%)	5,820 (39%)	15,202 (64%)	8,671 (36%)
Sydney	4,838 (59%)	3,336 (41%)	7,611 (60%)	5,116 (40%)
Western Sydney	10,351 (68%)	4,914 (32%)	17,016 (70%)	7,333 (30%)
Far West	141 (58%)	104 (42%)	206 (58%)	147 (42%)
Hunter New England	6,967 (56%)	5,530 (44%)	11,138 (59%)	7,769 (41%)
Mid North Coast	1,545 (44%)	1,956 (56%)	2,251 (45%)	2,735 (55%)
Murrumbidgee	2,654 (59%)	1,823 (41%)	4,457 (64%)	2,519 (36%)
Northern NSW	2,637 (55%)	2,195 (45%)	3,958 (56%)	3,059 (44%)
Southern NSW	1,254 (62%)	782 (38%)	1,976 (63%)	1,143 (37%)
Western NSW	2,416 (62%)	1,511 (38%)	3,828 (66%)	1,989 (34%)
Correctional settings	193 (100%)	0 (0%)	249 (100%)	0 (0%)
Hotel quarantine	5 (100%)	0 (0%)	5 (100%)	0 (0%)
Total*	66,707 (60%)	45,169 (40%)	106,348 (62%)	65,920 (38%)

* Total includes people with an unknown date of birth, people with a usual place of residence outside NSW, and those for whom LHD was not available at the time of data extraction.

- Detailed demographic information about RAT cases became available from 20 January 2022.
- Where both RAT and PCR records are found for a case, only the PCR result is counted.
- A greater proportion of young people aged 10-39 years and a smaller proportion of cases aged 50 years and over were detected by RAT compared to cases detected by PCR.
- Note that the RAT surveillance program implemented in NSW schools did not start until after this reporting period.
- The proportion of cases detected by PCR compared to the proportion detected by RAT varies between Local Health Districts (LHDs). For example, 70% of cases residing in the Western Sydney LHD were detected by PCR, compared to only 45% in the Mid North Coast LHD.

Figure 2. Seven day backward rolling average of COVID-19 cases rate per 100,000 population by age and notification date, NSW, from 26 November 2021 to 29 January 2022

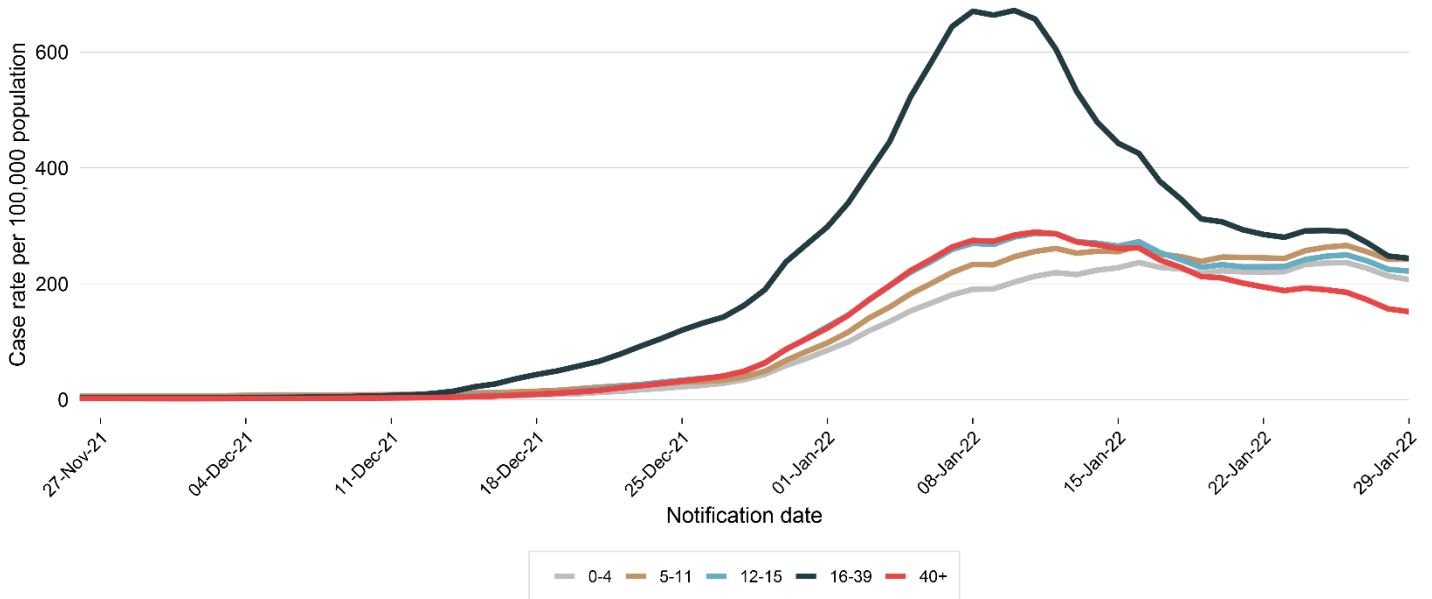
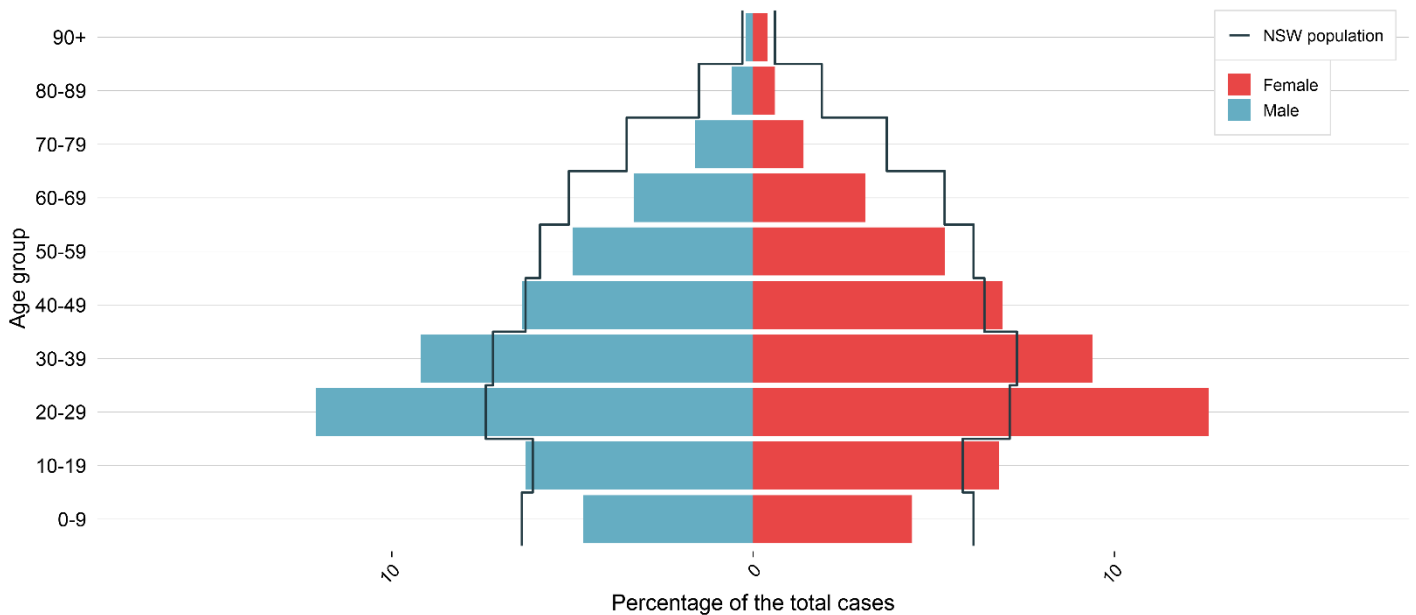


Figure 3. Current wave total case percentage (n = 735,771) by age and gender, NSW, from 26 November 2021 to 29 January 2022



Note that the figure does not include cases for whom gender is not specified or non-binary, and excludes 180,433 positive RATs registered up to 19 January 2022.

- Cases decreased in the week ending 29 January 2022, compared to the previous week.
- Cases between 26 November 2021 and late January 2022 have been concentrated in the 16-39 years age group (see Figure 2), and especially in the 20-29 years age group (see Figure 3).
- In the week ending 29 January, case rates decreased in those aged 40+ years, and have converged in all other age groups.
- The median age of cases since 26 November 2021 was 31 (interquartile range (IQR) = 21-47). Cases aged 10-49 years were over-represented among cases relative to their proportion in the NSW population.

Section 2: Variants of concern in NSW

Table 4. Variants of concern (VOCs)[#] identified among COVID-19 cases by week reported, NSW, 1 January 2020 to 29 January 2022

Variant	Week ending				26 Nov 2021 – 29 Jan 2022	16 Jun 2021 – 25 Nov 2021	1 Jan 2020 – 15 Jun 2021
	29 Jan*	22 Jan*	15 Jan	8 Jan			
Alpha (B.1.1.7)	0	0	0	0	0	11	189
Beta (B.1.351)	0	0	0	0	0	5	29
Gamma (P.1)	0	0	0	0	0	0	6
Delta (B.1.617.2)	0	2	15	32	2,687	16,599	73
Omicron (B.1.1.529)	62	281	409	336	2,614	-	-
Omicron (BA.2)	12	4	0	1	17	-	-
Total	74	287	424	369	5,318	16,615	297

***Note:** identification of variants of concern is through whole genome sequencing. Results for reported cases in the most recent weeks may not be available at the time of reporting.

Variants that pose an increased risk to global public health are designated as VOCs by the World Health Organization.

- From 1 January 2020 to 15 June 2021, genomic sequencing identified several VOCs in cases in NSW, with the predominant variant being Alpha (B.1.1.7).
- On 16 June 2021, the first community case with the Delta (B.1.617.2) variant was notified and genomic sequencing has identified this as the only variant circulating in the community in the following months (other variants were detected in hotel quarantine).
- On 26 November 2021, the first community case with the Omicron (B.1.1.529) variant was notified. Since that time, both the Delta and Omicron variants have been circulating in the community. A descendant lineage of Omicron (BA.2) has also been identified in the community.
- These dates form the basis for the major time intervals used throughout the report.
- The current priority for whole genome sequencing is cases admitted to an intensive care unit. In the general community, the Omicron variant is now dominant.

Section 3: Cases in hospital each day with COVID-19

Figure 4a. Estimated active cases (number of cases notified last 14 days), number of cases in hospital, in ICU and ventilated by date, NSW, from 16 June 2021 to 29 January 2022

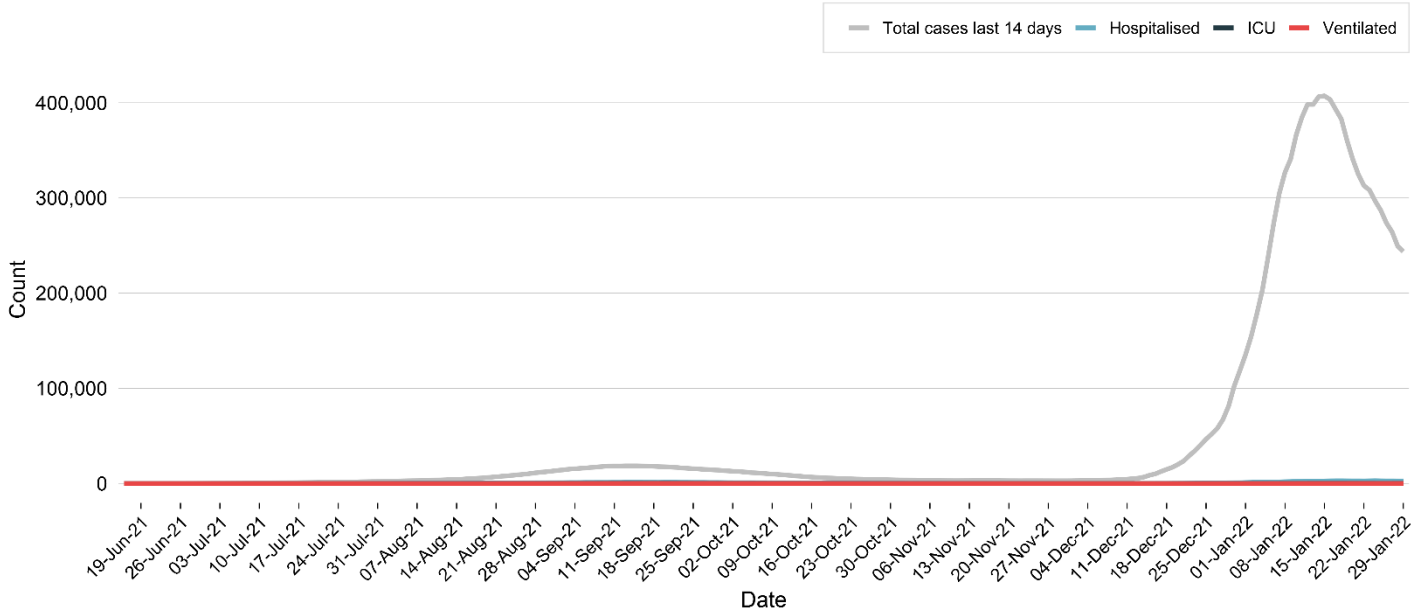
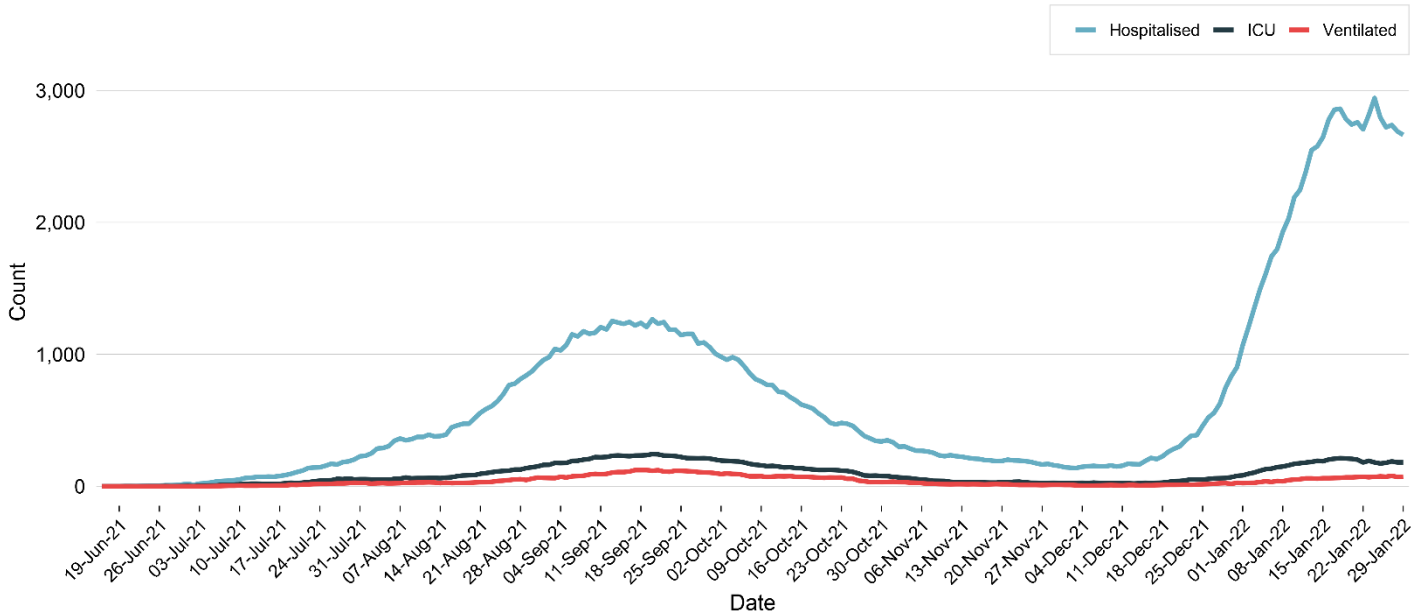
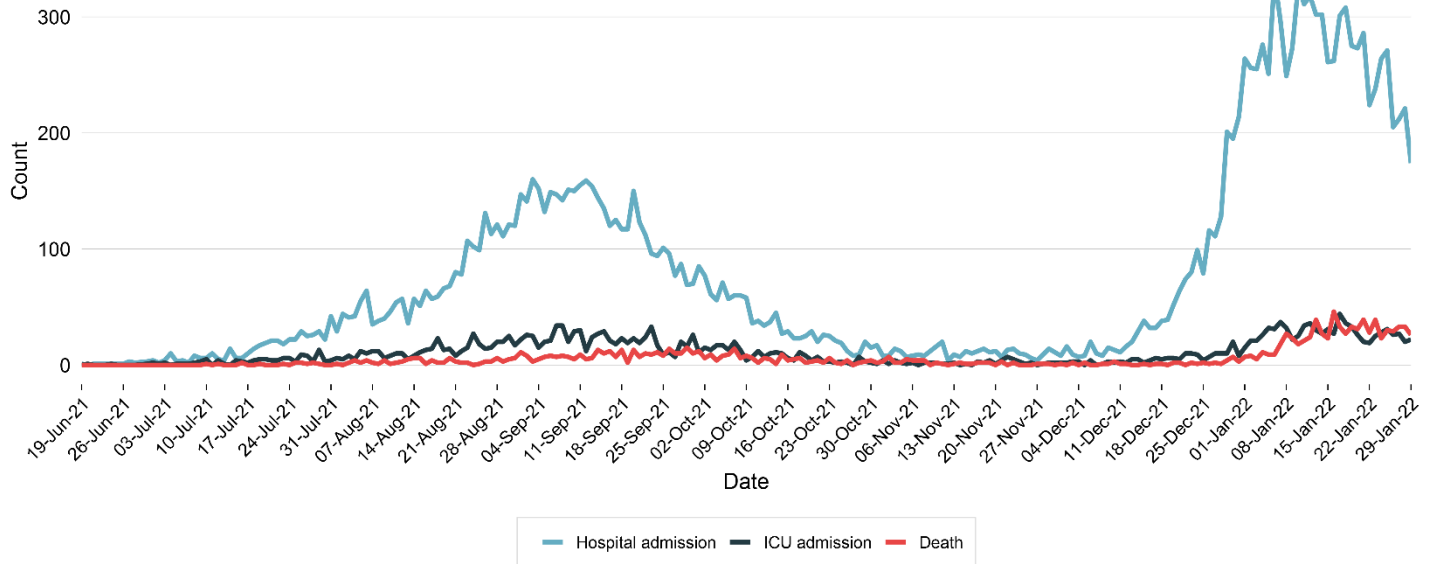


Figure 4b. Number of cases in hospital, in ICU and ventilated by date, NSW, from 16 June 2021 to 29 January 2022



- The graph shows the number of active cases and the number of cases hospitalised, in ICU and ventilated.
- Since 16 June 2021, the median delay between a person becoming ill with COVID-19 and requiring a hospitalisation is 4 days.
- The number of cases who are hospitalised was stable in the week ending 29 January. The number of cases in hospital is higher than the previous peak in mid-September 2021, however the number of cases in hospital has not increased at the same rate as number of cases detected. This may be due to cases being primarily young, having received at least two effective doses, and/or the Omicron variant being less severe than the Delta variant circulating in the period 16 June to 25 November 2021.

Figure 4c. Number of daily new hospital admissions, ICU admissions and deaths among cases, NSW, from 16 June 2021 to 29 January 2022



- The number of daily new hospital admissions decreased in the week ending 29 January 2022 compared to the previous week. Given that hospitalisation lags symptom onset by a median of 4 days, and death lags by a median of 12 days, the number of daily deaths has not yet shown signs of reaching a peak.

Section 4: Clinical severity by vaccination status

Table 5. Hospitalisations, ICU admissions and deaths among cases diagnosed with COVID-19, by vaccination status, NSW, from 26 November 2021 to 29 January 2022

Vaccination status	Total cases	Hospitalised* (% of total cases)	Hospitalised and in ICU* (% of total cases)	Death* (% of total cases)
Three or more effective doses	34,292	467 (1.4%)	45 (0.1%)	53 (0.2%)
Two effective doses	513,228	5,962 (1.2%)	562 (0.1%)	484 (0.1%)
One effective dose	6,618	175 (2.6%)	23 (0.3%)	27 (0.4%)
No effective dose	95,918	961 (1.0%)	106 (0.1%)	164 (0.2%)
Unknown	153,048	2,099 (1.4%)	237 (0.2%)	23 (<0.1%)
Total	803,104	9,664 (1.2%)	973 (0.1%)	751 (0.1%)

* 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.

- In the past week, 71,189 (63.6%) of all cases had received at least two effective doses (see Appendix D), reflective of the high proportion of community vaccination (90.0% of those aged 12 years and over, at the start of this wave on 26 November 2021).
- Vaccination status is determined by matching records in the Australian Immunisation Register, or, where no match can be made (e.g., because of a misspelled name, incorrect date of birth, or Medicare registration outside NSW), then vaccination status is based on self-reported data from case interviews where available. Given the high vaccination rate in the population, it is likely that most cases with Unknown vaccination status have actually received at least two effective doses.
- The proportion of cases who were hospitalised, admitted to ICU or died is similar in Table 5 for those with no effective dose and those with two effective doses because the no effective dose group contains a very large proportion of young children, who typically have mild outcomes and are only very rarely hospitalised, admitted to ICU or die. Likewise, the overall rate of hospitalisation, ICU admission and death is currently similar for those with three effective doses compared to those with two effective doses, because the group with three effective doses contains a larger proportion of elderly cases, as well as more people with immunosuppression, who were eligible for a third vaccine dose earlier. Therefore, it is important to consider rates of hospitalisation, ICU admission, and death by age group as well as vaccination status. Table 6 and Appendix D show such further breakdowns by age range.

Table 6. Proportion of cases with a severe outcome (ICU and/or death) amongst all cases, by age, time of infection, and vaccination status, NSW, 26 November 2021 to 29 January 2022

Age-group (years)	Three or more effective doses	Two effective doses	Less than two effective doses
0-9	-	-	<1% (18 / 72,950)
10-19	0% (0 / 356)	<1% (9 / 65,508)	<1% (6 / 20,440)
20-29	<1% (1 / 5,029)	<1% (30 / 144,439)	<1% (8 / 3,028)
30-39	<1% (4 / 5,651)	<1% (38 / 104,783)	1% (13 / 2,475)
40-49	<1% (4 / 7,834)	<1% (44 / 76,690)	1% (14 / 1,395)
50-59	<1% (9 / 6,207)	<1% (73 / 60,730)	3% (26 / 813)
60-69	<1% (9 / 4,233)	<1% (152 / 36,830)	7% (41 / 581)
70-79	1% (21 / 2,979)	2% (253 / 16,442)	10% (41 / 424)
80-89	2% (26 / 1,415)	4% (253 / 6,257)	25% (74 / 294)
90+	3% (19 / 588)	8% (122 / 1,549)	33% (45 / 136)
Total	<1% (93 / 34,292)	<1% (974 / 513,228)	<1% (286 / 102,536)

* Note: Less than two effective doses combines those with one and no effective dose. The table excludes cases with an unknown vaccination status.

- In the period since 26 November 2021, the *number* of cases with two effective doses who experience severe outcomes is reflective of the high number of people in the community who have received two effective doses. However, the *proportion* of cases with two effective doses who experience severe outcomes is still lower than that for cases with less than two effective doses in every age group, demonstrating the effectiveness of vaccines to protect against severe outcomes.
- Caution should be used when interpreting rates among people over 60 with less than two effective doses since 26 November 2021. The denominator among cases is small, because the proportion of people in the community aged over 60 with no effective dose is small.
- Caution should also be used when interpreting rates among those with three or more effective doses, as the number who have received three doses is still relatively small. Rates will become more reliable as a greater proportion of the population receives their third dose. However, the preliminary evidence to date suggests that three or more effective doses provides additional protection against ICU admission and/or death, compared to having received only two effective doses.

Section 5: Deaths following recent infection with COVID-19

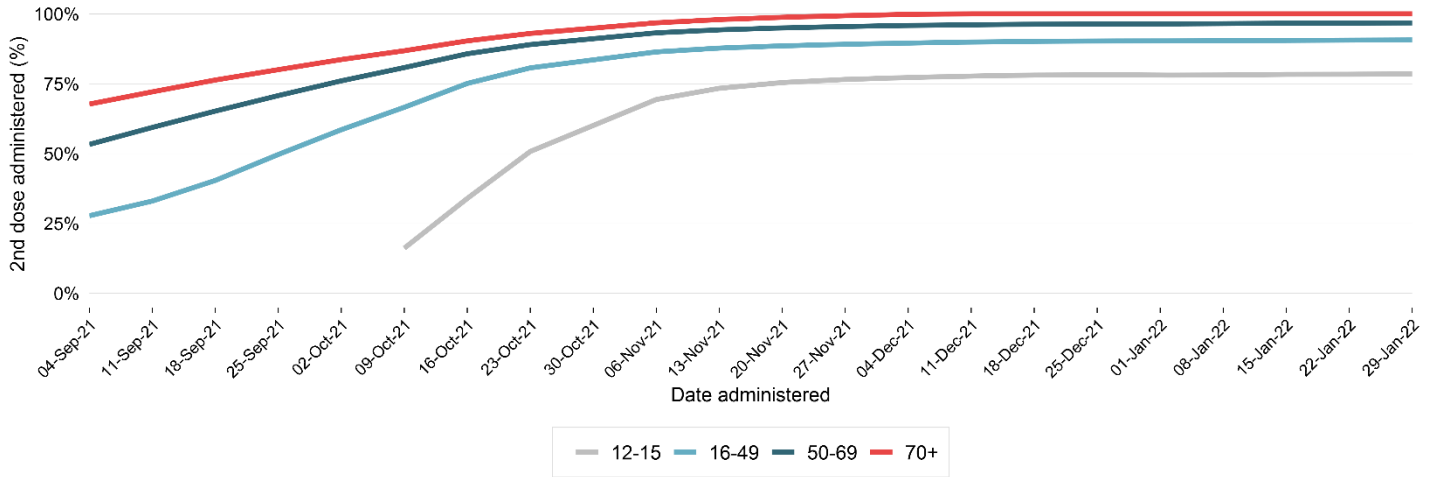
Table 7. Deaths following recent infection with COVID-19, by age group and location, 26 November 2021 to 29 January 2022

Age-group (years)	Number of deaths	Case fatality rate	Location of death		
			Health care facility	Aged care facility	Home
0-9	1	<0.1%	0	0	1
10-19	0	0.0%	0	0	0
20-29	2	<0.1%	2	0	0
30-39	4	<0.1%	3	0	1
40-49	9	<0.1%	7	0	2
50-59	27	<0.1%	23	0	4
60-69	68	0.1%	60	2	6
70-79	167	0.7%	139	27	1
80-89	289	3.0%	202	80	7
90+	184	6.5%	100	82	2
Total	751	0.1%	536	191	24

- Since the start of the pandemic, 0.13% of confirmed cases (1,395 people) have died.
- This includes 415 residents of aged care facilities.
- Among cases since 26 November, 21.8% (164/751) of the deaths were among people who had received no effective dose (see Table 5). This is an over-representation, given that those with no effective dose represent 11.9% (95,918/803,104) of cases.
- In the period from 16 June to 29 January 2022, the median delay between a person becoming ill and death was 12 days.
- In the week ending 29 January 2022, there were 220 deaths in people with a diagnosis of COVID-19, including
 - 38 people who had received three doses (1 in their 50s, 1 in their 60s, 6 in their 70s, 15 in their 80s, and 15 aged 90+ years),
 - 128 people who had received two effective doses (1 in their 50s, 12 in their 60s, 28 in their 70s, 56 in their 80s, and 31 aged 90+ years),
 - 7 people who had received one dose (2 in their 60s, 4 in their 80s and 1 aged 90+ years),
 - 46 people who had received no effective dose (2 in their 50s, 4 in their 60s, 6 in their 70s, 21 in their 80s, and 13 aged 90+ years), and
 - 1 person in their 90s whose vaccination status is unknown
- In the week ending 29 January 2022, 158 died in a health care facility, 60 died in an aged care facility, and 2 died at home.
- The majority of deaths in cases since 26 November 2021 have occurred in hospital (536/751, 72%).
- Among the 24 deaths at home since 26 November 2021, 18 (75%) were diagnosed after death.

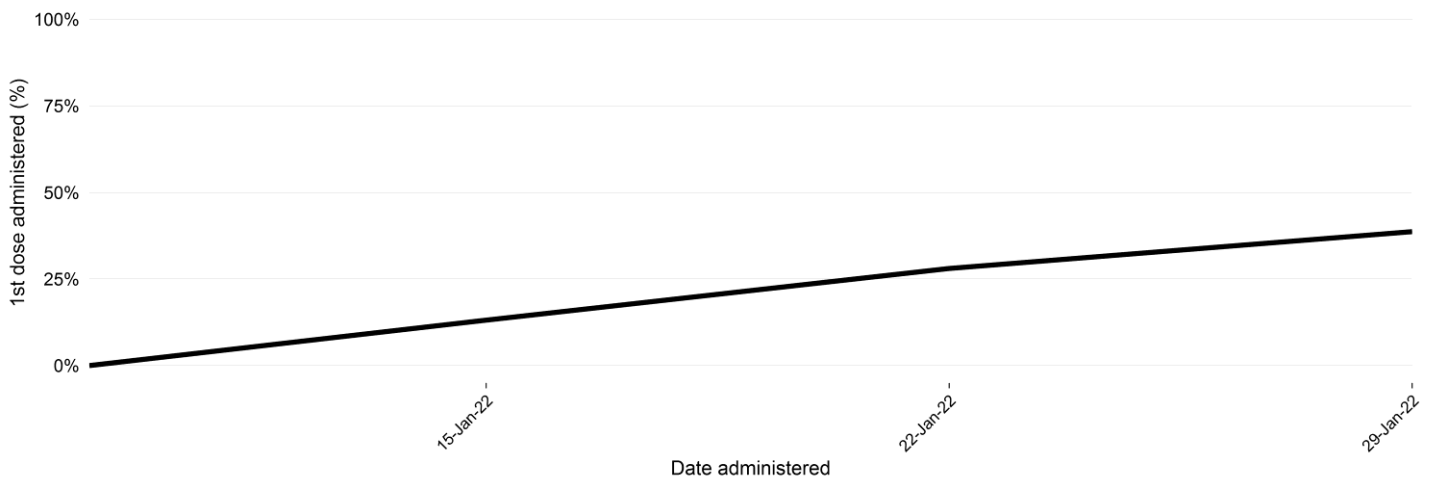
Section 6: Vaccination coverage in NSW

Figure 5. Proportion of 12+ year-olds who have received two doses of COVID-19 vaccine, by age range and time, NSW, 4 September 2021 to 29 January 2022



Sources: <https://www.health.gov.au/resources/collections/covid-19-vaccination-daily-rollout-update>

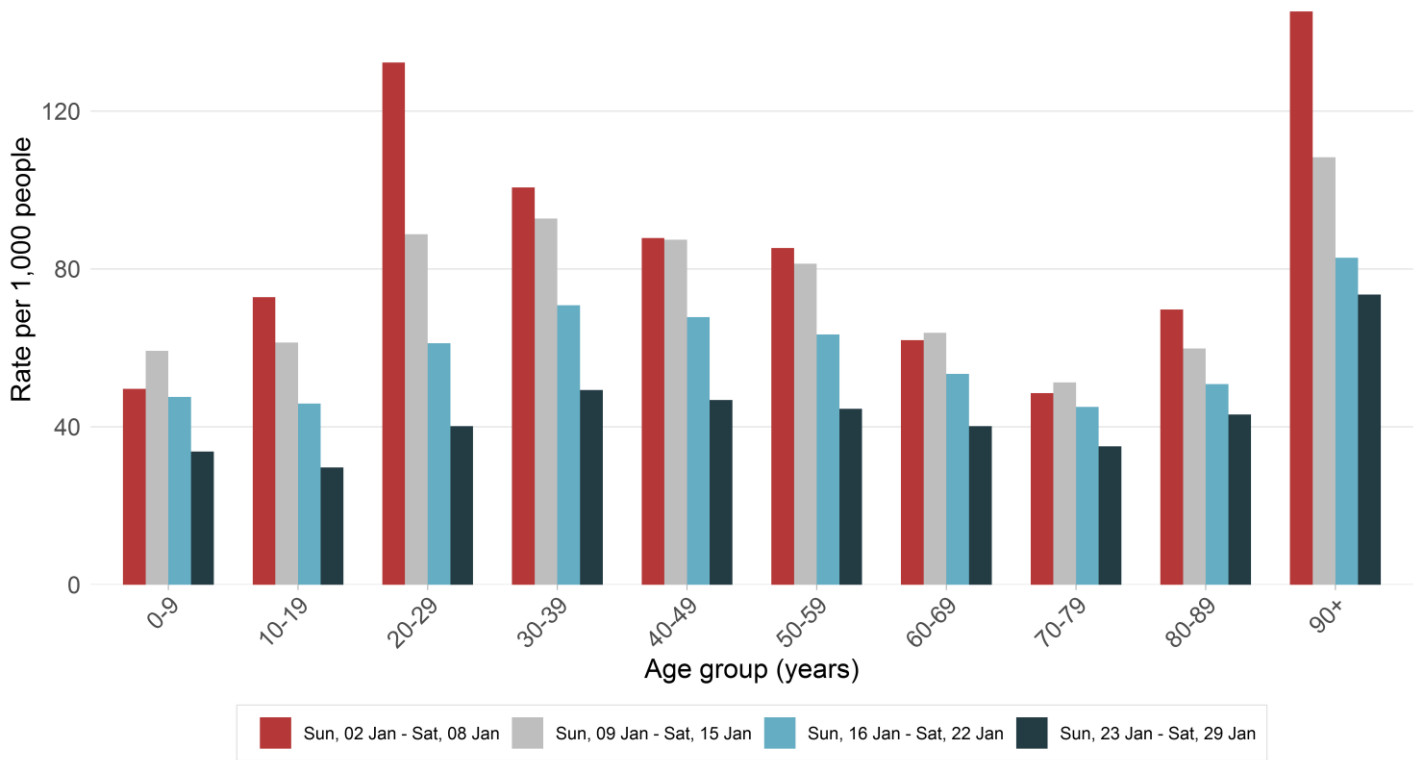
Figure 6. Proportion of children aged 5-11 years who have received one dose of COVID-19 vaccine, by age range and time, NSW, 9 January 2022 to 29 January 2022



- The proportion of the NSW population aged 12 and over who have received two vaccine doses was over 93% by 29 January 2022.
- Children aged 12-15 years became eligible for vaccination from mid-September 2021 and showed strong uptake of vaccination immediately. Since mid-November their vaccination has remained stable at around 78%.
- The highest vaccination rates have been achieved among those aged 70+ and 50-69 years, who have a vaccination rate above 95%.
- Children aged 5-11 became eligible for vaccination on 10 January 2022, and by 29 January 38.7% of children in this age range had received their first dose. Children in this age range are recommended to receive their second dose 8 weeks after the first, with a minimum interval of 3 weeks.
- By 29 January 2022, 39.3% of the NSW population aged 18 years and over had received three or more vaccine doses.

Section 7: COVID-19 testing in NSW by age group

Figure 7. Number of PCR tests per 1,000 population, by age group, NSW, 2 January to 29 January 2022

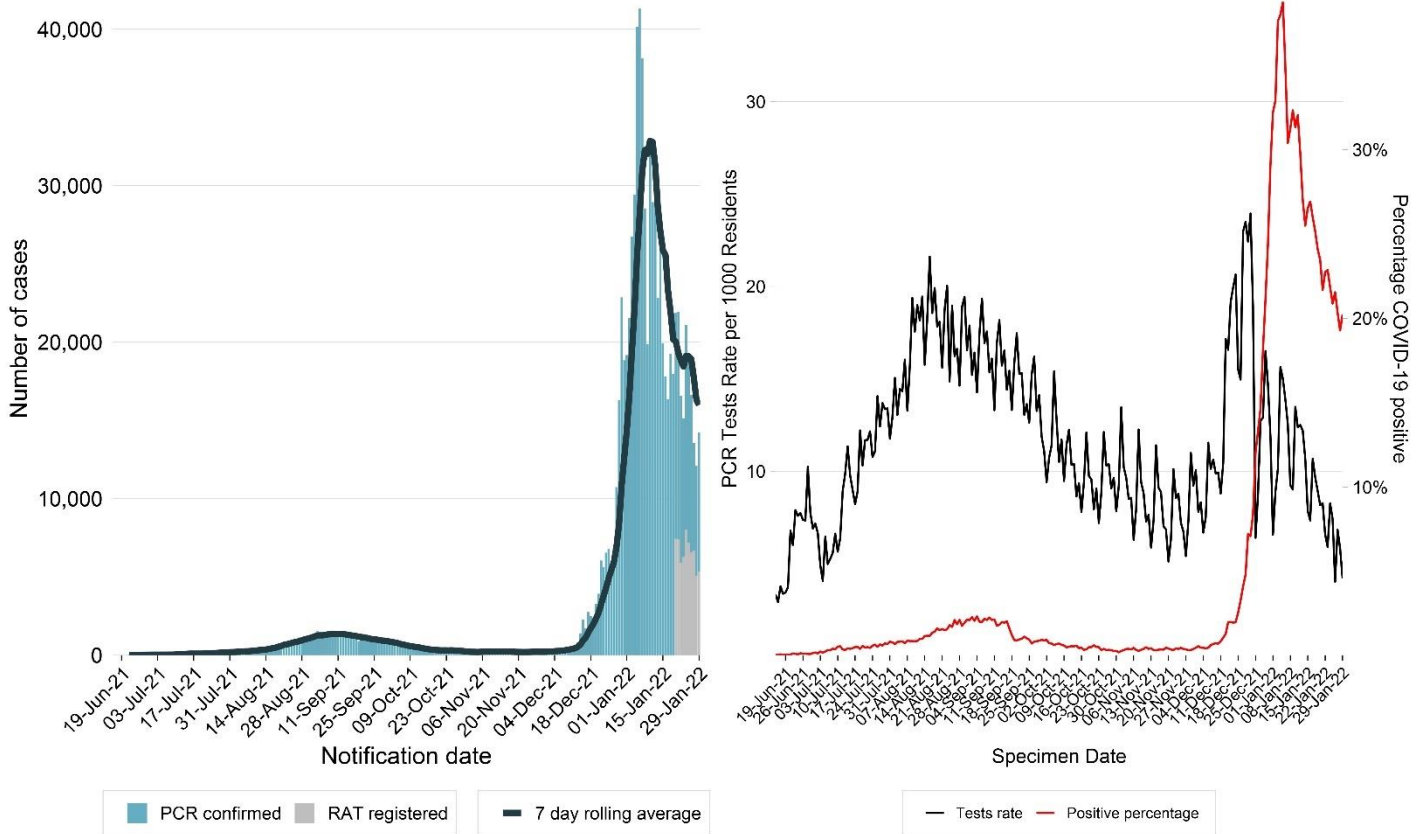


Includes SARS-CoV-2 PCR tests only and excludes notifications with age missing.

- The figure shows PCR testing only and excludes RAT results. While it is mandatory to report positive RAT results, NSW Health receives no information about the number of negative tests performed, and as such it is not possible to calculate RAT testing rates.
- In the last four weeks to 29 January, PCR testing rates decreased for all age groups. Changes in testing policy direct people to RATs as the primary option, with PCR testing recommended only in select circumstances.
- The PCR testing rate remains highest among those aged 90 years and over.

Section 8: PCR testing and positivity rates, NSW

Figure 8. PCR confirmed cases, testing rates per 1000 population, and percentage of tests which were positive for COVID-19, NSW, 16 June 2021 to 29 January 2022



- There were 320,900 PCR tests reported in the week ending 29 January 2022, down 30% from the 457,696 reported in the week ending 22 January 2022.
- This is likely due to recent policy changes to use RATs as the primary option, with PCR recommended only in select circumstances.
- Test positivity rates have generally been well below 3%, reflecting high surveillance capacity and rapid case identification. However, during January 2022, the test positivity rate increased to above 30%. This high positivity rate indicates that there were likely undetected COVID-19 cases in the community. The test positivity rate has dropped to approximately 20% in the week ending 29 January 2022.
- The proportion of PCR confirmed cases notified to NSW Health by the laboratory within 24 hours of specimen collection was 81% (53,850/66,707) in the week ending 29 January 2022, compared to 77% (85,073/111,010) in the previous week.

Section 9: Case rates in Local Health Districts

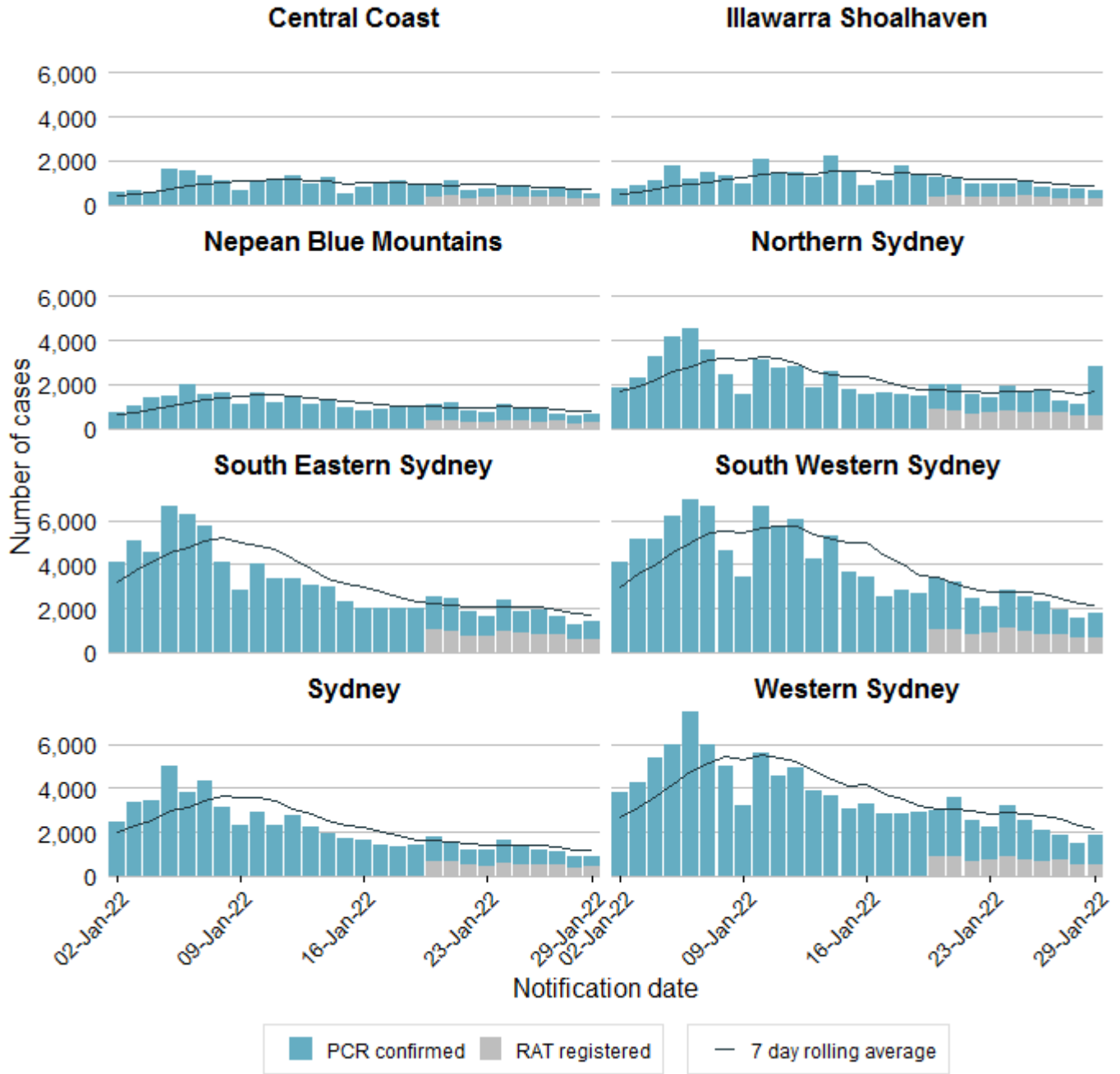
Table 8. Total COVID-19 cases rate per 100,000 population by LHD of residence and week reported, NSW, 2 January to 29 January 2022

	Local Health District	Week ending				Total
		29 Jan	22 Jan	15 Jan	8 Jan	
Metropolitan Local Health Districts	Western Sydney	1,449	1,987	2,743	3,595	9,775
	South Western Sydney	1,435	1,970	3,369	3,734	10,507
	Central Coast	1,418	1,819	1,928	2,075	7,239
	Nepean Blue Mountains	1,412	1,725	2,208	2,515	7,860
	Illawarra Shoalhaven	1,390	1,988	2,603	1,966	7,948
	South Eastern Sydney	1,266	1,539	2,281	3,803	8,888
	Northern Sydney	1,251	1,224	1,718	2,310	6,503
	Sydney	1,173	1,478	2,334	3,647	8,632
Rural and Regional Local Health Districts	Northern NSW	1,557	1,449	1,735	1,634	6,375
	Mid North Coast	1,551	1,066	1,268	1,451	5,336
	Murrumbidgee	1,502	1,471	1,378	1,068	5,418
	Western NSW	1,378	1,185	1,246	1,340	5,149
	Hunter New England	1,312	1,293	1,500	1,981	6,086
	Southern NSW	938	1,307	1,176	964	4,385
	Far West	813	620	677	607	2,717
	NSW*	1,367	1,610	2,213	2,761	7,950

* Includes people with a usual place of residence outside of NSW, and those for whom LHD was not available at the time of data extraction. The table excludes 180,433 positive RATs registered up to 19 January 2022.

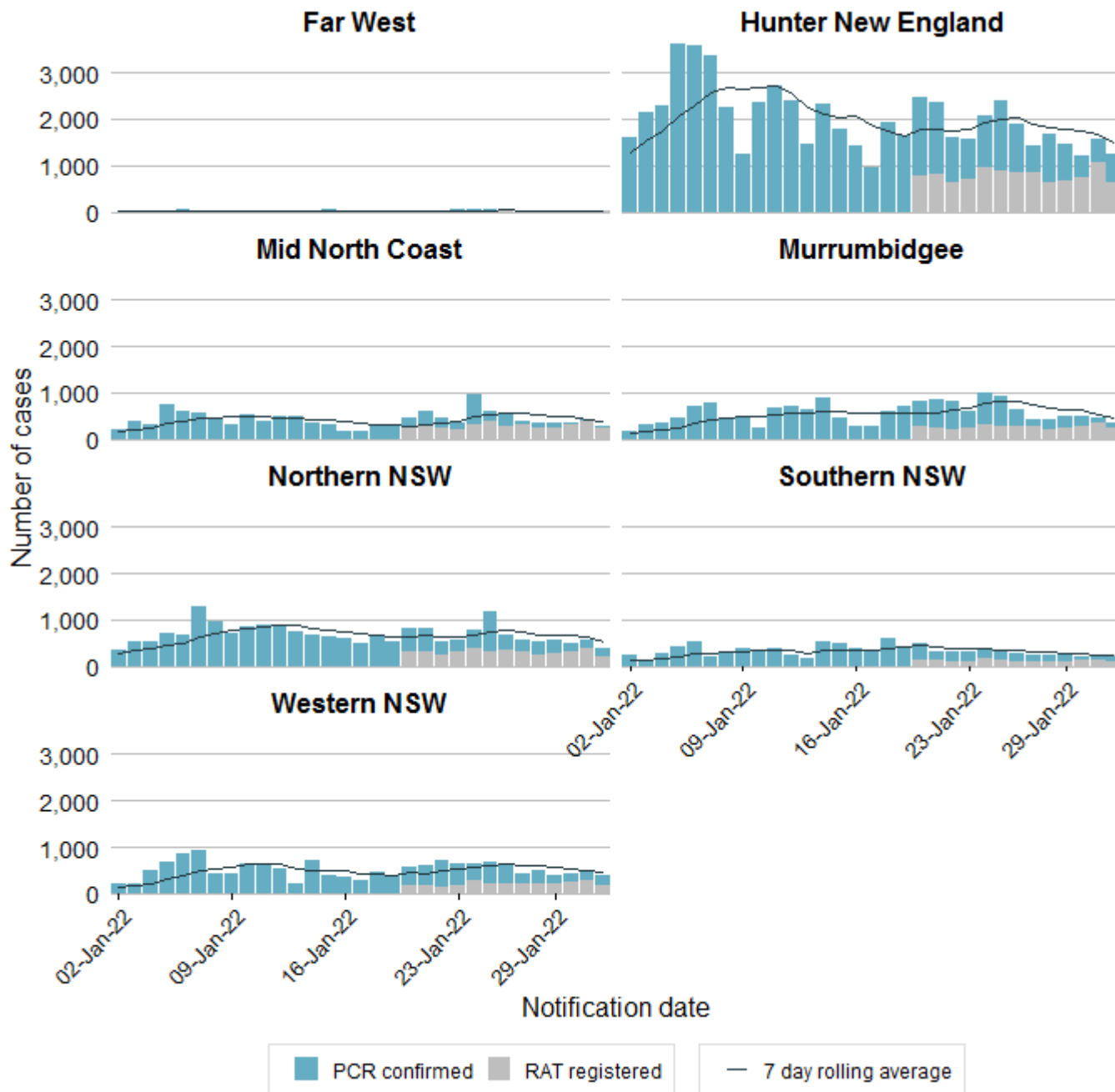
- In the week ending 29 January 2022, case rates per 100,000 population were highest in three regional Local Health Districts (LHDs), Northern NSW, Mid North Coast and Murrumbidgee. These three LHDs have much smaller populations than the metropolitan LHDs.
- Since 2 January 2022, Southern Western Sydney, Western Sydney and South Eastern Sydney LHDs had the highest case rates per 100,000 population.
- Table 8 does not include 601 cases in correctional settings and 15 cases in hotel quarantine.

Figure 9a. Number of COVID-19 cases for metropolitan Local Health District by test type, NSW, 2 January to 29 January 2022



Note: The figure excludes 180,433 positive RATs registered up to 19 January 2022.

Figure 9b. Number of COVID-19 cases for rural and regional Local Health Districts by test type, NSW, 2 January to 29 January 2022.



Note: The figure excludes 180,433 positive RATs registered up to 19 January 2022.

Section 10: Aboriginal people

Figure 10. Number of COVID-19 infections in Aboriginal people by date, NSW, 16 June 2021 to 29 January 2022

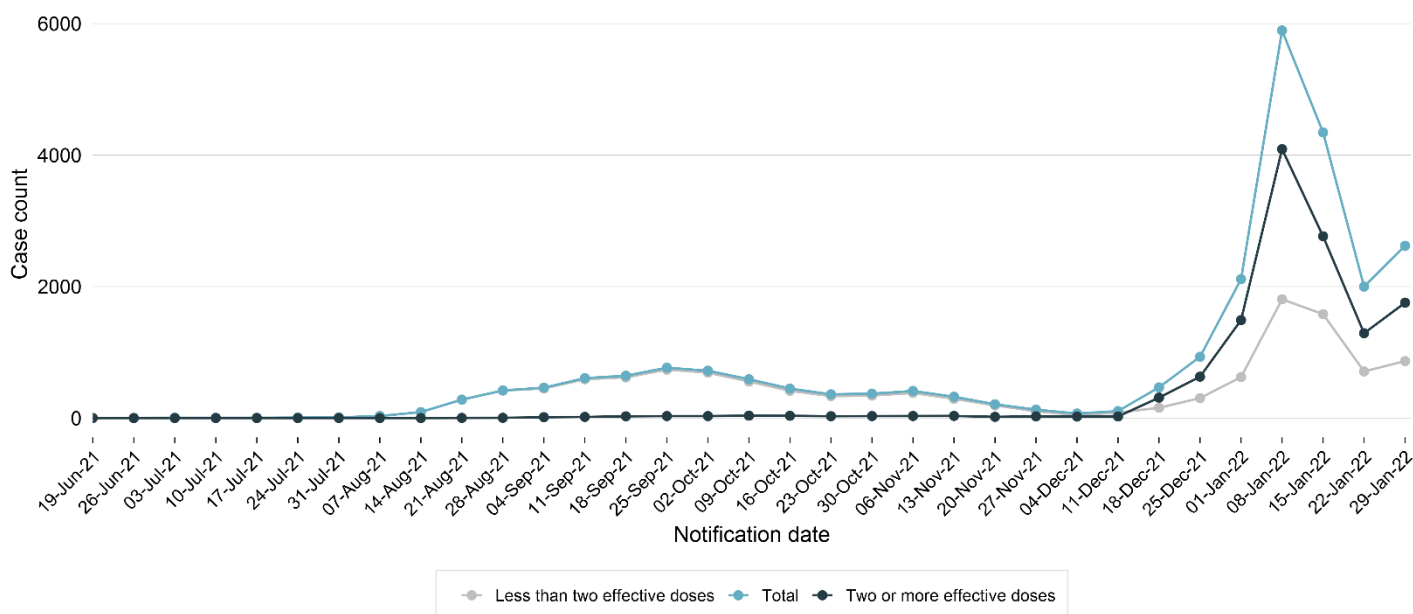


Table 9. Demographics of infections among Aboriginal people by gender, age, and vaccination status, NSW, 16 June 2021 to 29 January 2022

	Week ending				26 Nov 2021 - 29 Jan 2022	16 Jun 2021 - 25 Nov 2021
	29 Jan	22 Jan	15 Jan	8 Jan		
Gender						
Female	1,409 (54%)	1,081 (54%)	2,357 (54%)	3,262 (55%)	10,086 (54%)	3,506 (51%)
Male	1,207 (46%)	916 (46%)	1,986 (46%)	2,632 (45%)	8,463 (46%)	3,372 (49%)
Non-specified or non-binary	4 (<1%)	2 (<1%)	2 (<1%)	3 (<1%)	15 (<1%)	1 (<1%)
Age group						
0-9	225 (9%)	243 (12%)	727 (17%)	771 (13%)	2,444 (13%)	1,805 (26%)
10-19	429 (16%)	329 (16%)	894 (21%)	1,252 (21%)	3,707 (20%)	1,606 (23%)
20-29	776 (30%)	552 (28%)	1,029 (24%)	1,867 (32%)	5,440 (29%)	1,223 (18%)
30-39	549 (21%)	382 (19%)	652 (15%)	825 (14%)	2,913 (16%)	963 (14%)
40-49	317 (12%)	226 (11%)	501 (12%)	542 (9%)	1,923 (10%)	646 (9%)
50-59	212 (8%)	163 (8%)	333 (8%)	382 (6%)	1,319 (7%)	390 (6%)
60+	112 (4%)	106 (5%)	209 (5%)	209 (4%)	818 (4%)	246 (4%)
Vaccination status						
Three or more effective doses	78 (3%)	49 (2%)	101 (2%)	78 (1%)	343 (2%)	0 (0%)
Two effective doses	1,676 (64%)	1,241 (62%)	2,664 (61%)	4,013 (68%)	12,033 (65%)	356 (5%)
One effective dose	41 (2%)	50 (3%)	60 (1%)	69 (1%)	277 (1%)	473 (7%)
No effective dose	316 (12%)	295 (15%)	1,144 (26%)	1,266 (21%)	3,882 (21%)	5,524 (80%)
Unknown	509 (19%)	364 (18%)	376 (9%)	471 (8%)	2,029 (11%)	526 (8%)
Total	2,620 (100%)	1,999 (100%)	4,345 (100%)	5,897 (100%)	18,564 (100%)	6,879 (100%)

* The table excludes positive RATs registered up to 19 January 2022.

- Since 26 November 2021 there have been 18,564 Aboriginal people diagnosed with COVID-19, representing 2.3% of all cases in that time. This is an under-representation among Aboriginal and Torres Strait Islander people, who represent 3.4% of the NSW population according to the Australian Bureau of Statistics. In contrast, in the period 16 June to 25 November 2021 Aboriginal and Torres Strait Islander people were over-represented in total cases, with 9.1% of cases identified as Aboriginal.
- Since 26 November 2021, the proportion of cases of COVID-19 in Aboriginal people has been highest in the 20-29 year age group, reflecting the high case numbers in this age group in the population as a whole.
- In the period from 16 June to 25 November 2021 80% of Aboriginal cases had received no effective dose, compared with 70% of the non-Aboriginal cases in this period.

- Since 26 November 2021, the proportion of cases who had received two or more effective doses is similar among Aboriginal and non-Aboriginal cases (67% vs. 68%, respectively).
- NSW Health is no longer interviewing every case and therefore data on Aboriginality is limited (complete data available for 24.6% of cases). The number of cases who identify as Aboriginal or Torres Strait Islander people is likely to be under-reported.

Table 10. Hospitalisations, ICU admissions and deaths among Aboriginal people diagnosed with COVID-19, NSW, from 1 January 2020 to 29 January 2022

Clinical severity	1 Jan 2020 – 25 Nov 2021		26 Nov 2021 – 29 Jan 2022	
	Aboriginal people	Non-Aboriginal people/ status not recorded	Aboriginal people	Non-Aboriginal people/ status not recorded
Hospitalised	565 (8.1%)	9258 (12.5%)	240 (1.3%)	10431 (1.3%)
Admitted to ICU	103 (1.5%)	1,514 (2.1%)	26 (0.1%)	945 (0.1%)
Death	19 (0.3%)	625 (0.8%)	12 (0.1%)	739 (0.1%)
Total	6,934	73,814	18,564	784,540

* 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. Non-Aboriginal people includes cases where Aboriginal status is not recorded. The table excludes 180,433 positive RATs registered up to 19 January 2022.

- 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.
- Up to 25 November 2021, Aboriginal cases were less likely to be admitted to ICU or die than non-Aboriginal cases and had a lower rate of hospitalisation.
- This may be because the Aboriginal population in NSW is younger than the non-Aboriginal population, and younger cases are less likely to experience severe illness.
- Since 26 November 2021, the rate of admission to ICU and rate of death are similar between Aboriginal and non-Aboriginal cases.

Section 11: Correctional settings

Figure 11. Number of COVID-19 infections among people residing in correctional settings by date, NSW, 16 June 2021 to 29 January 2022

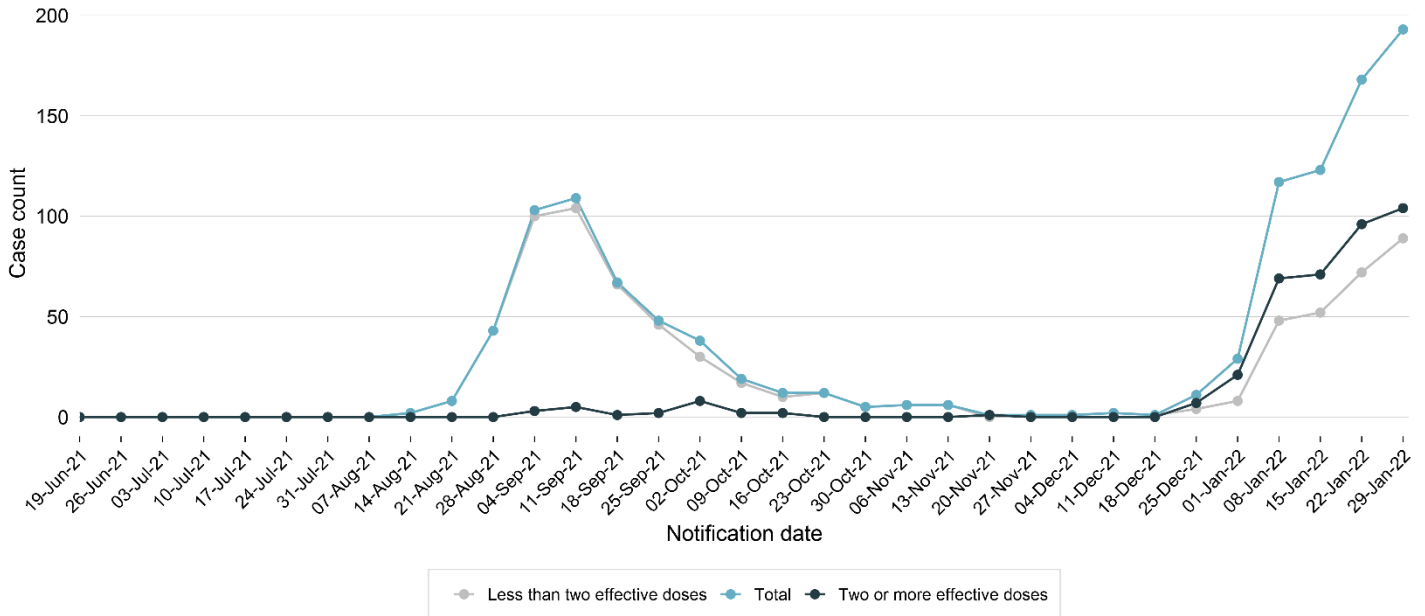


Table 11. Demographics of infections in correctional settings by gender, age, and vaccination status, NSW, 16 June 2021 to 29 January 2022

	Week ending				26 Nov 2021 - 29 Jan 2022	16 Jun 2021 - 25 Nov 2021
	29 Jan	22 Jan	15 Jan	8 Jan		
Gender						
Male	193 (100%)	166 (99%)	121 (98%)	113 (97%)	635 (98%)	453 (94%)
Female	0 (0%)	1 (1%)	2 (2%)	4 (3%)	9 (1%)	27 (6%)
Non-specified or non-binary	0 (0%)	1 (1%)	0 (0%)	0 (0%)	1 (<1%)	0 (0%)
Age group						
10-19	13 (7%)	2 (1%)	10 (8%)	8 (7%)	38 (6%)	28 (6%)
20-29	49 (25%)	49 (29%)	29 (24%)	32 (27%)	172 (27%)	142 (30%)
30-39	58 (30%)	51 (30%)	38 (31%)	32 (27%)	192 (30%)	169 (35%)
40-49	43 (22%)	37 (22%)	28 (23%)	30 (26%)	148 (23%)	95 (20%)
50-59	17 (9%)	12 (7%)	10 (8%)	9 (8%)	51 (8%)	35 (7%)
60-69	9 (5%)	10 (6%)	4 (3%)	6 (5%)	29 (4%)	7 (1%)
70-79	2 (1%)	5 (3%)	4 (3%)	0 (0%)	11 (2%)	3 (1%)
80-89	2 (1%)	2 (1%)	0 (0%)	0 (0%)	4 (1%)	1 (<1%)
Vaccination status						
Three or more effective doses	0 (0%)	1 (1%)	0 (0%)	0 (0%)	1 (<1%)	0 (0%)
Two effective doses	104 (54%)	95 (57%)	71 (58%)	69 (59%)	367 (58%)	24 (5%)
One effective dose	11 (6%)	7 (4%)	3 (2%)	7 (6%)	30 (4%)	59 (12%)
No effective dose	3 (2%)	1 (1%)	1 (1%)	1 (1%)	6 (1%)	268 (56%)
Unknown	75 (39%)	64 (38%)	48 (39%)	40 (34%)	241 (37%)	129 (27%)
Total	193 (100%)	168 (100%)	123 (100%)	117 (100%)	645 (100%)	480 (100%)

- Note that cases in correctional settings may have acquired their infection prior to entry into the setting.
- Most cases of COVID-19 among people residing in correctional settings were male and aged 30-39 years, consistent with the demographics of correctional populations generally.
- The number of cases in correctional settings increased in the week ending 29 January 2022 compared to the previous week.

Section 12: Other respiratory infections in NSW

Figure 12. Proportion of tests positive for influenza, NSW, 1 January 2016 to 23 January 2022

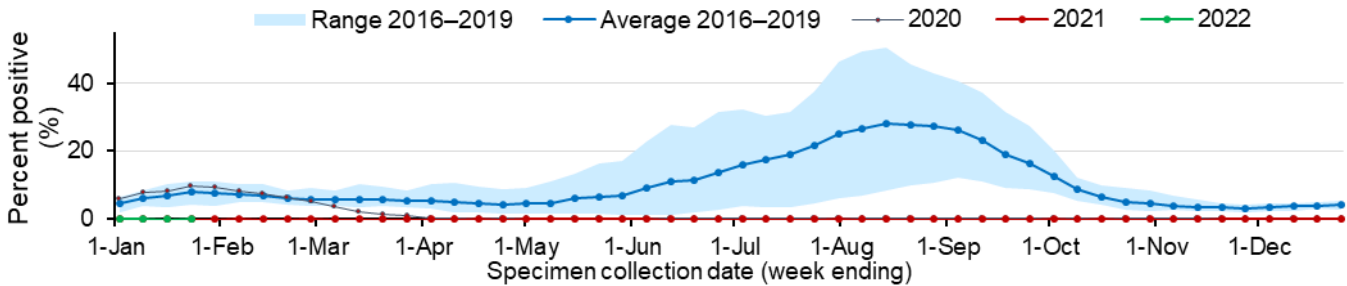


Figure 13. Proportion of FluTracker participants reporting influenza-like illness, NSW, 1 January 2016 to 23 January 2022

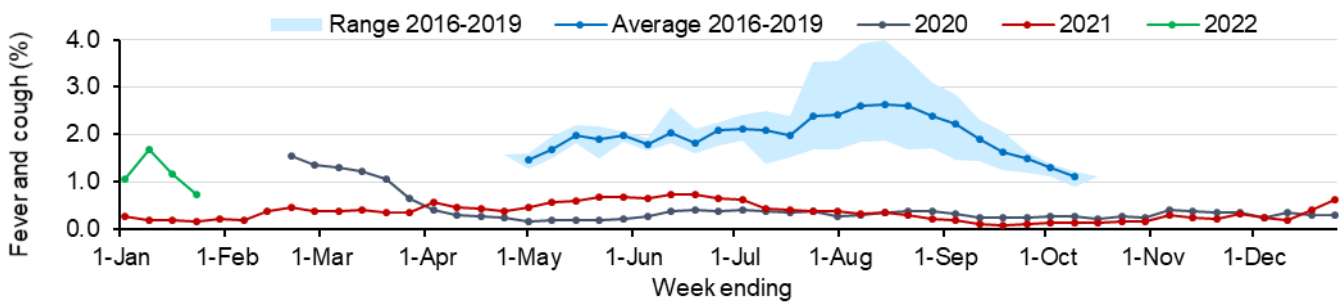


Figure 14. Emergency Department pneumonia presentations, NSW, 1 January 2017 to 30 January 2022

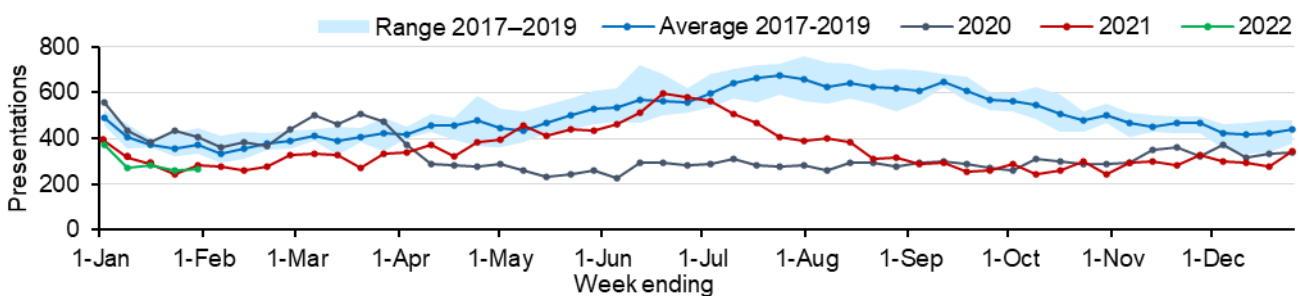
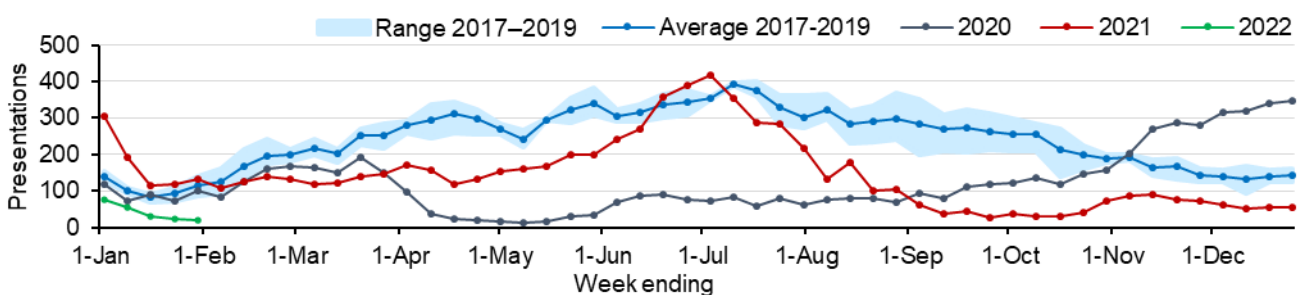


Figure 15. Emergency Department bronchiolitis presentations, NSW, 1 January 2017 to 30 January 2022



- The percentage of influenza tests that were positive has been low (<1%) relative to the usual seasonal range (see Figure 12), indicating limited influenza transmission in the community. Data are pending from several labs from 5 December 2021 and are subject to change.
- In the week ending 23 January 2022, 21,259 people were surveyed with FluTracker, and 153 people (0.7%) reported flu-like symptoms (see Figure 13, and Glossary for further details on the FluTracker survey).
- In the last four weeks, 58% (563/966) of people with flu-like illness reported having a COVID-19 test.
- International border closures, improved hygiene and social distancing measures implemented during 2020 and 2021 in the COVID-19 pandemic impacted on a broad range of other viral and bacterial infections.
- Both pneumonia presentations and bronchiolitis presentations to emergency departments decreased in March 2020 and again in July 2021, and remain below the seasonal range for this time of year (see Figures 14 and 15).

Appendix A: COVID-19 PCR tests in NSW by Local Government Area

Local Health District	Local Government Area	Week ending				Total since January 2022	
		29 Jan 2022		22 Jan 2022		No.	Tests per 1,000 population
		No.	Tests per 1,000 population	No.	Tests per 1,000 population	No.	Tests per 1,000 population
Central Coast	<i>LHD Total*</i>	12,798	36.27	17,989	50.98	77,024	218.28
	Kiama	897	38.36	1,263	54.01	6,191	264.73
	Shellharbour	3,568	48.72	5,392	73.63	24,004	327.78
Illawarra Shoalhaven	Shoalhaven	3,985	37.72	6,494	61.47	27,216	257.61
	Wollongong	9,082	41.64	13,379	61.34	63,411	290.72
	<i>LHD Total*</i>	17,532	41.78	26,528	63.22	120,822	287.94
	Blue Mountains	2,765	34.95	3,712	46.92	16,226	205.09
	Hawkesbury	4,116	61.16	5,344	79.41	20,822	309.41
Nepean Blue Mountains	Lithgow	447	20.69	1,083	50.13	3,580	165.70
	Penrith	11,979	56.25	17,692	83.07	74,454	349.59
	<i>LHD Total*</i>	19,164	49.01	27,640	70.69	114,217	292.12
	Hornsby	4,319	28.40	5,554	36.53	25,156	165.44
	Hunters Hill	989	66.02	1,205	80.44	5,824	388.79
	Ku-ring-gai	5,067	39.85	6,840	53.79	31,121	244.75
	Lane Cove	1,971	49.08	2,726	67.89	13,036	324.64
	Mosman	793	25.60	1,202	38.80	5,966	192.57
Northern Sydney	North Sydney	1,390	18.53	1,914	25.51	9,598	127.94
	Northern Beaches	10,417	38.09	15,815	57.82	69,826	255.31
	Parramatta [#]	9,314	36.21	13,091	50.90	59,111	229.83
	Ryde	5,490	41.82	7,142	54.41	33,117	252.28
	Willoughby	2,160	26.60	2,800	34.49	13,007	160.21
	<i>LHD Total*</i>	34,295	35.88	47,497	49.69	216,553	226.54
	Bayside	7,344	41.17	10,026	56.20	48,927	274.26
	Georges River	6,641	41.64	9,471	59.39	43,866	275.07
	Randwick	6,028	38.73	8,461	54.36	42,579	273.56
South Eastern Sydney	Sutherland Shire	10,731	46.53	15,453	67.01	66,816	289.73
	Sydney [#]	7,555	30.67	10,516	42.69	54,964	223.12
	Waverley	2,460	33.11	3,446	46.38	17,759	239.03
	Woollahra	1,591	26.79	2,215	37.30	11,447	192.75
	<i>LHD Total*</i>	37,097	38.68	52,408	54.64	248,996	259.61
	Camden	5,833	57.50	8,525	84.04	35,616	351.11
	Campbelltown	9,551	55.87	13,878	81.18	62,964	368.33
	Canterbury-Bankstown [#]	19,027	50.35	26,863	71.08	126,065	333.58
South Western Sydney	Fairfield	9,518	44.96	14,507	68.53	65,075	307.40
	Liverpool	10,570	46.44	15,916	69.93	73,184	321.57
	Wingecarribee	1,362	26.64	1,961	38.35	9,583	187.41
	Wollondilly	1,580	29.73	2,556	48.09	10,121	190.43
	<i>LHD Total*</i>	48,620	46.82	71,384	68.74	322,778	310.80
	Burwood	1,687	41.54	2,246	55.30	9,896	243.67
	Canada Bay	4,251	44.25	5,448	56.71	24,660	256.68
Sydney	Canterbury-Bankstown [#]	19,027	50.35	26,863	71.08	126,065	333.58
	Inner West	7,869	39.19	9,544	47.53	43,667	217.45
	Strathfield	3,297	70.26	4,302	91.68	20,369	434.07

		Week ending				Total since January 2022	
		29 Jan 2022		22 Jan 2022			
Local Health District	Local Government Area	No.	Tests per 1,000 population	No.	Tests per 1,000 population	No.	Tests per 1,000 population
	Sydney [#]	7,555	30.67	10,516	42.69	54,964	223.12
	<i>LHD Total[†]</i>	30,717	44.08	40,865	58.65	192,907	276.86
Western Sydney	Blacktown	22,638	60.46	32,426	86.60	141,933	379.04
	Cumberland	13,549	56.10	19,606	81.18	88,144	364.95
	Parramatta [#]	9,314	36.21	13,091	50.90	59,111	229.83
	The Hills Shire	9,911	55.69	14,533	81.66	60,777	341.50
	<i>LHD Total[†]</i>	54,320	51.56	78,233	74.26	343,921	326.48
Far West	Balranald	28	11.98	28	11.98	229	97.95
	Broken Hill	344	19.68	439	25.12	2,808	160.65
	Central Darling	89	48.40	113	61.45	368	200.11
	Wentworth	111	15.74	175	24.81	865	122.64
	<i>LHD Total[†]</i>	572	18.98	755	25.05	4,270	141.65
Hunter New England	Armidale Regional	1,036	33.66	1,216	39.51	5,469	177.69
	Cessnock	1,723	28.72	2,634	43.91	11,391	189.90
	Dungog	170	18.04	213	22.60	966	102.52
	Glen Innes Severn	161	18.15	221	24.91	992	111.83
	Gunnedah	313	24.68	370	29.18	2,096	165.29
	Gwydir	42	7.85	55	10.27	342	63.89
	Inverell	540	31.97	692	40.97	3,010	178.21
	Lake Macquarie	7,309	35.50	11,110	53.96	44,089	214.13
	Liverpool Plains	92	11.64	117	14.80	808	102.24
	Maitland	3,891	45.69	6,230	73.15	26,365	309.57
	Mid-Coast	2,277	24.27	3,181	33.90	16,315	173.87
	Moree Plains	489	36.88	541	40.80	2,975	224.34
	Muswellbrook	263	16.06	315	19.23	1,833	111.93
	Narrabri	292	22.23	244	18.58	2,269	172.74
	Newcastle	6,256	37.78	9,410	56.83	41,102	248.24
	Port Stephens	2,626	35.74	3,504	47.69	15,994	217.66
	Singleton	818	34.87	822	35.04	3,884	165.55
	Tamworth Regional	1,900	30.38	3,018	48.26	13,155	210.34
	Tenterfield	66	10.01	78	11.83	539	81.74
	Upper Hunter Shire	158	11.14	224	15.80	1,428	100.71
	Uralla	129	21.46	163	27.11	633	105.29
Walcha	56	17.87	73	23.29	385	122.85	
<i>LHD Total[†]</i>	30,606	32.14	44,420	46.64	195,941	205.74	
Mid North Coast	Bellingen	150	11.54	178	13.70	1,064	81.87
	Coffs Harbour	815	10.55	1,432	18.53	9,214	119.23
	Kempsey	395	13.28	990	33.28	4,590	154.31
	Nambucca	185	9.34	387	19.54	2,127	107.40
	Port Macquarie-Hastings	1,064	12.59	1,796	21.25	11,489	135.92
	<i>LHD Total[†]</i>	2,609	11.56	4,783	21.20	28,484	126.22
Murrumbidgee	Albury	1,603	29.49	2,375	43.70	10,831	199.27
	Berrigan	36	4.11	100	11.43	484	55.31
	Bland	50	8.37	86	14.40	443	74.18
	Carrathool	15	5.36	17	6.07	187	66.81

		Week ending				Total since January 2022	
		29 Jan 2022		22 Jan 2022			
Local Health District	Local Government Area	No.	Tests per 1,000 population	No.	Tests per 1,000 population	No.	Tests per 1,000 population
	Coolamon	83	19.12	101	23.27	547	126.01
	Cootamundra-Gundagai Regional	127	11.30	217	19.31	1,135	101.02
	Edward River	67	7.38	190	20.92	778	85.65
	Federation	156	12.54	320	25.73	1,759	141.43
	Greater Hume Shire	201	18.67	399	37.07	1,740	161.65
	Griffith	1,089	40.29	1,589	58.79	6,777	250.73
	Hay	57	19.33	46	15.60	253	85.79
	Hilltops	529	28.28	979	52.34	3,657	195.52
	Junee	136	20.35	232	34.71	1,082	161.90
	Lachlan [#]	121	19.92	105	17.28	660	108.64
	Leeton	348	30.41	329	28.75	1,448	126.52
	Lockhart	57	17.35	51	15.53	350	106.54
	Murray River	56	4.62	109	8.99	696	57.44
	Murrumbidgee	65	16.59	104	26.55	462	117.95
	Narrandera	71	12.04	112	18.99	402	68.15
	Snowy Valleys	143	9.88	211	14.57	1,334	92.13
	Temora	57	9.04	96	15.22	582	92.28
	Wagga Wagga	1,927	29.53	2,776	42.54	13,470	206.41
	<i>LHD Total[*]</i>	6,902	23.15	10,452	35.06	48,583	162.97
Northern NSW	Ballina	900	20.17	1,521	34.08	6,806	152.51
	Byron	714	20.35	947	26.99	6,599	188.11
	Clarence Valley	984	19.05	1,045	20.23	5,632	109.02
	Kyogle	110	12.51	130	14.78	707	80.38
	Lismore	612	14.01	949	21.72	5,210	119.24
	Richmond Valley	402	17.13	521	22.20	2,990	127.42
	Tenterfield	66	10.01	78	11.83	539	81.74
	Tweed	3,545	36.55	4,749	48.96	22,665	233.66
	<i>LHD Total[*]</i>	7,273	23.43	9,874	31.81	50,706	163.38
Southern NSW	Bega Valley	826	23.96	1,152	33.41	5,171	149.99
	Eurobodalla	845	21.96	977	25.39	5,017	130.40
	Goulburn Mulwaree	797	25.60	1,376	44.20	7,471	239.98
	Queanbeyan-Palerang Regional	2,385	39.03	3,405	55.73	13,135	214.98
	Snowy Monaro Regional	524	25.20	915	44.00	4,615	221.93
	Upper Lachlan Shire	168	20.85	301	37.35	1,172	145.43
	Yass Valley	218	12.76	511	29.91	2,496	146.08
<i>LHD Total[*]</i>	5,764	26.55	8,641	39.81	39,084	180.05	
Western NSW	Bathurst Regional	2,589	59.36	2,995	68.66	15,018	344.31
	Blayney	273	37.00	327	44.31	1,396	189.19
	Bogan	88	34.11	60	23.26	383	148.45
	Bourke	125	48.26	152	58.69	752	290.35
	Brewarrina	12	7.45	9	5.59	126	78.21
	Cabonne	238	17.46	393	28.82	1,558	114.27
	Cobar	59	12.67	80	17.17	508	109.06

Local Health District	Local Government Area	Week ending				Total since January 2022	
		29 Jan 2022		22 Jan 2022		No.	Tests per 1,000 population
		No.	Tests per 1,000 population	No.	Tests per 1,000 population	No.	Tests per 1,000 population
	Coonamble	44	11.12	86	21.73	575	145.28
	Cowra	179	14.05	263	20.64	1,254	98.41
	Dubbo Regional	4,878	90.81	6,034	112.33	26,084	485.56
	Forbes	221	22.31	344	34.73	1,152	116.29
	Gilgandra	147	34.68	137	32.32	698	164.66
	Lachlan [#]	121	19.92	105	17.28	660	108.64
	Mid-Western Regional	361	14.30	556	22.02	2,872	113.74
	Narromine	337	51.71	393	60.30	1,831	280.96
	Oberon	88	16.26	150	27.72	778	143.78
	Orange	1,884	44.38	2,636	62.10	11,854	279.24
	Parkes	502	33.83	717	48.33	2,922	196.94
	Walgett	70	11.76	162	27.21	840	141.11
	Warren	99	36.71	188	69.71	908	336.67
	Warrumbungle Shire	125	13.47	187	20.16	1,094	117.91
	Weddin	57	15.78	66	18.27	329	91.06
	<i>LHD Total[*]</i>	12,470	43.75	16,028	56.24	73,442	257.68
NSW Total	NSW Total[^]	320,900	39.67	457,696	56.58	2,078,324	256.91

Source - Notifiable Condition Information Management System, accessed as at 8pm 1 February 2022

^{*} Local Health District total counts and rates includes tests for LHD residents only. Murrumbidgee includes Albury LGA residents.

[#] Local Government Area (LGA) spans multiple Local Health Districts.

[^] NSW Total counts and rates since January 2021 include tests where residential information is incomplete. See <https://www.health.nsw.gov.au/Infectious/covid-19/Pages/counting-tests.aspx> for detail on how tests are counted.

Appendix B: Deaths reported by the Chief Health Officer in the media for 21 January to 27 January 2022

At a press conference each Friday, the Chief Health Officer provides a summary of deaths publicly reported in the week prior, including age, vaccination status and underlying health conditions. The summary provided on 28 January 2022 is included here.

These deaths do not necessarily correlate with the deaths reported in Section 5 of this report. Section 5 summarises deaths that occurred up to and including the epidemiological week of the report, based on the date of death. The summary provided by the Chief Health Officer and included here is based on the date the deaths were reported and covers a 7 day period from Friday to the following Thursday.

From 21 January to 27 January 2022, NSW Health reported the deaths of 210 people with COVID-19.

Of these, 192 deaths were in people aged 65 and over. 43 of these died in aged care facilities, 147 died in hospital and 2 died at home. Of those who died at home, 1 was a male in his 60s and 1 was a male in his 80s. 1 was not vaccinated and 1 had received two doses of the vaccine.

18 deaths were in people aged under 65 years. Of these:

- 1 was in their 30s
- 2 were in their 40s
- 10 were in their 50s
- 5 were in their early 60s

8 of these were not vaccinated and the 1 person who died and did not have significant comorbidities was in that unvaccinated group. 1 had one dose, 8 had two doses and only 1 had three doses.

Of the people aged under 65 years:

- 2 had significant cardiac disease
- 2 had significant obesity
- 3 had chronic pulmonary disease
- 1 had asthma
- 4 had diabetes
- 2 had chronic kidney disease
- 1 had severe liver disease
- 6 had cancers
- 1 had severe mental illness
- 3 were on a palliative care pathway pre covid
- 3 had some very rare genetic severe conditions

People often have multiple underlying health conditions so some people may be included in multiple categories.

Additional information on deaths reported each day can be found in the daily media releases:

<https://www.health.nsw.gov.au/news/Pages/2022-nsw-health.aspx>

Appendix C: Number of positive PCR test results for influenza and other respiratory viruses at sentinel NSW laboratories, January 2020 to 23 January 2022

The reported testing numbers reflect the number of influenza PCR tests conducted. Not all samples are tested for all of the other respiratory viruses. Therefore, data presented may tend to under-represent current respiratory virus activity in NSW.

Testing numbers in NSW from 28 December 2020 – 23 January 2022

Specimen collection date	PCR tests conducted	Influenza A No.	Influenza A %Pos.	Influenza B No.	Influenza B %Pos.	Adeno-virus	Para-influenza	RSV	Rhino-virus	HMPV	Entero-virus
2021 Total	811,134	30	<0.01%	12	<0.01%	8,474	18,847	17,612	64,890	6,693	6,842
Month ending											
31 January*	63,814	1	<0.01%	0	-	416	88	3,275	3,541	23	560
28 February	54,010	2	<0.01%	0	-	419	106	2,386	8,667	22	910
28 March	42,760	0	-	0	-	507	354	1,909	8,891	18	1,187
2 May*	53,506	0	-	3	<0.01%	802	1,515	1,653	8,141	48	1,128
30 May	52,445	0	-	6	<0.01%	946	3,129	1,491	8,982	78	843
27 June	73,605	1	<0.01%	0	-	1,551	7,104	2,794	9,915	635	811
26 July	78,704	0	-	0	-	1,463	4,603	3,014	5,089	1,991	587
29 August*	126,147	0	-	1	<0.01%	869	1,497	852	2,252	2,035	259
26 September	75,074	0	-	0	-	321	151	124	715	454	70
31 October*	88,568	6	<0.01%	0	-	304	59	40	1,898	188	82
28 November	55,275	3	<0.01%	0	-	577	45	31	4,086	232	167
2 January*	46,776	17	0.04%	2	<0.01%	299	196	43	2,713	969	238
Week ending											
2 January	10,742	2	0.02%	0	-	36	44	9	211	159	26
9 January	9,588	4	0.04%	0	-	37	27	4	155	120	18
16 January	6,974	1	0.01%	0	-	27	31	2	85	68	7
23 January	6,060	2	0.03%	0	-	29	21	0	75	47	10

Notes: Preliminary laboratory data is provided by participating sentinel laboratories on a weekly basis and are subject to change. Serological diagnoses are not included. Data are pending from several labs for the weeks since 5 December due to high demand on testing laboratories in the past weeks.

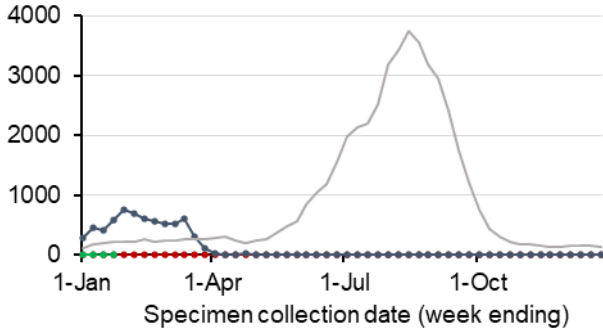
HMPV – Human metapneumovirus

RSV - Respiratory syncytial virus

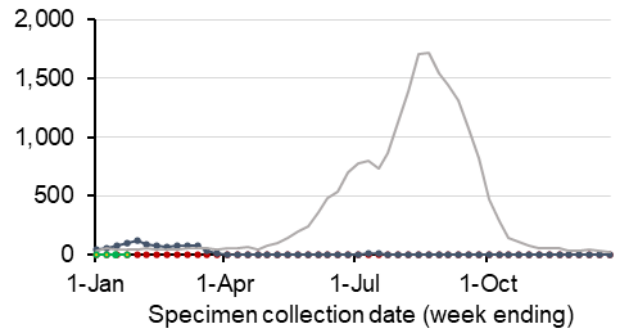
*Five-week period

Number of positive PCR test results for influenza and other respiratory viruses at sentinel NSW laboratories, January 2020 to 23 January 2022

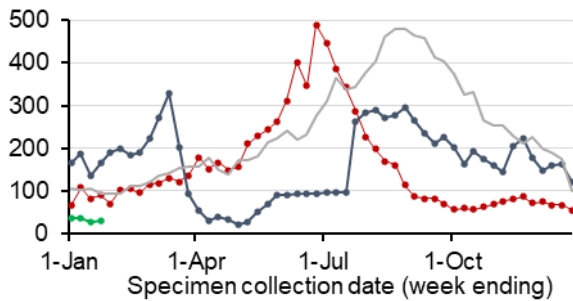
Influenza A



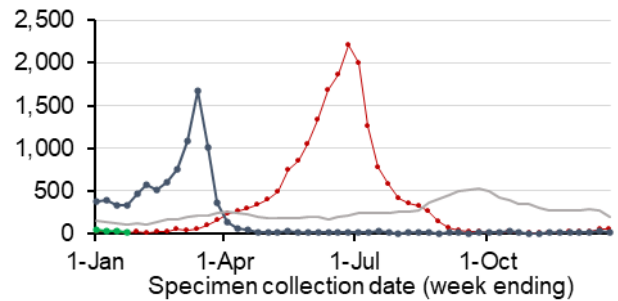
Influenza B



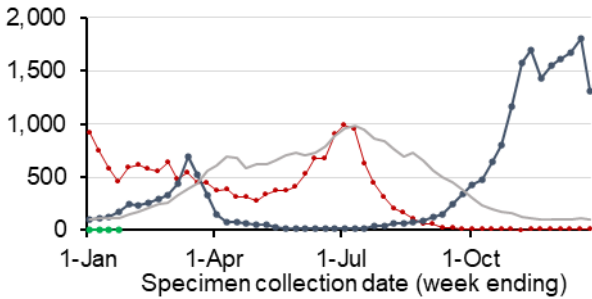
Adenovirus



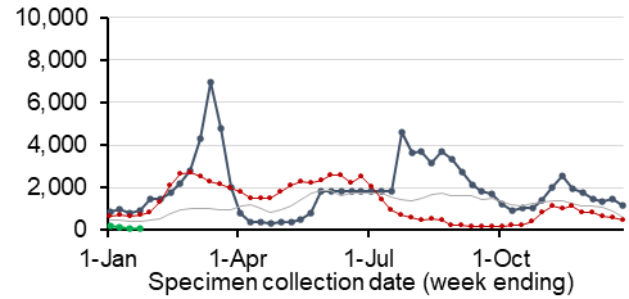
Parainfluenza



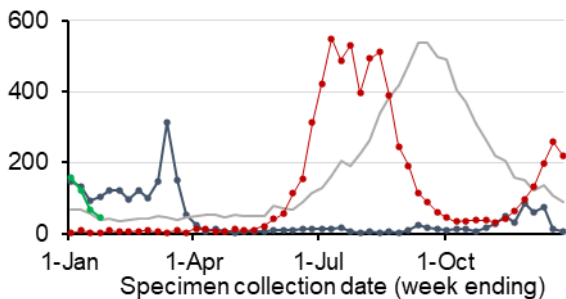
Respiratory Syncytial Virus



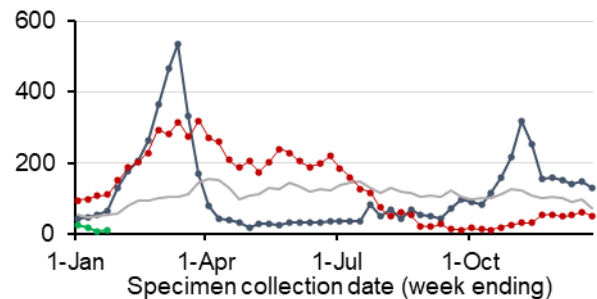
Rhinovirus



Human metapneumovirus



Enterovirus

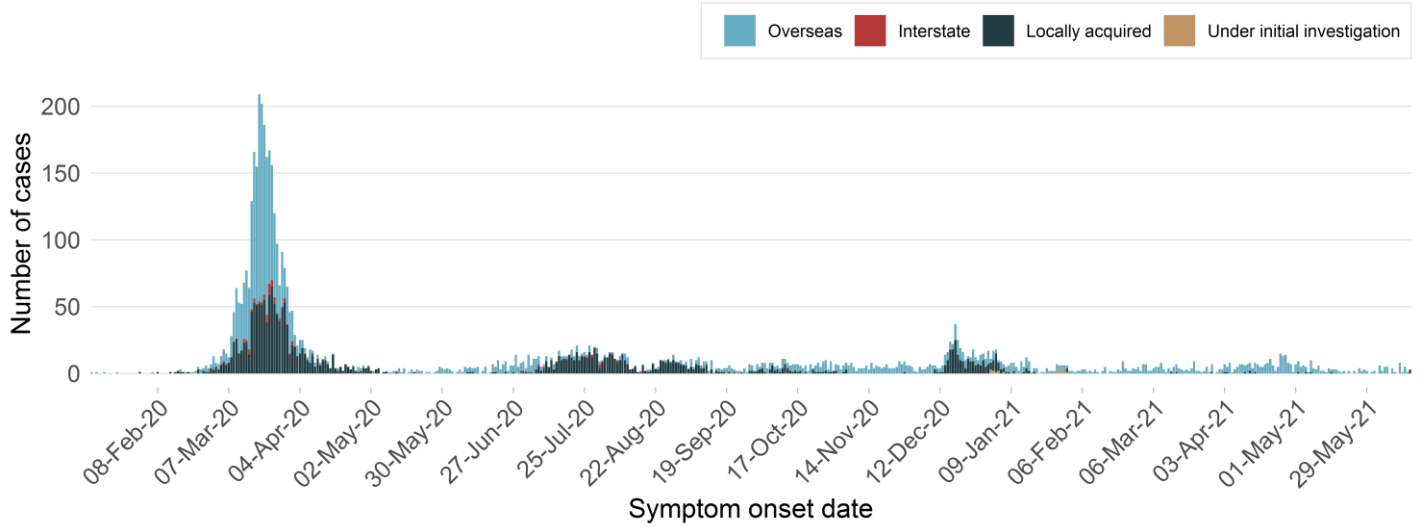


— 2022 — 2021 — 2020 — Average 2016–2019

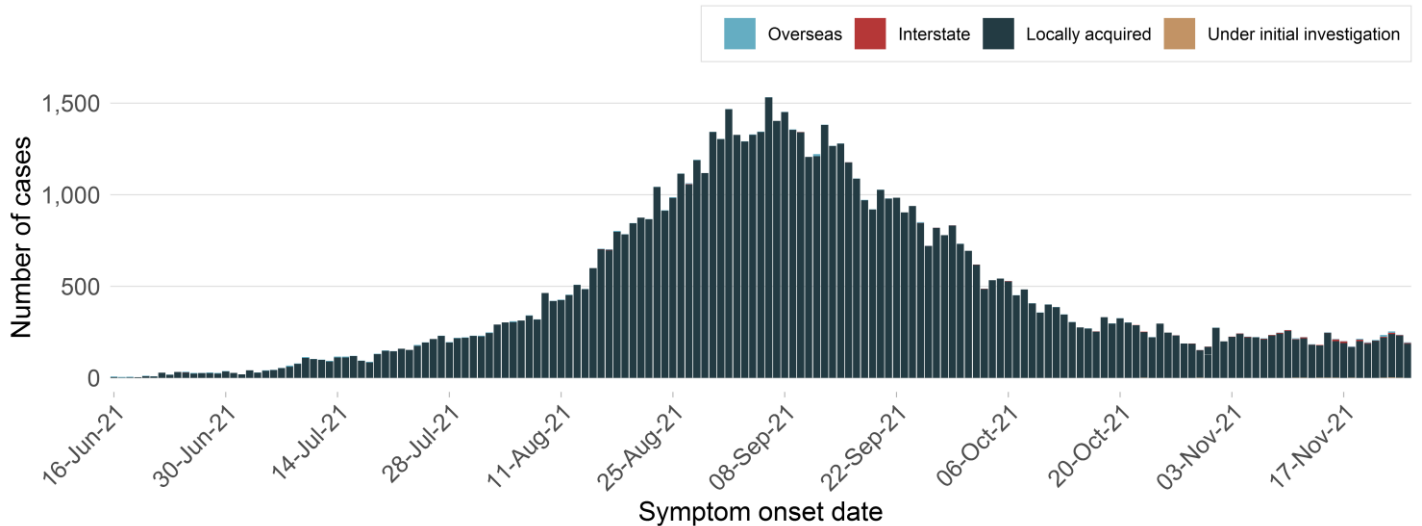
Note: Preliminary laboratory data are provided by participating sentinel laboratories on a weekly basis and are subject to change. Serological diagnoses are not included. Not all samples are tested for all respiratory viruses. Therefore, data presented may tend to under-represent current respiratory virus activity in NSW. Data are pending from several labs for the weeks since 5 December due to high demand on testing laboratories in the past weeks.

Appendix D: Additional tables and figures

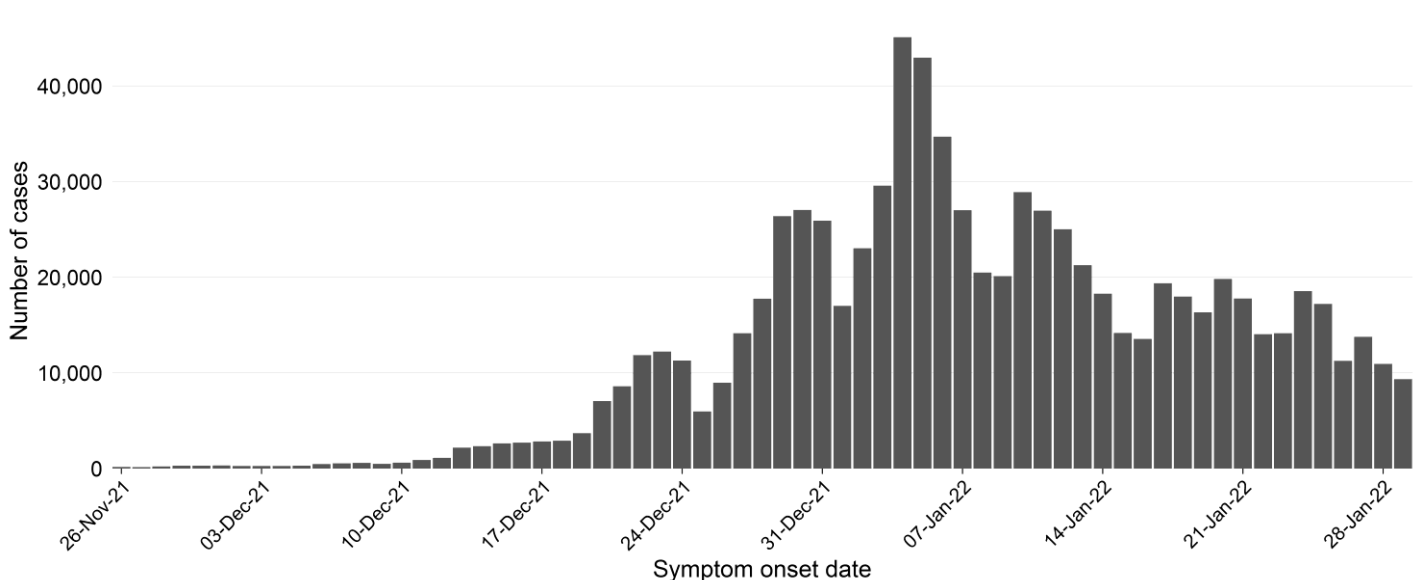
COVID-19 cases by likely infection source and reported illness onset, NSW, 13 January 2020 to 15 June 2021



COVID-19 cases by likely infection source and reported illness onset, NSW, 16 June to 25 November 2021



COVID-19 cases by reported illness onset, NSW, 26 November 2021 to 29 January 2022

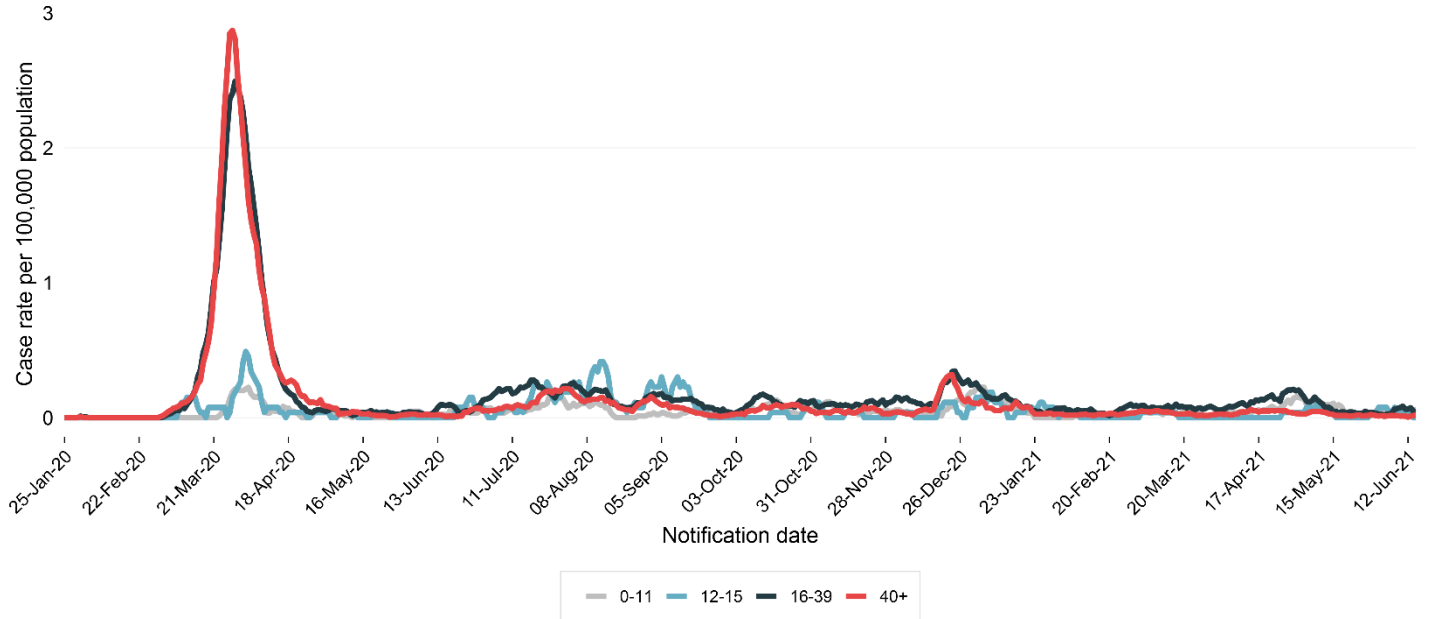


Total COVID-19 cases by vaccination status and week reported, NSW, 16 June 2021 to 29 January 2022

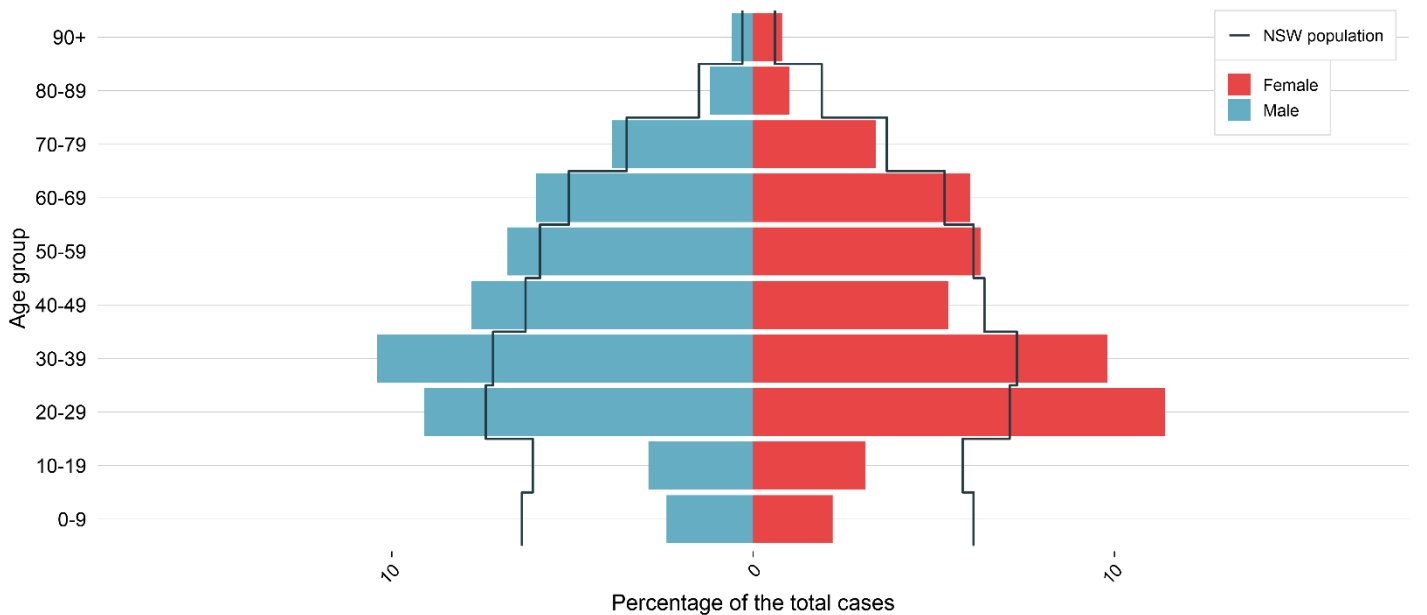
	Third or more effective doses	Two effective doses	One effective dose	No effective dose	Unknown	Total
16 Jun - 25 Nov 2021	2 (<1%)	6,919 (9%)	6,930 (9%)	53,146 (71%)	8,320 (11%)	75,317
26 Nov 2021 - 29 Jan 2022	34,292 (4%)	513,228 (64%)	6,618 (1%)	95,918 (12%)	153,048 (19%)	803,104
Month						
June 2021	0 (0%)	3 (1%)	11 (5%)	221 (93%)	2 (1%)	237
July 2021	0 (0%)	70 (2%)	104 (3%)	3,093 (94%)	40 (1%)	3,307
August 2021	0 (0%)	570 (3%)	818 (4%)	16,508 (87%)	1,084 (6%)	18,980
September 2021	0 (0%)	2,636 (8%)	3,946 (11%)	22,054 (63%)	6,235 (18%)	34,871
October 2021	2 (<1%)	1,892 (15%)	1,736 (14%)	8,142 (66%)	589 (5%)	12,361
November 2021	3 (<1%)	2,158 (33%)	339 (5%)	3,591 (55%)	450 (7%)	6,541
December 2021	2,039 (2%)	92,749 (70%)	1,146 (1%)	12,925 (10%)	23,309 (18%)	132,168
Week ending						
8 Jan 2022	6,823 (3%)	153,912 (68%)	1,794 (1%)	19,156 (8%)	44,292 (20%)	225,977
15 Jan 2022	8,088 (4%)	113,183 (62%)	1,523 (1%)	21,353 (12%)	36,999 (20%)	181,146
22 Jan 2022	7,713 (6%)	77,571 (59%)	1,067 (1%)	20,442 (16%)	24,982 (19%)	131,775
29 Jan 2022	9,167 (8%)	62,022 (55%)	906 (1%)	19,865 (18%)	19,916 (18%)	111,876

* Vaccination status is updated regularly using both the Australian Immunisation Register and the patient's interview. See Glossary for details of vaccination status categories. The increase in cases with an unknown vaccination status since December 2021 is due to no record being found in AIR, and NSW Health no longer interviewing every case, such that cases cannot provide further information about vaccination. These cases likely represent a mix of those with two or more effective doses, and those with no effective dose. The table excludes 180,433 positive RATs registered up to 19 January 2022.

Seven day backward rolling average of COVID-19 cases rate per 100,000 population by age and notification date, NSW, from 1 January 2020 to 15 June 2021



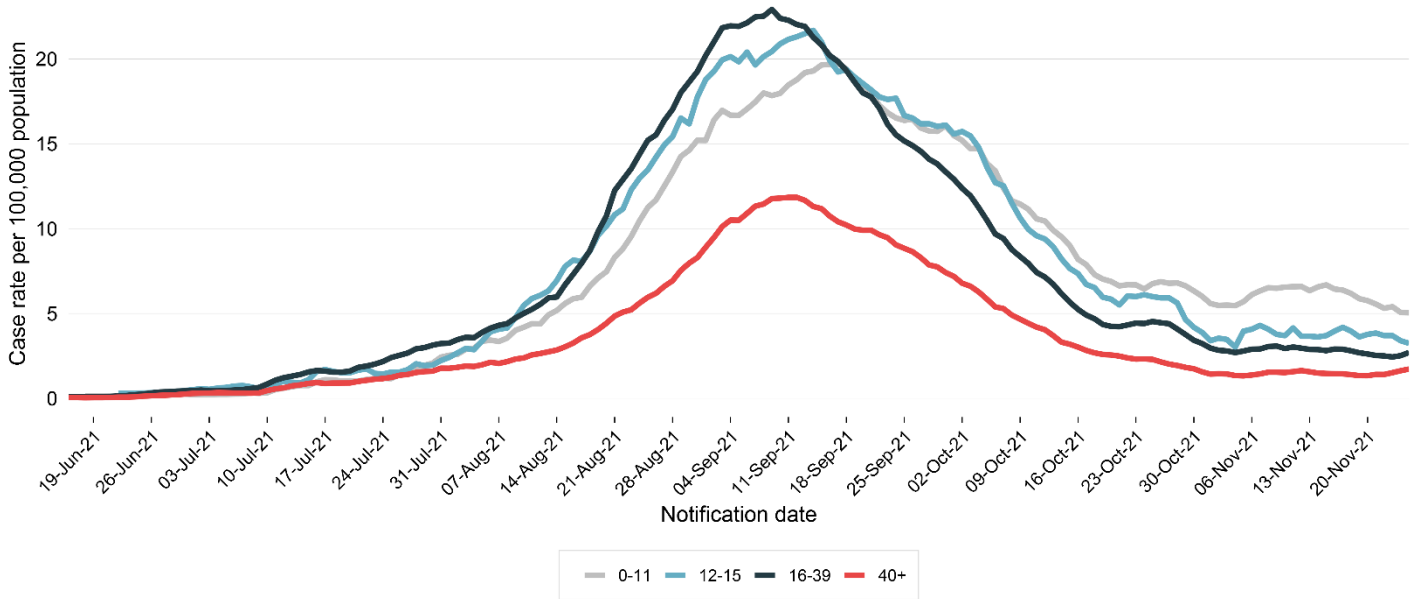
Total case percentage (n = 5,430) by age and gender, NSW, from 1 January 2020 to 15 June 2021



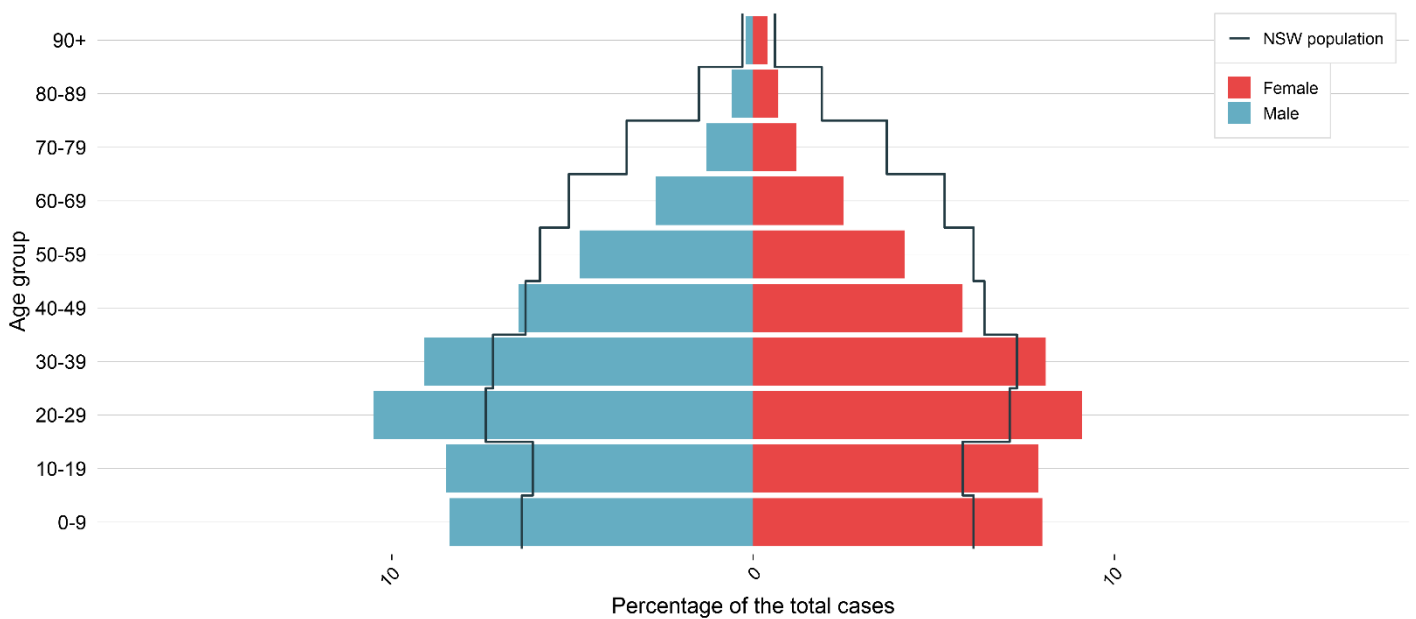
Note that the figure does not include cases for whom gender is not specified or non-binary.

Cases before 16 June 2021 had a median age 39 years, and interquartile range (IQR) = 27-57 years.

Seven day backward rolling average of COVID-19 cases rate per 100,000 population by age and notification date, NSW, from 16 June to 25 November 2021



Total case percentage (n = 75,277) by age and gender, NSW, from 16 June to 25 November 2021



Note that the figure does not include cases for whom gender is not specified or non-binary.

Cases between 16 June 2021 and 25 November 2021 were younger, with a median age = 28 years and IQR = 15-44 years.

Hospitalisations among people with COVID-19, by age group, NSW, 1 January 2020 to 29 January 2022

Age-group (years)	1 Jan 2020 – 15 Jun 2021		16 Jun – 25 Nov 2021		26 Nov 2021 – 29 Jan 2022	
	Hospitalised	Percentage of cases hospitalised	Hospitalised	Percentage of cases hospitalised	Hospitalised	Percentage of cases hospitalised
0-9	5	2%	288	2%	457	1%
10-19	8	2%	362	3%	318	<1%
20-29	22	2%	962	7%	1,035	1%
30-39	42	4%	1,249	10%	1,115	1%
40-49	39	5%	1,295	14%	769	1%
50-59	59	8%	1,260	19%	902	1%
60-69	84	13%	1,039	27%	1,276	2%
70-79	68	17%	750	39%	1,658	7%
80-89	41	34%	497	53%	1,614	17%
90+	13	31%	126	53%	520	18%
Total	381	7%	7,828	10%	9,664	1%

* There is often a delay between a person becoming ill with COVID-19 and subsequently requiring a hospitalisation or dying. Since 16 June 2021, the median time between onset and hospitalisation is 4 days and between onset and death is 12 days. Therefore, hospitalisations and deaths are under-reported for the most recently notified cases.

ICU hospitalisations among people with COVID-19, by age group, NSW, 1 January 2020 to 29 January 2022

Age-group (years)	1 Jan 2020 – 15 Jun 2021		16 Jun – 25 Nov 2021		26 Nov 2021 – 29 Jan 2022	
	Admitted to ICU	Percentage of cases admitted to ICU	Admitted to ICU	Percentage of cases admitted to ICU	Admitted to ICU	Percentage of cases admitted to ICU
0-9	0	0%	11	<1%	17	<1%
10-19	2	1%	37	<1%	21	<1%
20-29	4	<1%	120	1%	54	<1%
30-39	14	1%	185	1%	86	<1%
40-49	12	2%	231	2%	91	<1%
50-59	23	3%	341	5%	144	<1%
60-69	41	6%	283	7%	213	<1%
70-79	36	9%	211	11%	239	1%
80-89	14	11%	58	6%	96	1%
90+	1	2%	1	<1%	12	<1%
Total	147	3%	1,478	2%	973	<1%

Deaths following recent infection with COVID-19, by age group and location, 1 January 2020 to 25 November 2021

Age-group (years)	1 January 2020 – 15 June 2021		16 June 2021 – 25 November 2021				
	Number of deaths	Case fatality rate	Number of deaths	Case fatality rate	Location of death		
					Health care facility	Aged care facility	Home
0-9	0	0%	0	0%	-	-	-
10-19	0	0%	0	0%	-	-	-
20-29	0	0%	6	<1%	4	0	2
30-39	0	0%	16	<1%	11	0	5
40-49	0	0%	29	<1%	22	0	7
50-59	1	<1%	67	1%	58	0	9
60-69	4	1%	107	3%	94	1	12
70-79	15	4%	135	7%	126	6	3
80-89	20	16%	165	18%	148	10	7
90+	16	38%	63	26%	47	16	0
Total	56	1%	588	1%	510	33	45

Before 16 June 2021, location of death was not well-recorded. Among deaths occurring at home for cases in the period 16 June – 25 November 2021, the majority (28/45, 62%) were diagnosed after death.

Hospitalisations, ICU admissions and deaths among cases with COVID-19, by vaccination status, NSW, from 1 January 2020 to 25 November 2021

Vaccination status	Total cases	Hospitalised (% of total cases)	Hospitalised and in ICU (% of total cases)	Death (% of total cases)
1 January 2020 – 15 June 2021				
Total	5,431	381 (7.0%)	147 (2.7%)	56 (1.0%)
16 June 2021 – 25 November 2021				
Two or more effective doses	6,921	569 (8.2%)	66 (1.0%)	89 (1.3%)
One effective dose	6,930	587 (8.5%)	97 (1.4%)	73 (1.1%)
No effective dose	53,146	5,445 (10.2%)	1,076 (2.0%)	418 (0.8%)
Unknown	8,320	1,227 (14.7%)	239 (2.9%)	8 (0.1%)
Total	75,317	7,828 (10.4%)	1,478 (2.0%)	588 (0.8%)

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

- The percentage of cases who died is higher for those with two or more effective doses compared to those with no effective dose because elderly people were more likely to have received two doses before or during this period, and the group with no effective dose contains a considerable proportion of children aged 0-11 who were ineligible for vaccination throughout this period, and typically have mild illnesses. Among cases in the period from 16 June to 25 November 2021, the median age of those who died was 83.5 (interquartile range (IQR) = 76-90); for those with no effective dose it was 72 (IQR 60-82).

Proportion of cases with a severe outcome (ICU and/or death) amongst all cases, by age, time of infection, and vaccination status, NSW, 1 January 2020 to 25 November 2021

Age-group (years)	1 Jan 2020 - 15 Jun 2021		16 Jun 2021 – 25 Nov 2021			
			Two or more effective doses		Less than two effective doses	
0-9	0%	(0 / 251)	-	-	<1%	(11 / 12,409)
10-19	<1%	(1 / 325)	0%	(0 / 160)	<1%	(32 / 10,583)
20-29	<1%	(4 / 1,115)	<1%	(2 / 1,054)	1%	(97 / 11,692)
30-39	1%	(15 / 1,098)	<1%	(5 / 1,413)	2%	(163 / 9,723)
40-49	2%	(12 / 718)	<1%	(4 / 1,314)	3%	(192 / 6,700)
50-59	4%	(30 / 710)	1%	(16 / 1,175)	6%	(288 / 4,729)
60-69	7%	(44 / 656)	2%	(17 / 823)	10%	(255 / 2,547)
70-79	12%	(46 / 394)	7%	(37 / 568)	18%	(198 / 1,085)
80-89	21%	(26 / 122)	12%	(35 / 300)	30%	(155 / 516)
90+	38%	(16 / 42)	21%	(24 / 114)	42%	(39 / 92)
Total	4%	(194 / 5,431)	2%	(140 / 6,921)	2%	(1,430 / 60,076)

* Less than two effective doses combine those with one and no effective dose.

- Prior to 15 June 2021, 4% of cases had a severe outcome, with an increasing risk of severe outcome with increasing age (from <1% for those aged under 30 to 38% for those aged 90+ years).
- Although vaccination was available in Australia before 15 June 2021, there were relatively few cases between 22 February 2021 (when vaccination began) and 15 June 2021.
- The total proportion of cases with a severe outcome is lower in the period from 16 June – 25 November 2021 compared to before this date; this is because infections were in a younger cohort in the later period.
- In the period from 16 June to 25 November 2021, the likelihood of a severe outcome for individuals with less than two effective doses is similar to the pre-delta period, while the likelihood of a severe outcome is substantially reduced amongst individuals with two or more effective doses.
- Increased age remains a significant predictor of increased risk of a severe outcome, but the protective effects of vaccination remain apparent for every age group.

Top 20 metropolitan LGAs of residence, ordered by COVID-19 cases per 100,000 population rate in the last 7 days, NSW, 26 November 2021 to 29 January 2022

LGA name	Last 7 days		26 Nov 2021 - 29 Jan 2022	
	Cases	Cases per 100,000 population	Cases	Cases per 100,000 population
Hunters Hill	295	1,969	2,362	15,768
Lane Cove	766	1,908	5,148	12,820
Camden	1,924	1,897	13,750	13,555
Shellharbour	1,334	1,822	7,824	10,684
Northern Beaches	4,952	1,811	27,345	9,998
Campbelltown	2,901	1,697	23,089	13,507
Cumberland	4,060	1,681	36,470	15,100
Penrith	3,560	1,672	25,535	11,990
Blacktown	6,178	1,650	50,233	13,415
Liverpool	3,488	1,533	32,972	14,488
Sutherland Shire	3,515	1,524	26,513	11,497
The Hills Shire	2,609	1,466	19,930	11,199
Central Coast	5,002	1,454	29,913	8,696
Canterbury-Bankstown	5,460	1,445	52,299	13,839
Waverley	1,071	1,442	10,803	14,541
Wollongong	3,097	1,420	20,939	9,600
Hawkesbury	953	1,416	5,377	7,990
Georges River	2,017	1,265	18,636	11,686
Burwood	513	1,263	3,431	8,448
Strathfield	592	1,262	7,594	16,183

* The table excludes 180,433 positive RATs registered up to 19 January 2022.

Top 20 regional and rural LGAs of residence, ordered by COVID-19 cases per 100,000 population rate in the last 7 days, NSW, 26 November 2021 to 29 January 2022

LGA name	Last 7 days		26 Nov 2021 - 29 Jan 2022	
	Cases	Cases per 100,000 population	Cases	Cases per 100,000 population
Griffith	739	2,734	2,890	10,692
Bourke	56	2,162	144	5,560
Coolamon	90	2,073	201	4,630
Coffs Harbour	1,572	2,034	5,011	6,484
Wagga Wagga	1,316	2,017	4,515	6,919
Tweed	1,923	1,982	8,539	8,803
Temora	119	1,887	254	4,027
Orange	788	1,856	3,466	8,165
Murrumbidgee	70	1,787	195	4,978
Central Darling	32	1,740	73	3,970
Dubbo Regional	892	1,660	4,005	7,455
Byron	581	1,656	5,114	14,578
Armidale Regional	501	1,628	1,718	5,582
Maitland	1,363	1,600	9,161	10,757
Blayney	118	1,599	381	5,163
Kempsey	470	1,580	2,024	6,805
Lachlan	96	1,580	248	4,082
Mid-Western Regional	394	1,560	1,124	4,451
Snowy Valleys	221	1,526	613	4,234
Lismore	660	1,511	2,457	5,623

* The table excludes 180,433 positive RATs registered up to 19 January 2022.

Glossary

Term	Description
PCR case	<p>A person infected who has tested positive to a validated specific SARS-CoV-2 nucleic acid test (in NSW, this has been principally via polymerase chain reaction (PCR) tests) or has had the virus identified by electron microscopy or viral culture. Blood tests (serology) is only used in special situations following a public health investigation and require other criteria to be met in addition to the positive serology result (related to timing of symptoms and contact with known COVID-19 cases).</p> <p>Case counts include:</p> <ul style="list-style-type: none"> - NSW residents diagnosed in NSW who were infected overseas or in Australia (in NSW or interstate), and - interstate or international visitors diagnosed in NSW who were under the care of NSW Health at the time of diagnosis
RAT case	<p>A person who has reported a positive result with a SARS-CoV-2 rapid antigen test (RAT). From 12 January 2022, it was mandatory to report positive results to NSW Health via the Service NSW app. NSW Health receives no information about negative test results. Detailed demographic information about RAT cases will be entered in the NSW Health database for COVID cases from 20 January 2022.</p>
Incubation period	<p>The time between a case becoming infected and developing symptoms. The incubation period for COVID-19 is between 1 and 14 days prior to symptom onset.</p>
Overseas acquired case	<p>Case who likely acquired their infection overseas.</p>
Interstate acquired case	<p>Case who likely acquired their infection interstate.</p>
Three effective doses	<p>Cases reported as having three effective doses have had a third dose of COVID-19 vaccine at least 60 days after a valid second dose and 14 days prior to COVID infection. This includes people who are immunocompromised and have had a third primary dose (recommended 2-6 months after second dose), and non-immunocompromised people who have had a booster dose.</p>
Two effective doses	<p>Cases reported as having received two effective doses have received their second vaccine dose at least 14 days prior to known exposure to COVID-19, and have not yet received an effective third dose.</p>
One effective dose	<p>Cases reported as having one effective dose received their first dose of a two-dose vaccination course at least 21 days prior to known exposure to COVID-19, or received their second dose of a two-dose vaccination course less than 14 days prior to known exposure to COVID-19.</p>
No effective dose	<p>Cases reported as no effective dose received their first dose of a two-dose vaccination course less than 21 days prior to known exposure to COVID-19, or have not received any vaccine dose.</p> <p>Using the phrase “no effective dose” indicates that an insufficient period of time has elapsed to allow for maximal immune response provided by the vaccine. It does not indicate that vaccines are ineffective.</p> <p>Historical cases in children aged 5-11 between 16 June 2021 and 9 January 2022 have been assigned No effective dose, as have all cases in children aged 0-4 since 16 June 2021.</p>
Unknown	<p>Cases reported with an unknown vaccination status are those whose vaccination status has not yet been determined via searching the Australian Immunisation Register and/or via case interview.</p>
Hospitalisation	<p>People with COVID-19 can be hospitalised because of the disease but may also be hospitalised for other reasons not related to their COVID-19 diagnosis. For the purposes of surveillance, reported hospitalisation counts include all people who were admitted to any hospital ward for more than 1 day, around the time of their COVID-19 diagnosis. The count does not include people managed in the community (e.g., including Hospital in the Home schemes).</p>
Death	<p>A COVID-19 death is defined for surveillance purposes as a death in a confirmed COVID-19 case, unless there is a clear alternative cause of death that cannot be related to COVID-19 (e.g., trauma). There should be no period of complete recovery from COVID-19 between illness and death.</p>
Variants of concern	<p>This report reflects the recommendations of Australia’s Communicable Diseases Genomics Network (CDGN) for reporting of Variants of Concern (VoC) in NSW.</p>

Pneumonia presentations	Pneumonia presentations to Emergency Departments include people with diagnoses of viral, bacterial, atypical or unspecified pneumonia, and Legionnaires' disease, but excludes 'pneumonia with influenza' and provides an indicator of more severe respiratory conditions.
Bronchiolitis presentations	Bronchiolitis is a common disease of infants often caused by respiratory syncytial virus (RSV). Public health measures introduced in 2020 around social distancing and improved hygiene practices coincided with a large decrease in bronchiolitis presentations for the majority of 2020. A rise in bronchiolitis presentations in the later part of 2020 corresponds to an increase in RSV detections (see Appendix B). Since 16 June 2021, there has again been a steady decrease in bronchiolitis presentations.
FluTracking	FluTracking is an online weekly survey asking participants to report flu-like symptoms. It usually runs only between May and October in line with flu season but has continued every week since the start of the pandemic. Members of the public are encouraged to enrol and contribute to the FluTracking initiative: https://info.flutracking.net/

Dates used in COVID-19 reporting

Event	Date name	Source
Person first starts to feel unwell	Date of symptom onset	The date that the case reports their symptoms commenced, or the date of test if self-report information is not available.
Person has a PCR swab taken, or performs a rapid antigen test	Date of test	This date is provided to NSW Health by the laboratory when the PCR test result (positive or negative) is notified, or by the person when reporting their test result.
Laboratory or case notifies NSW Health of result	Date of notification	<p>For PCR tests, this date is provided to NSW Health by the laboratory. Laboratories prioritise notification of positive results to allow prompt public health action.</p> <p>Positive PCR cases: The date of notification is collected by NSW Health on the day of notification. Cases are informed of their diagnosis by their doctor or public health staff as soon as the result is available. The date of notification to NSW Health is usually the same day as the date the case finds out about the result.</p> <p>Negative PCR cases: Some laboratories notify NSW Health of negative results in batches at regular intervals. For these laboratories the date of notification to NSW Health does not reflect the date the negative result was available at the laboratory. NSW Health does not collect information on the date the person was informed of the result.</p> <p>Positive RAT cases: The date of notification is collected by NSW Health on the day of notification.</p>